SUPPLEMENT

9
CBSE

INFORMATION TECHNOLOGY

CODE 402 | Skill Education

<This book belongs to>

<Name> .....</Name>

<Class> .....</Class> <Section> .....</Section>

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Based on Windows & LibreOffice

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SYLLABUS

INFORMATION TECHNOLOGY (CODE – 402)

JOB ROLE: DOMESTIC DATA ENTRY OPERATOR

CLASS-IX

Total Marks: 100 (Theory-50 + Practical-50)

Course Overview:

A Data Entry Operator/Analyst is a person who is responsible for entering data into different applications and computer databases, manage and maintain effective record keeping. In addition, S/he is responsible for organizing files, collecting and managing data to be entered into the computer. S/he is also responsible for security of data and safeguard of the computer network.

With every office and organization seeking to become computerized, the demand for data entry operators/analysts is on a rise. Data entry operators/analysts usually work in an indoor, office setting using a computer and other electronic machines. To be in the profession of data entry/analysis, one has to have computer literacy, high typing speed, organization skills, concentration skills, communication skills and an ability to sit for long periods of time entering and computing data.

Objectives of the Course:

In this course, the students will be introduced to the fundamental concepts of digital documentation, digital spreadsheet, digital presentation, database management and internet security.

The following are the main objectives of this course:

- To familiarize the students with the world of IT and IT enabled services.
- To provide an in-depth training in use of data entry, internet and internet tools.
- To develop practical knowledge of digital documentation, spreadsheets and presentation.
- To enable the students to understand database management system and have updated knowledge about digital record keeping.
- To make the students capable of getting employment in Private Sector, Public Sector, Ministries, Courts, House of Parliament and State Legislative Assemblies.
- To develop the following skills:
  - Data Entry and Keyboarding skills
  - The concept of Digital Documentation
  - The concept of Digital Presentation
  - The concept of Electronic Spreadsheet
  - The concept of Databases
  - Internet Technologies

Salient Features

To be a data entry operator/analyst, one requires a lot of hard work and practical hands-on experience. One should have an intensive knowledge of Office applications, computer operations, and knowledge of clerical, administrative techniques and data analysis. Along with this, as a data entry operator/analyst, you will be expected to have fast typing speed, accuracy, and efficiency to perform tasks.

As a data entry operator/analyst, one should improve their computer skills, numerical and literacy skills. These skills can help one expand into a new career path in the future.

Scheme of Units

This course is a planned sequence of instructions consisting of units meant for developing employability and vocational competencies of students of Class IX opting for skill subject along with other education subjects. The unit-wise distribution of hours and marks for class IX is as follows:

	UNITS	NO. OF HOURS for Theory and Practical 200		MAX. MARKS for Theory and Practical 100
PART A	**Employability Skills**			
	Unit 1 : Communication Skills-I	10		2
	Unit 2: Self-Management Skills-I	10		3
	Unit 3: ICT Skills-I	10		1
	Unit 4: Entrepreneurial Skills-I	15		3
	Unit 5: Green Skills-I	05		1
	Total	**50**		**10**
PART B	**Subject Specific Skills**	**Theory (In Hours)**	**Practical (In Hours)**	
	Unit 1: Introduction to IT – ITeS industry	2	4	4
	Unit 2: Data Entry & Keyboarding Skills	4	10	6
	Unit 3: Digital Documentation	10	26	10
	Unit 4: Electronic Spreadsheet	18	35	10
	Unit 5: Digital Presentation	10	31	10
	Total	**44**	**106**	**40**
PART C	**Practical Work**			
	Practical Examination			15
	Written Test			10
	Viva Voce			10
	Total			**35**
PART D	**Project Work / Field Visit**			
	Practical File / Student Portfolio			10
	Viva Voce			5
	Total			**15**
	GRAND TOTAL	**200**		**100**

EMPLOYABILITY SKILLS

Unit	Learning Outcome	Theory	Practical
COMMUNICATION SKILLS –I	1. Demonstrate knowledge of various methods of communication	1. Methods of communication • Verbal • Non-verbal • Visual	1. Writing pros and cons of written, verbal and non-verbal communication 2. Listing do's and don'ts for avoiding common body language mistakes
	2. Identify elements of communication cycle	1. Meaning of communication 2. Importance of communication skills 3. Elements of communication cycle– - sender, - ideas, - encoding, - communication channel, - receiver, - decoding, and - feedback	1. Draw a diagram of communication cycle 2. Role plays on communication process related to the sector/job role
	3. Identify the factors affecting our perspectives in communication	1. Perspectives in communication 2. Factors affecting perspectives in communication - Visual perception - Language - Past experience - Prejudices - Feelings - Environment	1. Group discussion on factors affecting perspectives in communication 2. Sharing of experiences on factors affecting perspectives 3. Sharing experiences on factors affecting communication at workplace
	4. Demonstrate the knowledge of basic writing skills	1. Writing skills related to the following: - Phrases - Kinds of sentences - Parts of sentence - Parts of speech - Use of articles - Construction of a paragraph	1. Demonstration and practice of writing sentences and paragraphs on topics related to the subject
SELF-MANAGEMENT SKILLS – I	1. Describe the meaning and importance of self-management	1. Meaning of self-management 2. Positive results of self-management 3. Self-management skills	1. Identification of self-management skills 2. Strength and weakness analysis
	2. Identify the factors that helps in building self-confidence	1. Factors that help in building self-confidence – social, cultural, and physical factors 2. Self-confidence building tips - getting rid of the negative thoughts, thinking positively, staying happy with small things, staying clean, hygienic and smart, chatting with positive people, etc.	1. Role play exercises on building self-confidence 2. Use of positive metaphors/words 3. Positive stroking on wakeup and before going bed 4. Helping others and working for community

Unit	Learning Outcome	Theory	Practical
ICT SKILLS - I	1. Describe the role of Information and Communication Technology (ICT) in day-to-day life and workplace	1. Introduction to ICT 2. Role and importance of ICT in personal life and at workplace 3. ICT in our daily life (examples) 4. ICT tools - Mobile, tab, radio, TV, email, etc.	1. Discussion on the role and importance of ICT in personal life and at workplace. 2. Preparing posters / collages for showing the role of ICT at workplace
	2. Identify components of basic computer system and their functions	1. Computer system - Central Processing Unit (CPU), memory, motherboard, storage devices 2. Hardware and software of a computer system 3. Role and functions of Random Access Memory (RAM) and Read Only Memory (ROM) 4. Role and functions of Central Processing Unit 5. Procedure for starting and shutting down a computer	1. Connecting the cables and peripherals to the Central Processing Unit 2. Starting and shutting down a computer 3. Group discussion on the various aspects of hardware and software
	3. Demonstrate use of various components and peripherals of computer system	1. Peripherals devices and their uses – mouse, keyboard, scanner, webcam, etc. of a computer system	1. Identification of various parts and peripherals of a computer 2. Demonstration and practice on the use of mouse 3. Demonstration and practice on the use of keyboard 4. Demonstration of the uses of printers, webcams, scanner and other peripheral devices 5. Drawing diagram of computer system and labelling it
	4. Demonstrate basic computer skills	1. Primary operations on a computer system – input, process, storage, output, communication networking, etc.	1. Identification of the various input and output units and explanation of their purposes
ENTREPRENEURIAL SKILLS – I	1. Identify various types of business activities	1. Types of businesses – service, manufacturing, hybrid 2. Types of businesses found in our community Business activities around us	1. Prepare posters of business activities found in cities/villages, using pictures 2. Discuss the various types of activities, generally adopted by small businesses in a local community 3. Best out of waste 4. Costing of the product made out of waste 5. Selling of items made from waste materials 6. Prepare list of businesses that provides goods and services in exchange for money
	2. Demonstrate the knowledge of distinguishing characteristics of entrepreneurship	1. Meaning of entrepreneurship development 2. Distinguishing characteristics of entrepreneurship 3. Role and rewards of entrepreneurship	1. Prepare charts showing advantages of entrepreneurship over wages 2. Group discussions on role and features of entrepreneurship 3. Lectures/presentations by entrepreneurs on their experiences and success stories 4. Identify core skills of successful entrepreneur

Unit	Learning Outcome	Theory	Practical
GREEN SKILLS – I	1. Demonstrated the knowledge of the factors influencing natural resource conservation	1. Introduction to environment, 2. Relationship between society and environment, ecosystem and factors causing imbalance 3. Natural resource conservation 4. Environment protection and conservation	1. Group discussion on hazards of deteriorating environment 2. Prepare posters showing environment conservation 3. Discussion on various factors that influence our environment
	2. Describe the importance of green economy and green skills	1. Definition of green economy 2. Importance of green economy	1. Discussion on the benefits of green skills and importance of green economy 2. Prepare a Poster showing the importance of green economy with the help of newspaper/ magazine cuttings

SUBJECT SPECIFIC SKILLS

Unit	Learning Outcome	Theory	Practical
INTRODUCTION TO IT–ITeS INDUSTRY	1. Appreciate the applications of IT	• Introduction to IT and ITeS, BPO services, • BPM industry in India, • Structure of the IT-BPM industry, • Applications of IT in home computing, everyday life, library, workplace, education, entertainment, communication, business, science and engineering, banking, insurance, marketing, health care, IT in the government and public service	• Identify and list the various IT enabled services, Observe the application of IT in various areas.
DATA ENTRY AND KEYBOARDING SKILLS	1. Use keyboard and mouse for data entry	• Keyboarding Skills, • Types of keys on keyboard, Numeric keypad, • Home keys, Guide keys, • Typing and deleting text, • Typing ergonomics, • Positioning of fingers on the keyboard, Allocation of keys to fingers on four different rows, • Pointing device – Mouse, Mouse operations.	• Identify the keys and its use on the keyboard, • Demonstrate to use various keys on the keyboard, • Demonstrate to type the text, numbers, special character using appropriate keys on the keyboard, • Practice the correct typing ergonomics, • Practice to place fingers on correct key in four different row of keyboard, • Practice various mouse operations.
	2. Use typing software	• Introduction to Rapid Typing Tutor, • Touch typing technique, • User interface of Typing Tutor, • Typing text and interpret results, • Working with lesson editor, • Calculating typing speed, • Typing rhythm.	• Identify the user interface of • typing tutor, • Practice to type text in typing tutor software and interpret the results, • Practice to work in lesson editor, • Calculate the typing speed • Practice to improve typing • Using typing tutor software.
DIGITAL DOCUMENTATION	1. Create a document using a word processor	• Introduction to word processing, • Word processing applications, • Introduction to Word Processing tool • Creating a document, Parts of a Word Processor Window,	• List the available word processing applications. • Introduce with the parts of the main window. • Change document views. • Start a new document. • Open an existing document. • Save a document. • Close a document.

Unit	Learning Outcome	Theory	Practical
	2. Apply Editing features	• Text editing – Undo and Redo, • Moving and copying text, • Copy and Paste, • Selecting text, • Selection criteria, • Selecting non-consecutive text items, • Selecting a vertical block of • text, • Find and replace option, • Jumping to the page number, • Non-printing characters, • Checking spelling and grammar, • Using Synonyms and Thesaurus.	• Editing of text in a document • Demonstrate to use undo and redo option, • Use the keyboard and mouse options to select, cut, copy, paste, and move text. • Demonstrate to select nonconsecutive text items, vertical block of text, • Search and replace text in a document. • Jump to the given page number in a document, • Insert non-printing characters in a document, • Apply Spelling and grammar option of document. • Demonstrate to use Synonyms and Thesaurus.
	3. Apply formatting features	• Page style dialog • Formatting text – Removing manual formatting, Common text formatting, Changing text case, Superscript and Subscript • Formatting paragraph – Indenting paragraphs, Aligning paragraphs, Font colour, highlighting, and background colour, Using bullets and numbering, Assigning colour, border and background to paragraph. • Page formatting – setting up basic page layout using styles, Inserting page break, Creating header/footer and page numbers, • Defining borders and backgrounds, Inserting images shapes, special characters in a document, Dividing page into columns, Formatting the shape or image.	• Apply various text formatting options for the text, • Demonstrate to format paragraphs – indent/ align paragraphs, assign font colour, highlighting, and background colour, • Assign number or bullets to the lists items • Demonstrate to assign colour, border and background to paragraph • Demonstrate the page formatting – set up basic page layout using styles, • Insert page break, Create header/footer and page numbers • Define borders and backgrounds • Insert images, shapes, special characters in a document • Divide page into columns, • Format the shape or image.
	4. Create and work with tables	• Creating table in Word Processor • Inserting row and column in a table • Deleting rows and columns • Splitting and merging tables • Deleting a table • Copying a table • Moving a table.	• Demonstrate and do the following in Word Processor: • Create table, • Insert and delete rows and column in a table, • Split and merge tables, • Delete a table, • Copy or move from one location to another location of document.
	5. Use Print Options	• Printing options in Word Processor. • Print preview, • Controlling printing, • Printing all pages, single and multiple pages.	• Demonstrate to print the document, selected pages in the document • Print the document with various options, • Preview pages before printing.

Unit	Learning Outcome	Theory	Practical
	6. Understand and apply mail merge	• Introduction to mail merge • Concept of data source for mail merge.	• Demonstrate to print the letters using mail merge, • Do the following to achieve • Create a main document, • Create the data source, • Enter data in the fields, • Merge the data source with main document, • Edit individual document, • Print the merged letter, • Save the merged letter.
ELECTRONIC SPREADSHEET	1. Create a Spreadsheet	• Introduction to spreadsheet application • Starting a spreadsheet • Parts of a spreadsheet • Worksheet – Rows and Columns, Cell and Cell Address, • Range of cells – column range, row range, row and column range.	• Start the spreadsheet, • Identify the parts of Calc, • Identify the rows number, column number, cell address, • Define the range of cell, • Identify row range, column range, row & column range
	2. Apply formula and functions in spreadsheet	• Different types of data, • Entering data – Label, Values, Formula • Formula, how to enter formula, • Mathematical operators used in formulae, • Simple calculations using values and operators, • Formulae with cell addresses and operators, • Commonly used basic functions in a spreadsheet – SUM, AVERAGE, MAX, MIN, Count • Use of functions to do calculations.	• Demonstrate to enter the text, numeric data in a cell, • Identify the label, values and formula in the cell, • Demonstrate to enter formula in a cell, • Construct the formula using mathematical operators, • Identify formulae with cell addresses and operators, • Identify the correct syntax of formula, • Use the basic functions to perform calculations on data.
	3. Format data in the spreadsheet	• Formatting tool, • Use of dialog boxes to format values, • Formatting a range of cells with decimal places, • Formatting a range of cells to be seen as labels, • Formatting of a cell range as scientific, • Formatting a range of cells to display times, • Formatting alignment of a cell range, • Speeding up data entry using the fill handle, • Uses of fill handle to copy formulae.	• Identify the formatting tool, • Demonstrate to use of dialog boxes to format values, • Demonstrate to format range of cells with decimal places, • Demonstrate to format a range of cells to labels, • Demonstrate to format of a cell range as scientific, • Demonstrate to format a range of cells to display time, • Demonstrate to align cell data range, • Demonstrate to create • number series using fill handle, • Copy formula by dragging the formula using fill handle.
	4. Understand and apply Referencing	• Concept of referencing, • Relative referencing, • Mixed referencing, • Absolute referencing.	• Demonstrate to use Relative referencing in spreadsheet, • Demonstrate to use Mixed referencing in spreadsheet, • Demonstrate to use Absolute referencing in spreadsheet.
	5. Create and insert different types of charts in a spreadsheet	• Importance of chart in spreadsheet • Types of chart	• Create different types of charts supported by a spreadsheet, • Illustrate the example of chart in a spreadsheet.

Unit	Learning Outcome	Theory	Practical
DIGITAL PRESENTATION	1. Understand features of an effective presentation	• Concept of presentation, • Elements of presentation, • Characteristics of an effective presentation	• Identify and list the elements of presentation, • List the characteristics of an effective presentation.
	2. Create a presentation	• Introduction to presentation software, • Opening a presentation software • Parts of presentation window, • Closing a presentation • Creating a presentation using template, • Selecting slide layout, • Saving a presentation, • Running a slide show, • Save a presentation in PDF, • Closing a presentation, • Using Help.	• Start the presentation application • various components of main Impress window • Observe the different workspace views. • Create a new presentation using wizard. • Run the presentation, • Save the presentation, • Close the presentation, • Demonstrate to use Help in presentation.
	3. Work with slides	• Inserting a duplicate slide, • Inserting new slides, • Slide layout, • Copying and moving slides, • Deleting and renaming slides • Copying, moving and deleting contents of slide, • View a presentation, • Controlling the size of the view, • Workspace views – Normal, Outline, Notes, Slide sorter view.	• Demonstrate to insert a new slide and duplicate slide in a presentation, • Change the slide layout, • Demonstrate to copy and move slides in the presentation, • Demonstrate to copy, move and delete contents of the slide, • Demonstrate to view a presentation in different views.
	4. Format text and apply animations	• Formatting toolbar, • Various formatting features, • Text alignment, • Bullets and numbering. • Custom Animation	• Identify and list the various options in formatting toolbar, • Apply the appropriate formatting option • Align the text in presentation, • Apply bullets and numbering to the list items in presentation. Apply Animation
	5. Create and use tables	• Inserting tables in presentation, • Entering and editing data in a table, • Selecting a cell, row, column, table, • Adjusting column width and row height, • Table borders and background	Demonstrate the following: • Insert table in presentation, • Enter and edit data in a table, • Select a cell, row, column, table, • Adjust column width and row height, • Assign table borders and background.
	6. Insert and format image in presentation	• Inserting an image from a file, • Inserting an image from the gallery, • Formatting images, • Moving images, • Resizing images, • Rotating images, • Formatting using the Image toolbar, • Drawing graphic objects – line, shapes, • Grouping and un-grouping objects	• Demonstrate to insert an image from file, gallery in presentation, • Apply formatting options to image in presentation, • Demonstrate to move, resize and rotate images, • Apply formatting options of Image toolbar, • Drawing line, shapes using graphic objects, Demonstrate to group and ungroup objects.
	7. Work with slide master	• Slide masters, • Creating the slide masters, • Applying the slide masters to all slide, • Adding transitions.	• Create the slide masters, • Apply the slide masters to the • presentation, • Add transitions to presentation.

Content from Existing Book

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Part B: Subject Specific skills

PART-B

SUBJECT SPECIFIC SKILLS

UNIT 3

Digital Documentation

TOPICS COVERED

- Typewriter
- What is LibreOffice?
- Save a Document
- Open an Existing Document
- Non-Printing Characters
- Cut, Copy and Paste the Selected Text
- Find and Replace
- Spell Check and Grammar Check
- Formatting a Document
- Formatting a Paragraph
- Creating and Working with Tables
- Mail Merge
- Word Processor
- Create a New Document
- Close a document
- Cursor Movement
- Undo and Redo
- Selecting the text
- Jumping to a given page number
- Thesaurus and Synonyms
- Formatting the Text
- Formatting a Page
- Printing a Document

A document is a written, printed or digital information available in a specific format. A process of making and maintaining a document is called documentation. Earlier formal official or legal documents were made using manual or electronic typewriters but with the time they were replaced by computers. Computers have word processing software to create, edit, format and print documents.

A person with good typing skill and knowledge of a word processor can work as a data entry operator in many government or private organisations. This chapter will introduce you to commonly used word processors and their important features.

With the development of computers in the 1970s, people slowly shifted from typewriters to computers that were supporting word processor for creating and editing documents. Within a few years, after this, the falling prices of PCs made word processing available, for the first time, to the common people in the offices and at home.

PURE FACT

The term "word processing" was given by a German IBM typewriter sales executive, Ulrich Steinhilper, in the 1950s.

TYPEWRITER

A typewriter is a machine used for writing by pressing keys that print letters on paper. It was popular for typing documents before computers were common.

Limitations of Using a Typewriter

The typewriters were replaced by word processing software after a few years due to several limitations, as listed below:

- There is no concept of undo. Which means a simple typing error or spelling error will make you change the whole sheet and type again the whole content.

- There is no saving of digital data, so a document which needs to be duplicated, has to be typed again.
- Typewriter does not have all the required characters or symbols. It is not possible to type all the characters using a typewriter.
- There is no concept of formatting a document using a typewriter.

Electronic Typewriter

In 1974, Xerox (company) introduced an electronic typewriter which had the capability to resolve most of the limitations of a manual typewriter. It has a small screen that shows one or two lines and provides the facility to make small changes to the existing content. It also helped in making multiple copies of the same document. Later on, with the development of computer and application software, the electronic typewriters were completely replaced by word processing software, thus marking the beginning of the computer era.

WORD PROCESSOR

A word processor is an application software which is commonly used to create, edit, format, and print a document. It helps us create letters, applications, resumes, articles, poems, booklets, advertisements, invitations, and many more things. It supports graphical user interface where the text of specific size, font, colour or any other formatting feature that is visible on the screen will exactly resemble the same as taken on the printing paper. This is called WYSIWYG (What You See Is What You Get) feature.

Features of Word Processor

Some of the important features provided by any word processing software are as follows:

Header and Footer	Mail Merge	Word Wrap	Column
Voice Recognition	Printing	AutoCorrect	Tables
Formatting	Thesaurus	Find and Replace	Spelling and Grammar

- **Easy Typing and Word Wrapping Feature:** Text can be easily typed, edited, deleted and moved to the next line automatically in any word processor. When a line is finished, the text flows automatically on a new line. This is called Word Wrap. We use the Enter key in case we want to start a paragraph or end a short line or create a blank line. There is no word limit for any kind of document.
- **Saved, Stored and Retrieved when Required:** A document can be saved in the computer or any other storage device, and can be easily sent and received through the Internet as an attachment.
- **Select, Move, Copy and Delete the Text:** A small portion or complete data can be easily selected and moved to some other place in a document. In case the data needs to be repeated then by using the copy/paste option it can be easily done.

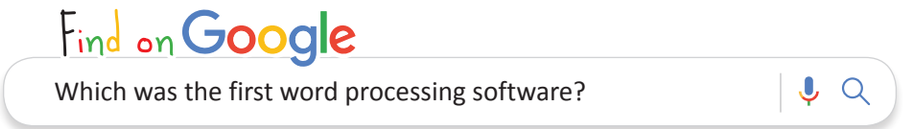
- **Spelling and Grammar Check:** The Autocorrect feature will take care of the spelling and grammar of the text. If needed the alternate words are also suggested for proper documentation.
- **Font Style and Style of the Text:** The text can be formatted with different font styles, sizes and colours. The alignment and line spacing can also be adjusted as per the requirement.
- **Bullets and Numbering:** To specify points in the form of ordered or unordered list, we can use bullets and numbering.
- **Headers and Footers:** Any specific text, logo or page number required to be displayed on the top(header) or bottom(footer) of each page can be done using headers and footers feature.
- **Creating and Editing Tables:** A table with specific rows and columns can be easily created. Editing of a table can be done easily such as adding or deleting rows or columns.
- **Inserting Pictures and Symbols:** In a document, any picture from the computer or downloaded image can be easily added and modified. Special symbols required for mathematical and scientific notations can also be added.
- **Print Preview Feature:** This is a very important feature which gives you a complete and true preview of a document before printing.
- **Mail Merge Feature:** In this, same document can be sent to multiple people by using a few steps. This feature is quite helpful when an invitation for a birthday party, any other kind of get-together or school events needs to be sent to multiple people.
- **Linking on Webpages:** Text can be easily linked on webpages for dynamic access of the data.

Word Processing Applications

Some of the commonly used word processing applications are:

Word processors are being used in business, home, and education, i.e., in schools and colleges for preparing letters, reports, and many other different types of documents. Students use it for preparing project reports and assignments. Teachers use word processors for preparing question papers and notes.

Office suite is a collection of programs, which are useful for word processing, spreadsheet preparation, presentation, and database management. There are several office suits. We will be using LibreOffice, because of its several advantages.



WHAT IS LIBREOFFICE?

LibreOffice is a free and open source software (FOSS), fully-featured office productivity suite. It is available free for downloading from the website https://www.libreoffice.org/. This suite is available in many languages and runs on many platforms (Windows, Mac and Linux). It uses Open Document Format (ODF) file format, for publishing documents. Currently the versions of LibreOffice 6.0 and above are available.

LibreOffice components are integrated with each other and have a similar 'look and feel', which makes it easy to use and train.

The components of LibreOffice are

- Writer for word processing,
- Calc for spreadsheet preparation,

- Impress for presentation,
- Base for database management,
- Draw for drawing
- and others.

LibreOffice includes support for opening and saving files in many common formats including Microsoft Office, HTML, XML, WordPerfect, and PDF.

Getting Started with LibreOffice Writer

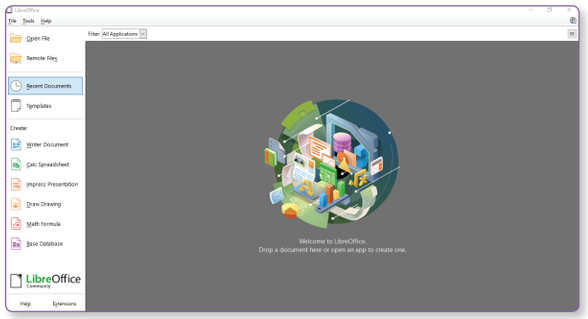
It is a free and open source word processor which is a part of the LibreOffice package. It can be used on any platform like Windows, Mac, Linux, Solaris, etc. It can be easily downloaded from https://www.libreoffice.org. The default extension of the file saved is ODF Text document(.odt) and if needed it can be saved in any format like .rtf, .doc, .html, .txt, etc.

In general, you will find a shortcut of LibreOffice on the desktop or on the Quick Launch Taskbar. The process may slightly differ according to the operating system you are using (Windows or Linux).

Different ways of starting LibreOffice Writer are:

i. To start LibreOffice Writer in Windows:

Double click LibreOffice Writer shortcut, found on the computer desktop. The given screen will be displayed.



Click on the Writer Document on this screen.

OR

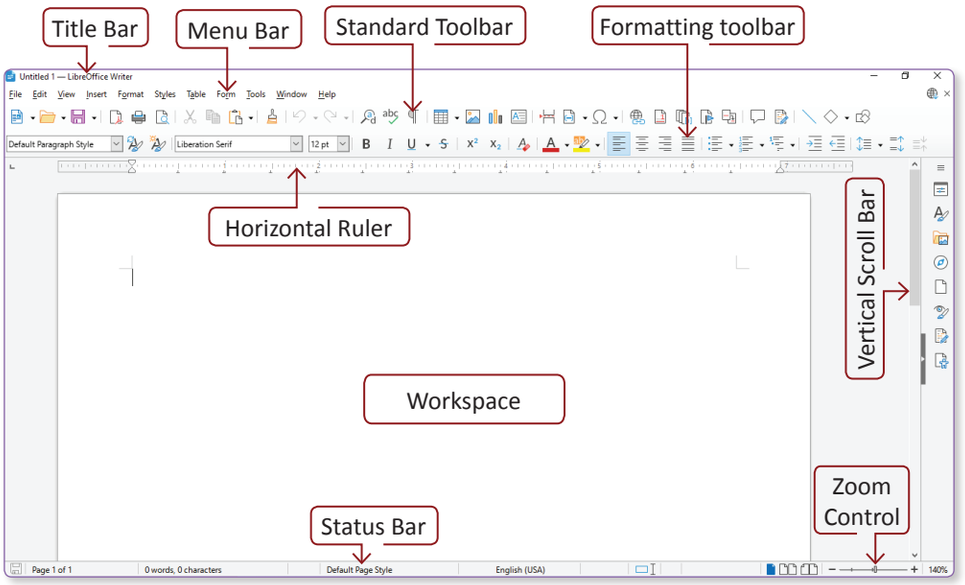
Click on the **Start** or **Windows** button→ select LibreOffice → LibreOffice Writer

OR

Using the **Search** command, type the word 'writer' in the **search field**, and select LibreOffice Writer from the offered results.

ii. To start LibreOffice Writer in Ubuntu Linux, find the **LibreOffice Writer icon** on the application launcher, or search it by clicking on 'Show Applications'

By using any one of the given methods the first screen that displays when you click on LibreOffice Writer is the following:



Parts of the Writer Window

The main window of the LibreOffice is similar to almost all open office applications. Let us now study the parts of the LibreOffice Writer window:

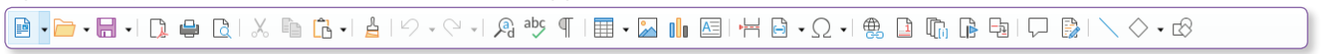
- **Title Bar:** It is the top bar of the window. On the left side, it displays the name of the application as LibreOffice Writer along with the active document name. In the given screen the default name—Untitled 1—is displayed. For the next new document, it will be Untitled 2, then Untitled 3, and so on. So we see that the name Untitled remains the same for the new document but the number keeps on increasing by 1. This is how the naming process follows in LibreOffice.

  On the right side it displays control menu—Minimise, Maximise, and Close buttons. These buttons control the size of the active window on the screen.

- **Menu Bar:** It is located just below the Title Bar. It contains menus—File, Edit, View, Insert, Format, Styles, Table, Form, Tools, Window and Help—which when clicked opens sub-menus and options that help you use different features of LibreOffice Writer.

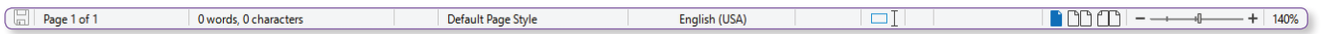
  The sub-menu item which shows three dots '...' just after the sub-menu name, will open another dialog box. The sub-menu item with the arrow '▸' will open another sub-menu.

- **Toolbars:** The tool bar appears just below the Menu Bar. By default, the Standard Toolbar and Formatting Toolbar appears on the window. To open other toolbars Select View Menu → Toolbars. The user can choose the required toolbars by clicking on it. The selected toolbar will show the ✓ sign before the name of the toolbar.
- **Standard Toolbar:** It is located just below the Menu Bar. It has buttons related to basic standard functions like New, Open, Save, etc., which are standard across all applications of LibreOffice.

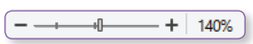


- **Formatting Toolbar:** It is located just below the Standard Toolbar. It contains buttons related to formatting the text like bold, italics, underline, superscript, subscript, font size, font style etc.

- **Horizontal and Vertical Ruler:** They help you align the text, tables, margins, indents, tabs and other elements of your document.
- **Status Bar:** This is positioned at the left bottom of the Writer window. It displays the number of pages, word count, character count, page style, language, view layout, zoom slider, etc.



- **Horizontal and Vertical Scroll bar:** They help you scroll the window. The horizontal scrollbar helps you scroll left and right side of the document. The vertical scrollbar helps you scroll to the top and bottom portion of the document
- **Zoom:** The *Zoom slider* with a *Zoom Percent* allows you to view the document in a scalable mode, i.e., if you wish to enlarge the screen to see the picture and the document in enlarged version then this scale is highly helpful. It does not affect the physical document.

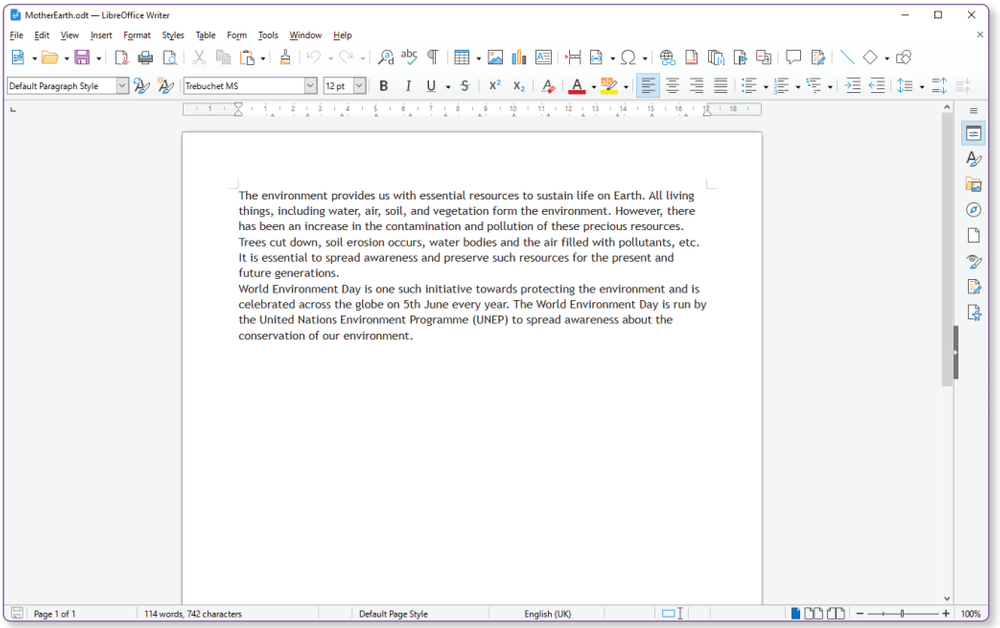


- **Workspace:** This is the actual working area where the cursor blinks and the user can type, edit and use all the features of the application software.

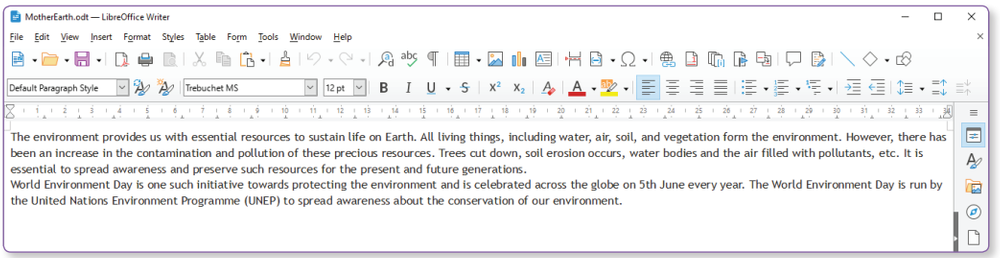
Different Views of a Document

Writer has three ways to view a document: Normal, Web, and Full Screen. To change the view, go to the View menu and click the required view.

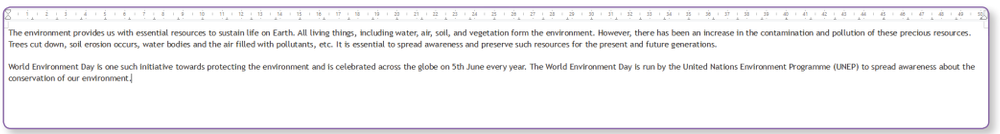
- **Normal View:** This is the default view of a document. It gives you a complete view of the document as it appears in the print out. It displays the headers and footers, page margins, actual content with proper line spacing in lines and paragraphs. This view implements the important feature WYSIWYG. You can use **View** menu → **Zoom** option to increase or decrease the size of the view.



- **Web View:** It gives you the view of the document as it appears in online mode when opened in any browser. You can use **View** menu → **Zoom** option to increase or decrease the size of the view.



- **Full Screen View:** In this view the document fills the entire screen. Only the page in the full screen will be displayed with no Menu Bar, Toolbars, Scrollbars. To close the Full Screen, press **Esc** key. This will help you exit the full screen view.



INFO MAIL

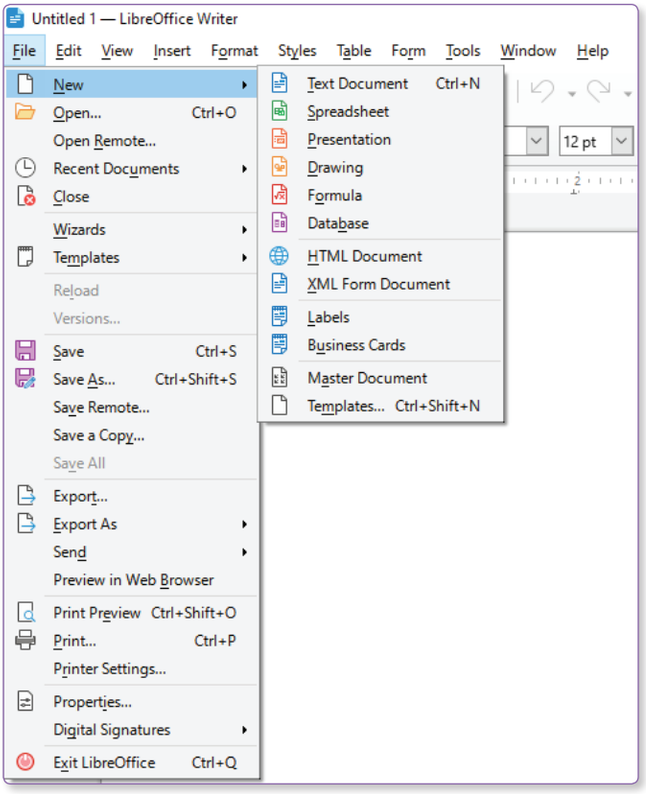
Subject: To view a document

You can choose View → Zoom → Zoom option from the Menu bar to display the Zoom & View Layout dialog box, where you can set the same options as on the Status bar.

You can use File → Print Preview option, or press Ctrl+Shift+O, to view the document, but this view does not allow editing.

CREATE A NEW DOCUMENT

Let's create a new document by clicking on the **File menu → New option → Text Document** or by pressing **Ctrl+N** keys. The default name of the new document will be "Untitled 1".



The new file will have a vertical bar/cursor blinking on the top left corner of the blank document. This is also known as Insertion point. The character you type will be inserted here and it moves the insertion point to the right. You can click anywhere in the document or use arrows keys in any direction to move the insertion point. Wherever this insertion point lies there the cursor blinks and is ready to take input from the keyboard.

When a word does not fit on the line then it automatically flows on the new line without pressing Enter key. This important feature of a word processor is called **Word Wrap.**

Let us start typing the given content in LibreOffice Writer:

The environment provides us with essential resources to sustain life on Earth. All living things, including water, air, soil, and vegetation form the environment. However, there has been an increase in the contamination and pollution of these precious resources. Trees cut down, soil erosion occurs, water bodies and the air filled with pollutants, etc. It is essential to spread awareness and preserve such resources for the present and future generations.

INFO MAIL

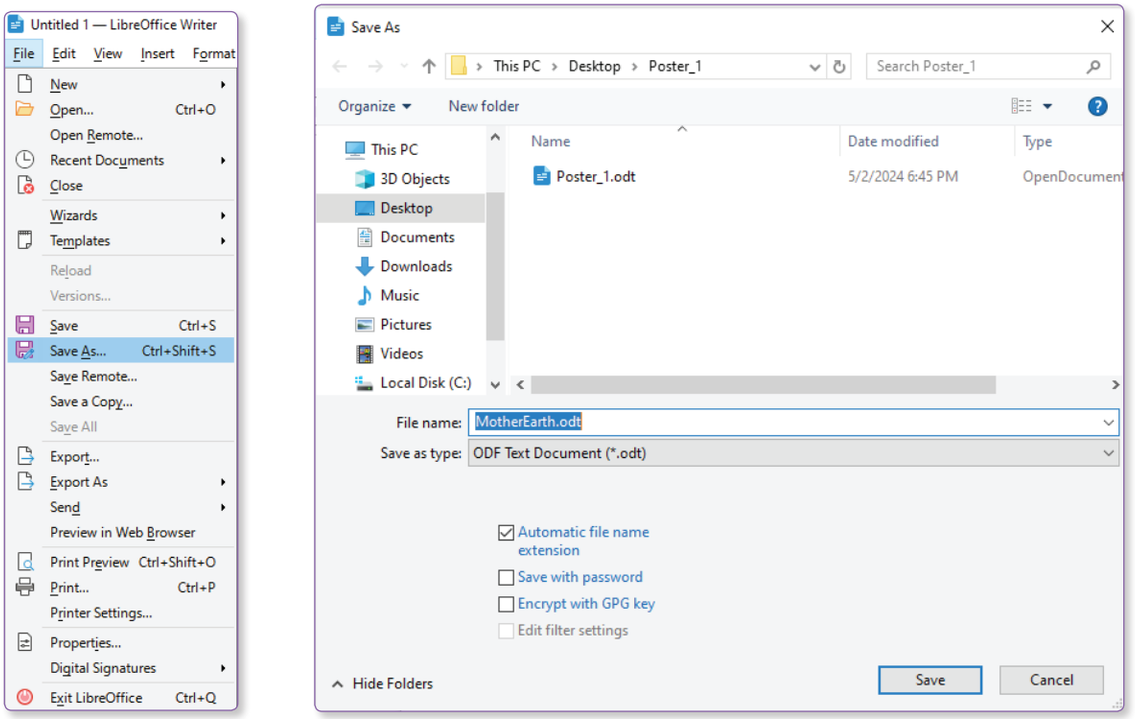
Subject: To create a new document

You can also select New Document button present on standard toolbar to create a new document.

SAVE A DOCUMENT

After you finish writing the above content go to **File menu → Save As** option to save the file for the first time with a new name.

The Save As pop up window will appear.



Select the location where you want tio save the file. Write the name in the File name box. Click on the Save button. Here, we have saved the file witn the name: **MotherEarth.odt**

Now add this data just below the previous paragraph in LibreOffice Writer:

> World Environment Day is one such initiative towards protecting the environment and is celebrated across the globe on 5th June every year. The World Environment Day is run by the United Nations Environment Programme (UNEP) to spread awareness about the conservation of our environment.

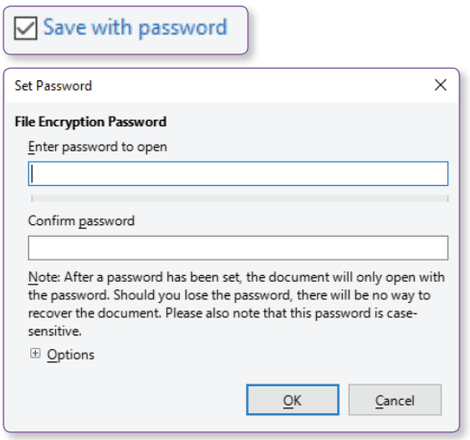
Now, go to **File** menu → **Save** option to save the above changes made in the existing document.

In case you want to create another copy of the same file, then again go to **File menu** → **Save As** option. Give another name like **MotherEarth2.odt** and click on the **Save** button.

Save with a Password

The **Save with password** option is selected in the Save As dialog box in case you want to assign a password to open a file. After this option is selected then the Set Password dialog box appears where you give a password which can be used at the time of opening a file.

Type the password to open the file in **Enter password to open** box. Type the same password in the **Confirm Password** box and click on the **OK** button.



INFO MAIL

Subject: To save a document

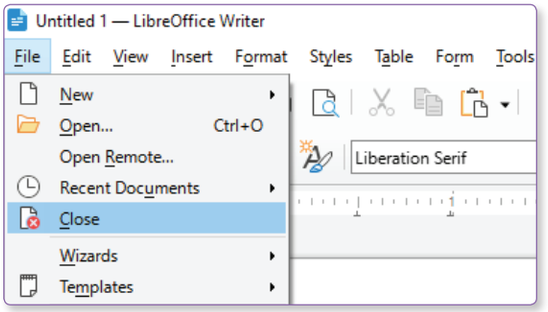
Press Ctrl+Shift+S to save the file with new name.

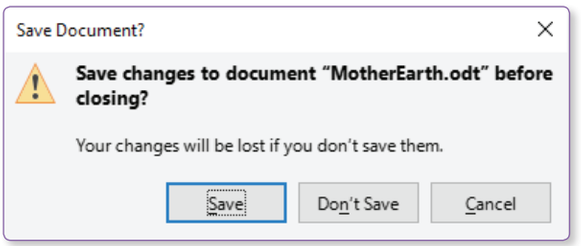
Press Ctrl+S to save changes in the same file.

Select File → Save All to save the changes in all the open documents.

CLOSE A DOCUMENT

After you have completed your work in the Writer document, you can select the **File** menu → **Close** option from the menu bar to close the file. After this command the file goes back to the hard disk or any other specified storage device and can be retrieved later when needed. This is equivalent to closing a notebook on your study table and keeping it aside in your bookshelf, after work is done.



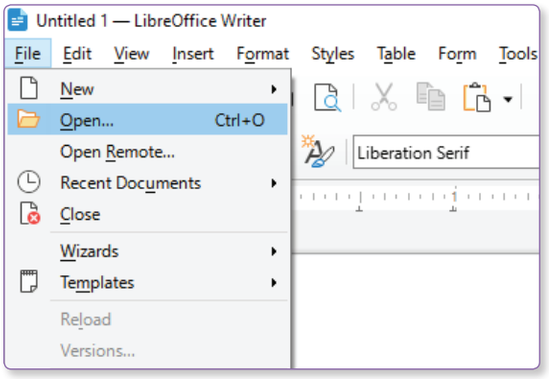


If a file is saved and there are no changes at the time of closing a document, then the file will be closed immediately without any message otherwise another dialog box appears. Click on **Save** button if you wish to save the changes; otherwise, click on **Don't Save** button.

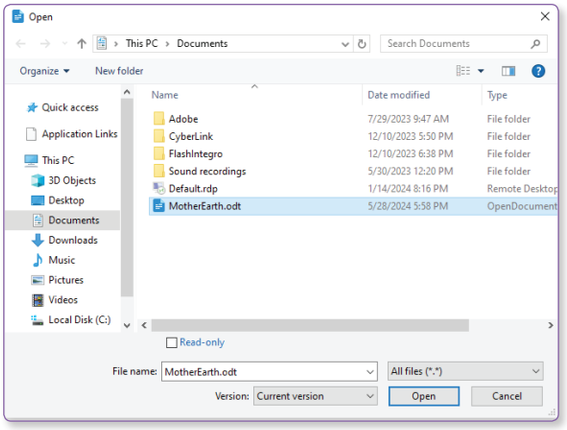
OPEN AN EXISTING DOCUMENT

You can open a document only if it had been created earlier and saved on the storage on device. Let us open a file (MotherEarth):

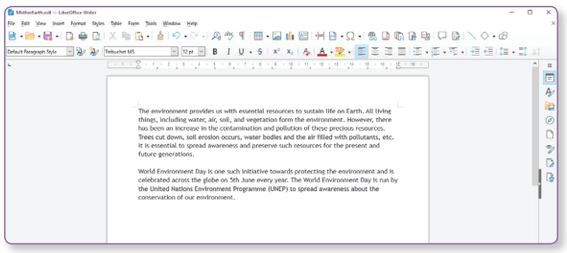
Step 1: Click on **File** menu → **Open** option. An Open dialog box appears.



Step 2: Select the drive and folder, then select MotherEarth.odt



Step 3: Click on **Open** button. The saved document opens.



CURSOR MOVEMENT

The Text Cursor is a flashing vertical line in the body of the text. It indicates where the next character will be inserted or where actions like highlighting text will begin.

Cursor movement in LibreOffice Writer refers to the actions and commands used to move the text cursor (insertion point) within the document.

Cursor Movement Using Keyboard

The 4 arrow keys (←↑↓→) on the keyboard are also known as cursor control keys because these keys are used to move cursor.

The ← key is used to move the cursor on the left of the letter, the → key is used to move the cursor on the right of the letter, the ↑ key is used to move the cursor one line up, and the ↓ key is used to move the cursor one line down.

- Observe the location of the Text Cursor.
- Press the different cursor control keys on the keyboard and watch how the Text Cursor moves around.

There are two more keys other than the cursor control keys—**Home** key and **End** key—that are used to move Text Cursor.

Pressing the **Home** key jump to the beginning of the line and pressing **End** key jump to the end of a line.

- Position the Text Cursor on a line of the document.
- Press the Home key and observe that the Text Cursor jumps to the beginning of the line.
- Press the End key and observe that the Text Cursor jumps to the end of the line.

When these keys are pressed in combination with the **Ctrl** key, the cursor jumps to the beginning and end of the document.

- To jump to the beginning of a document, press the **Ctrl** key, hold it down, then press the **Home** key **(Ctrl+Home)**.
- To jump to the end of a document, press the **Ctrl** key, hold it down, then press the End key **(Ctrl+End)**.

Cursor Movement Using Mouse

This is the **mouse pointer** . It takes the pointer shape while moving it around the screen. The mouse pointer changes to I shape, when moved over the text in a document.

Moving the I shaped mouse pointer over the text and clicking on the desired text, helps to get the text cursor while editing the document. Thus, the mouse can also be used to control the Text Cursor location.

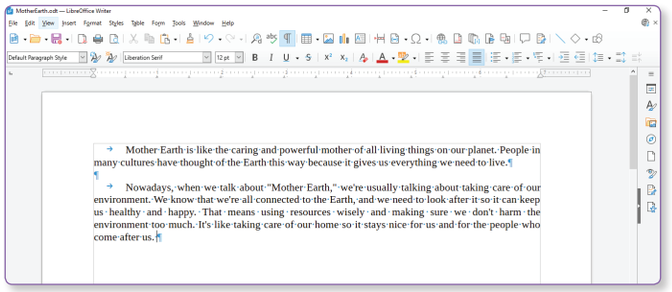
INFO MAIL

Subject: To move in a document

Using Keyboard-Arrows keys, Home key and End key are used to control the position of the cursor in a document. Mouse can easily be rolled on the surface to position the cursor in any direction.

NON-PRINTING CHARACTERS

Space bar Key, **Enter** Key and **Tab** Key are Non Printing characters of the document as they do not appear when the document is printed. They help in the formatting of a document specially when we need to keep a track of tabs and the spacing for the proper layout of a document.



These non-printing characters are displayed as for

¶ for Enter key

→ for Tab key

• for spacebar key

To display these non-printing characters in the document click on **Toggle Formatting Marks** button (¶) present on standard toolbar. It works like a toggle key. You click once to switch it on and click again to switch it off.

INFO MAIL

Subject: Toogle Key

Toggle key is key which works as alternate on and off button. For example, Insert key, Scroll Lock key, Num Lock key, etc.

Press Ctrl+F10 to toggle the non-printing characters.

UNDO AND REDO

Undo option lets you delete the last change made in the document.

Click on the **Edit** menu → **Undo** option from the menu bar.

OR

Click on **Undo** button present on the standard toolbar. This button has a drop-down arrow to allow you to undo multiple previous actions. Click on the drop-down arrow, next to Undo button, a list of all the separate actions performed will appear. Then hold the down arrow key to select as many previous actions as you want and press the Enter key to delete them.

SHORT KEY

To Undo:

Ctrl + Z

Redo helps you to restore the task that was previously undone. It is the reverse of Undo. For example, if you apply Blue colour to the font and you did not like it, you can undo it and get the original black color back. But then you realise that blue is looking better than black colour, so you use redo to restore the previous blue colour.

Click on the **Edit** menu → **Redo** option from the menu bar.

OR

Click on **Redo** button present on the standard toolbar. This button has a drop-down arrow to allow you to redo as many as you want the previous Undo operations.

SHORT KEY

To Redo:

Ctrl + Y

CUT, COPY AND PASTE THE SELECTED TEXT

Selected text can be easily cut, copied or pasted in the same or another document either by using mouse clicks or by using short keys on the keyboard.

Cut and Paste

Cut and Paste is used to move a selected text from one place to another. To move the selected text, follow the given steps:

Step 1: Select the text.

Step 2: Right click on text to open right click shortcut menu->select **Cut** option.

Or

Press Ctrl+X.

Or

Click on **Cut** button present on standard toolbar.

Step 3: Go to the desired location in the same document or another document and place the cursor.

Step 4: Right click on text to open right click shortcut menu->select **Paste** option.

Or

Press Ctrl+V.

Or

Click on **Paste** button present on standard toolbar.

Copy and Paste

Copy and Paste is used to make a duplicate copy of selected text.To copy the selected text, follow the given steps:

Step 1: Select the text.

Step 2: Right click on text to open right click shortcut menu->select **Copy** option.

Or

Press Ctrl+C.

Or

Click on Copy button present on standard toolbar.

Step 3: Go to the desired location in the same document or another document and place the cursor.

Step 4: Right click on text to open right click shortcut menu->select **Paste** option.

Or

Press Ctrl+V.

Or

Click on Paste button present on standard toolbar.

INFO MAIL

Subject: Cut and Copy

You cut or copy once but it can be pasted a number of times to the same or different locations. The cut/copy data is placed in the section of RAM called clipboard.

SELECTING THE TEXT

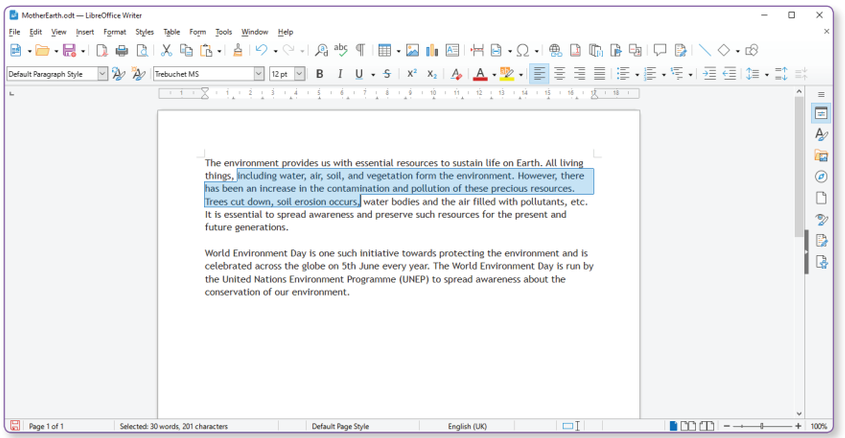
Selecting any text is required for performing actions like cut, copy, move, colour change, size change, etc. on it. The text selection can be done for consecutive text, non-consecutive text, and vertical block of text.

Consecutive Text

Selecting consecutive text means selecting the text continuously. We can select by using mouse and keyboard.

Using Mouse

To select consecutive text using mouse, click and hold the left mouse button and drag it over the text you want to select.



Using Keyboard

To select consecutive text using keyboard, use the following key combinations:

Type of selection	Key combination
Entire document	Ctrl+A
End of the word	Ctrl+Shift+Right Arrow
Beginning of the word	Ctrl+Shift+Left Arrow
One character to the right	Shift+Right Arrow
One character to the left	Shift+Left Arrow
End of the line	Shift+End
Beginning of the line	Shift+Home
One line down	Shift+Down Arrow
One line up	Shift+Up Arrow
One Screen down	Shift+Page Down
One Screen up	Shift+Page Up
End of Paragraph	Ctrl+Shift+Down Arrow
Beginning of Paragraph	Ctrl+Shift+Up Arrow
Beginning of Document	Ctrl+Shift+Home
End of document	Ctrl+Shift+End

Non-consecutive Text

It selects the text which is located at different places throughout the document. We can select by using mouse and keyboard.

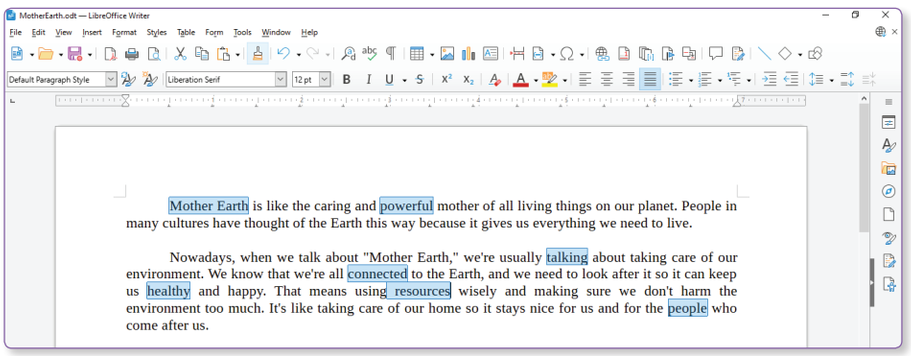
Using Mouse

To select non-consecutive text using mouse, follow the given steps:

Step 1: Select the first piece of text.

Step 2: Hold down the Control (Ctrl) key and use the mouse to select the next piece of text.

Step 3: Repeat these steps if more selection is required.



Using Keyboard

To select non-consecutive text using keyboard, follow the given steps:

Step 1: Select the first piece of text.

Step 2: Press **Shift + F8**. This switches the Writer to “adding selection” mode. To ensure this mode is on, check for the word **Selected** in the status bar.

Step 3: Use the arrow keys to move to the start of the next piece of text to be selected. Hold down the **Shift** key and select the next piece of text using **arrow** keys only.

Step 4: Repeat these steps, if more selection is required.

Now, you can perform different actions on it. Press **Esc** key to exit from this mode.

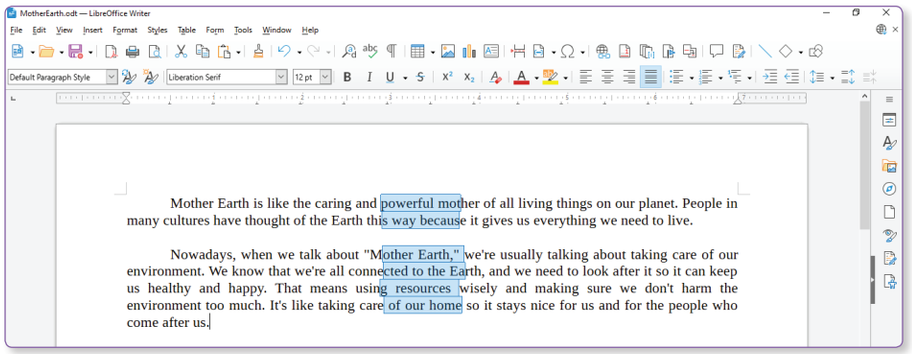
Vertical Block

Vertical block selection can be done in a paragraph or 'column' of text that is separated by spaces or tabs.To do vertical block selection, follow the given steps:

Step 1: Go to **Edit** menu and select **Selection Mode** option.

Step 2: Select **Block Area** option.

Step 3: Select the continuous block.

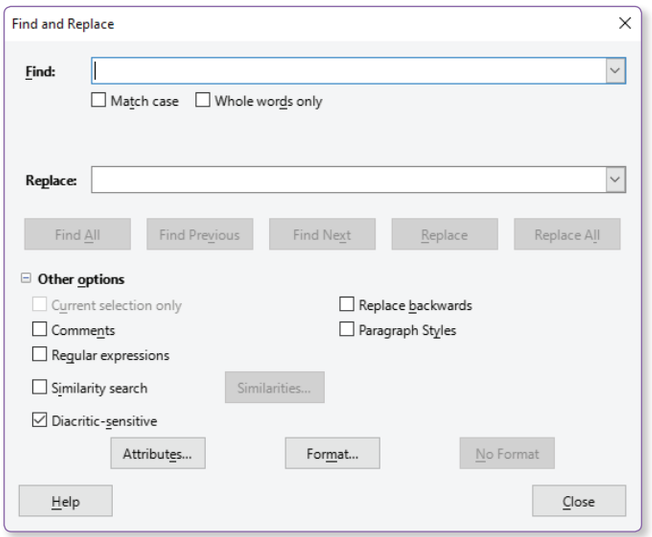


Press **Esc** key to exit from this mode.

FIND AND REPLACE

This option is used to locate a specific text in a document and in case required it can be replaced also. To use Find and Replace option, follow the given steps:

Step 1: Click on **Edit** menu → **Find and Replace** option or press **Ctrl + H** using keyboard. The **Find and Replace** dialog box will appear.



Step 2: Type the text you want to find in the **Find** box.

Step 3: To replace the text with different text, type the new text in the **Replace** box

Step 4: You can check on **Match case** check box if you want to match the word with uppercase/lowercase.

Step 5: You can check on **Whole words only** check box if you want to search for the whole word and not a part of any other word.

Step 6: Since both the above are checkbox then you can select both the options together, it will search for the whole word only and will match the specified case also.

Step 7: When you have set up your search, click on **Find All** button to select all the occurrences of the specified searched word in the given document.

Step 8: After the text is found we have a choice of replacing it with a new word only at the first match by selecting **Replace** button or replacing all the matches with the new word by clicking on **Replace All** button.

JUMPING TO A GIVEN PAGE NUMBER

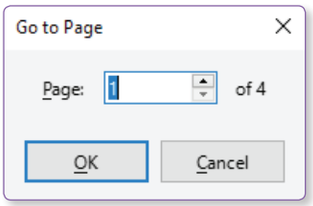
Sometimes the document is too large to handle by using up and down arrow keys. If you are on page 7 and you need to go to page 68 then scrolling down will be a lot of effort and a waste of time. In such a situation we jump to a specific page by following the given steps:

Step 1: Select **Edit** menu → **Go to Page** option

OR

Use keyboard shortcut: Ctrl+G

This will open the **Go to Page** dialog box, as shown here:



Step 2: Type the page number where you want to go.

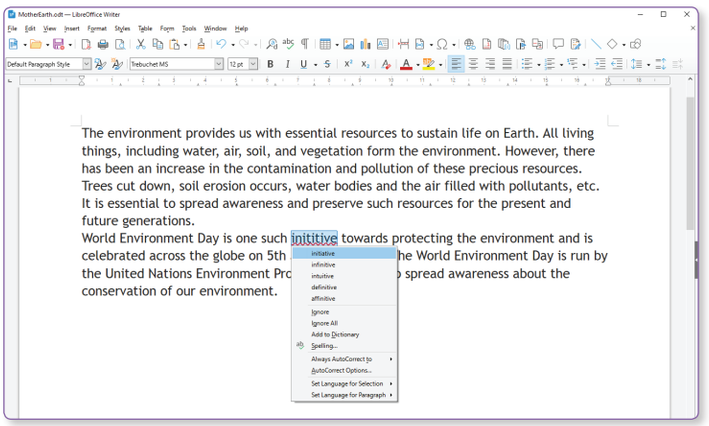
Step 3: Click on **OK** button**.** The cursor will move to the first character of mentioned page directly.

SPELL CHECK AND GRAMMAR CHECK

While writing a report on paper, sometimes we may not remember the spelling of some words. In this situation we refer to the books or confirm the spelling from teachers or parents. In same way, when writing a report in word processor document, we may commit spelling mistakes. In such cases, the Writer helps us correct the spelling. It also provides a grammar checker to check the grammar of the sentence. It can be used separately or in combination with the spelling checker. This is one of the important features of any word processing application. This feature helps you create an error free document.

The incorrect spellings are marked with red wavy line below the word. To correct the incorrect spelling, follow the given steps:

Step 1: Right-click on the word with a red wavy line. A shortcut menu will appear. It suggests a list of words for replacement which you can choose.



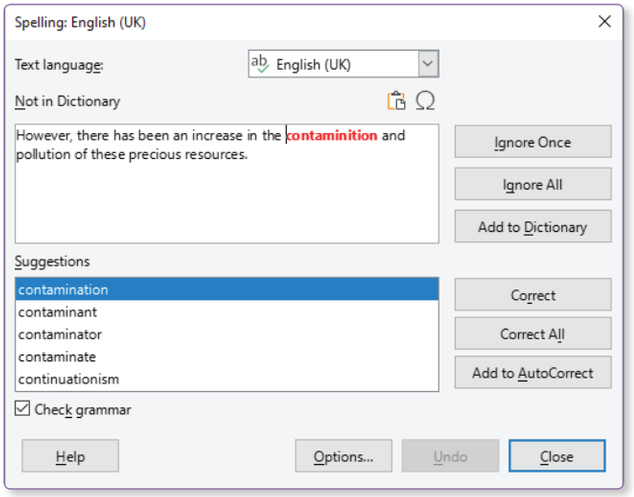
Step 2: Click on the suitable word to replace it with incorrect word.

To check spelling, you can also follow these steps:

Step 1: Click on **Tools** menu → **Spellings** option. The Spelling dialog box will appear.

OR

Click on the **Check Spelling** button on the standard toolbar. The Spelling dialog box will appear.



Step 2: Choose the correct spelling from the Suggestions list.

Step 3: Click on the **Correct** button, to change the spelling. The next incorrect spelling will be highlighted and the Suggestions list will change accordingly.

OR

Click on **Correct All** button, to change all the incorrect spelling in one click.

OR

Click on **Ignore Once** button to ignore the incorrect spelling of the selected word.

OR

Click on **Ignore All** button to ignore the incorrect spelling of all the incorrect words.

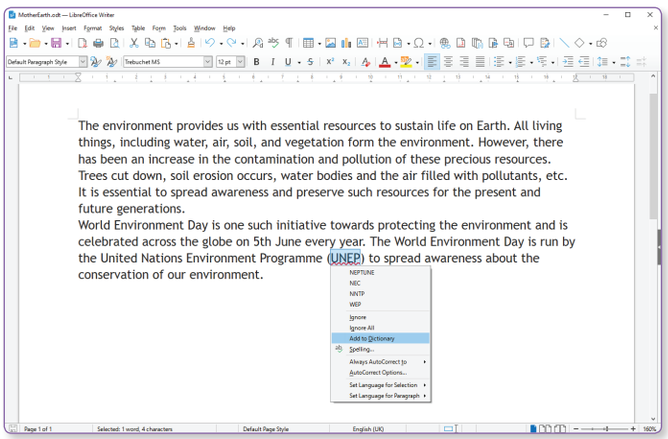
OR

Click on **Add to Dictionary** button, in case a correct word is highlighted as an incorrect word and you want to add it in the existing dictionary. In this way, next time it is not marked as wrongly spelled word.

Step 4: Click on **Close** button, after completing the desired action.

In case a correct word is highlighted with red wavy lines then you can add that word in the existing dictionary so that next time it is not marked as wrongly spelled word. To do so, follow the given step:

Step 1: Right-click on the word with a red wavy line. A shortcut menu will appear.



Step 2: Click on the Add to Dictionary option. The word will be added to the dictionary.

If any grammatical errors are detected, they are underlined by a blue wavy line. To remove grammatical error, follow the given steps:

Step 1: Right-click on the word with a blue wavy line. A shortcut menu will appear.

Step 2: The first entry in the shortcut menu describes the suspected broken grammatical rule. To correct it, click on the suggestion after first entry.

You can also switch on or off the auto spell check feature. To do so, click Tools → Automatic Spell Checking option. If ab is highlighted, then it means Automatic Spell Checking is on, otherwise it is off.

THESAURUS AND SYNONYMS

Sometimes you search for a word having a similar meaning to the word you have in mind. A word processor helps look up synonyms (different words with the same meaning) and antonyms (words with the opposite meaning) in the thesaurus.

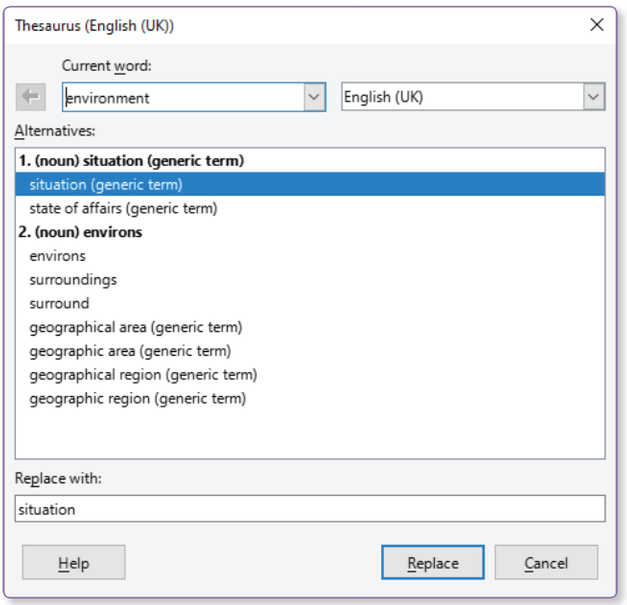
Thesaurus is different from a dictionary. A dictionary contains definitions and pronunciations, whereas thesaurus will have words with similar meanings or opposite meanings.

Sometimes in a document, we need to use a different word with a similar meaning. In Writer this can be done in two ways.

Using Thesaurus

To use thesaurus, follow the given steps:

Step 1: Click on the word you want to change. Click on the Tools menu → Thesaurus option. Thesaurus dialog box will appear.
OR
Right-click on a word you want to change. A shortcut menu will appear. Click on the **Synonyms** option from the shortcut menu, after that select the **Thesaurus** option. Thesaurus dialog box will appear.



Step 2: Select a suitable word from the list of Alternatives. The word will appear in the **Replace with** text box.

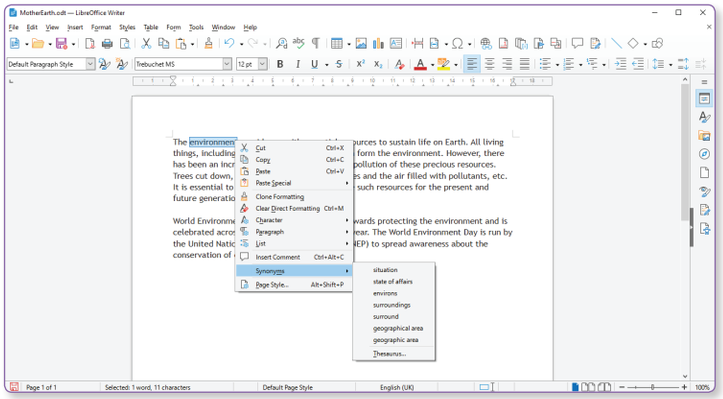
Step 3: Click on **Replace** button.

Using Synonyms

To use synonyms, follow the given steps:

Step 1: Right-click on a word and select the **Synonyms** option. A list of words with similar meaning will appear.

Step 2: Click on a word or phrase from the list. The highlighted word or phrase will be replaced in the document.



FORMATTING A DOCUMENT

Formatting refers to proper arrangement of text in a presentable form with different font styles, size, and colour in a document. The appropriate use of formatting can enhance the look and the understanding of the document. This can be done by:

- using options present in different menus,
- using tools present on the formatting toolbar,
- using shortcut keys,
- using context sensitive shortcut menu.

FORMATTING THE TEXT

Some of the common text formatting features are:

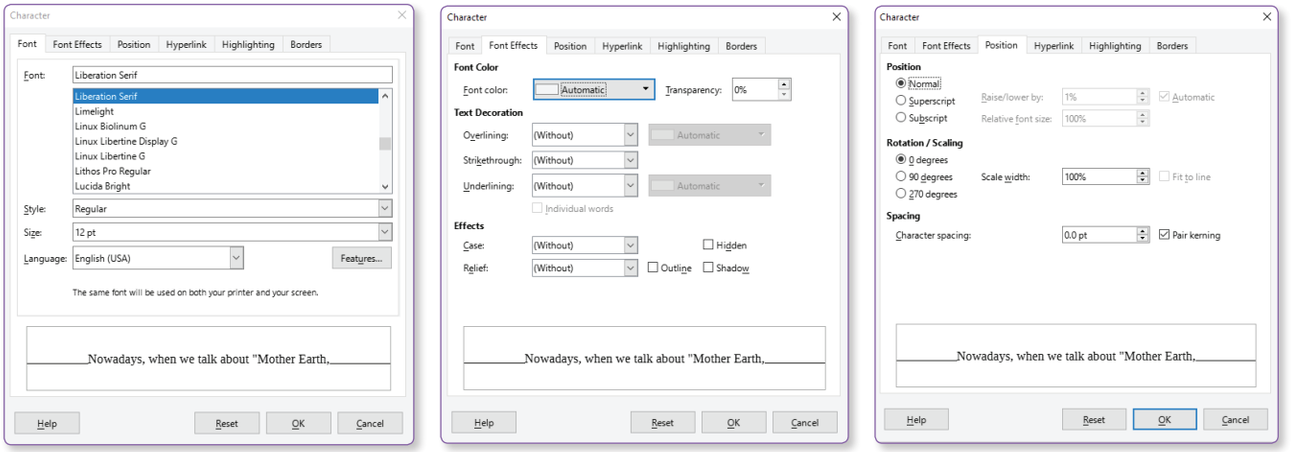
- Font Size
- Font Style—bold, italics, etc.
- Font Type—Arial, Algerian, Liberation Serif, Calibri, etc.
- Font Colour, Highlighting, Background Colour, etc.

Using Format Menu

To apply the text formatting features to the selected text, click on the **Format** menu → **Character** option. The Character dialog box will be displayed. It has all the options present in different tabs to change font type, style, size, colour and many more options related to text formatting.

Some of the tabs are as follows:

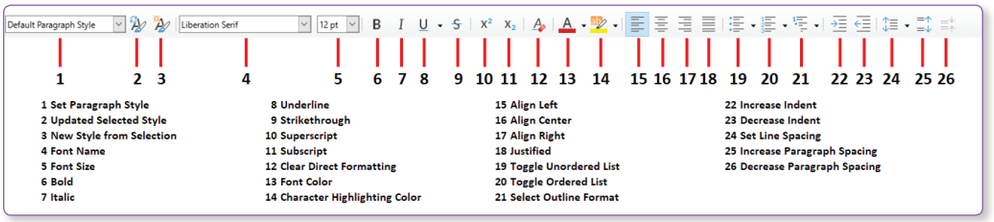
- **Font** tab will provide features such as Font Type, Style, Size, etc.
- **Font Effects** tab will provide features like Font Color (Font Color, Transparency), Effects (Case, Relief), Text Decoration (Overlining, Strikethrough, Underlining).
- **Position** tab will provide features such as font position, rotation, character spacing, etc.



Font Tab | Font Effects Tab | Position Tab

Using Formatting Toolbar

We can also use the formatting toolbar for formatting the text. To do so, select the text and click on the desired button from the formatting toolbar.



Using Shortcut keys

Keyboard shortcuts can be used to format the text.

SHORT KEY

To Superscript: Ctrl + Shift + P

To Subscript: Ctrl + Shift + B

To Bold: Ctrl + B

To Italics: Ctrl + I

To Underline: Ctrl + U

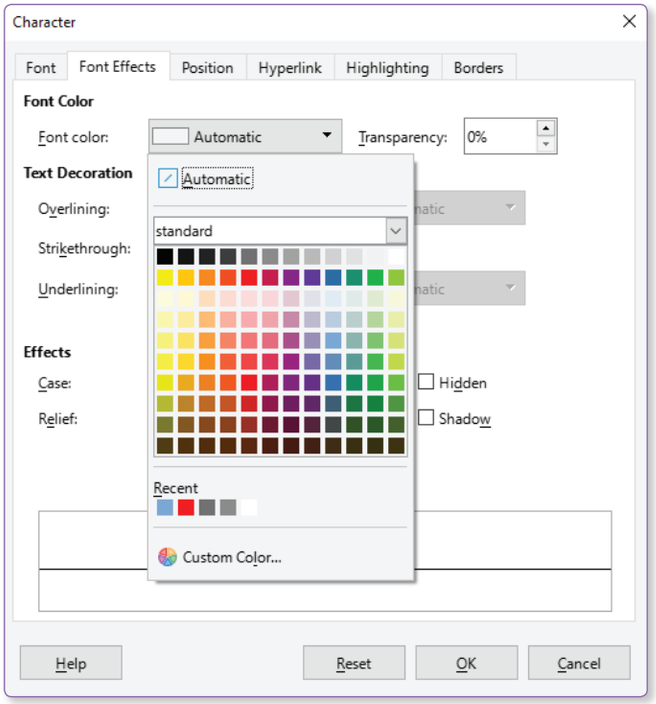
Changing Font Colour

To change the font colour, follow the steps given below:

Step 1: Click on the **Format** menu and select **Character** option from the drop-down menu that will appear. The **Character** dialog box will appear.

Step 2: Click on **Font Effects** tab. Click on the down arrow of Font color. Choose any colour from the colour palette and then click OK button.

Now, whatever you type will appear in the selected colour.



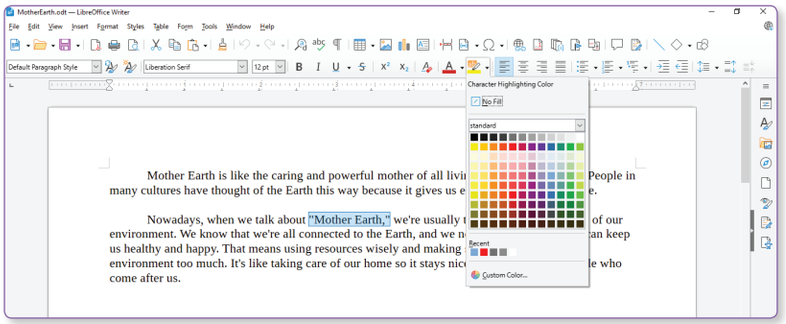
Highlighting the Text

It is used to highlight the selected text. It works similar to the working of a highlighter pen on a printed document. To highlight text, follow the given steps:

Step 1: Select the text you want to highlight.

Step 2: Click on the Highlighting **drop-down** arrow present on the formatting toolbar.

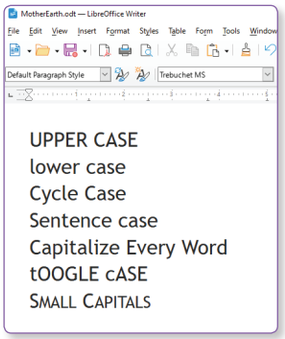
Step 3: Click on the desired colour to be used for highlighting the content.



Changing Case

Word processor provides options to interchange the 'case' of alphabet. It has the following case conversion ways:

- **Upper Case**: SENTENCE WILL BE IN COMPLETE UPPER CASE.
- **Lower Case**: sentence will be in complete lower case.
- **Cycle Case**: Cycles the selected words through uppercase, lowercase, and capitalize every word.
- **Sentence Case**: First letter of each sentence will be in capital letter.
- **Capitalize Every Word**: First Letter Of Each Word In Upper Case
- **Toggle Case**: changes every letter to the opposite case.
- **Small capitals**: capitalises all letters in a reduced font size.

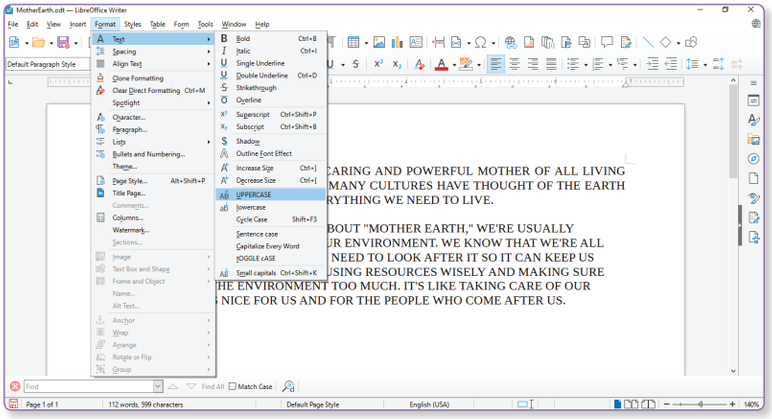


To change the case of the text, follow the given steps:

Step 1: Select the text or paragraph.

Step 2: Click on the **Format** menu and select the **Text** option from the drop-down menu.

Step 3: Select the desired option to change the case of selected text of paragraph.



INFO MAIL

Subject: To change the case of the text

To change the case of the text, follow the given steps:

Step 1: Select the text or paragraph.

Step 2: Right-click on the selected text or paragraph and select the Character option from the options. Another sub-menu will appear.

Step 3: Select Character option from this sub-menu. The Character dialog box will appear.

Step 4: Select Font Effects tab.

Step 5: Click on the drop-down arrow of the Case and select the desired case.

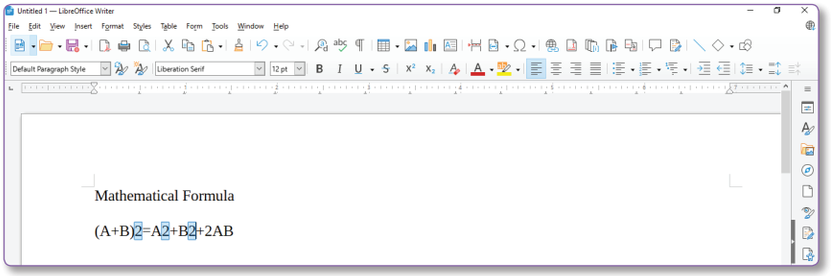
Superscript and Subscript

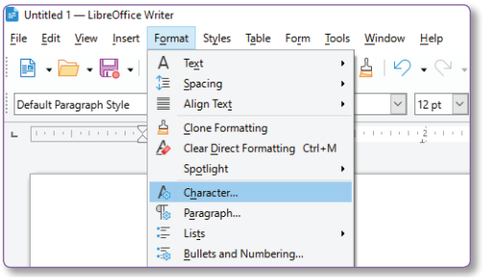
Superscript is a number or letter written in smaller font and above the other character baseline. Exponents in mathematics, 'th' with the day in date are written using superscripts in a document.

Subscript is a number or letter written in smaller font and below the other character baseline. In science, chemical equations are written using subscripts in a document.

To apply superscript, follow the given:

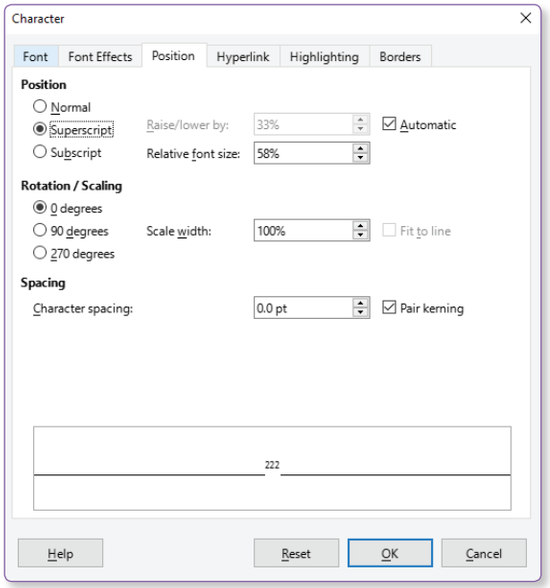
Step 1: Select the text.



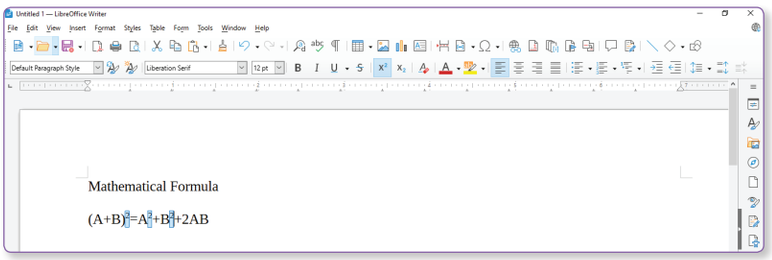


Step 2: Click on **Format** and select the **Character** option. The **'Character'** dialog box will appear on the screen.

Step 3: Click on **Position** tab.

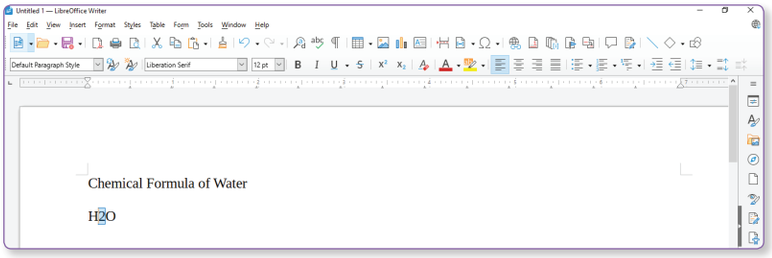


Step 4: Select the **Superscript** option from the **Position** section. The selected text appears above the baseline.

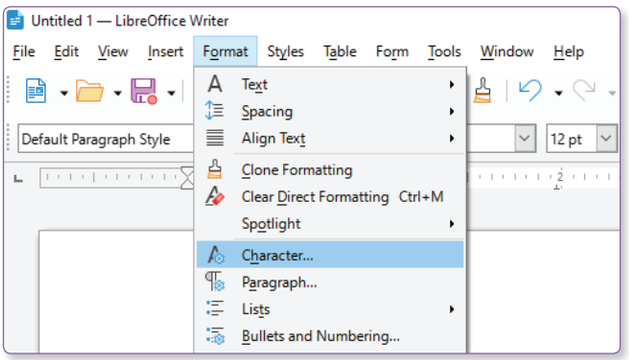


To apply subscript, perform the following steps:

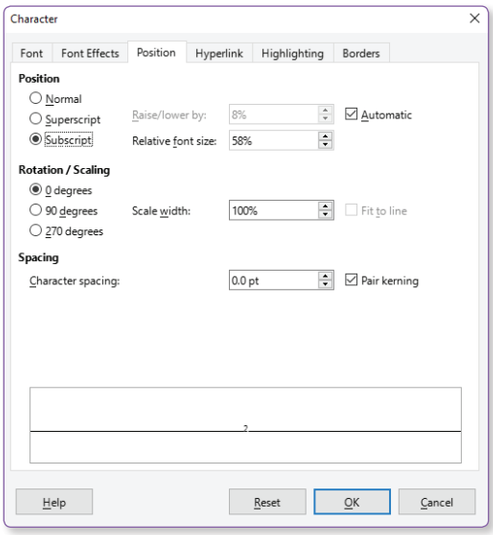
Step 1: Select the text.



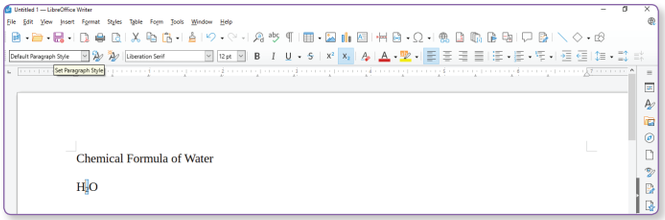
Step 2: Click on **Format** menu and select the **Character** option. The **'Character'** dialog box will appear on the screen.



Step 3: Click on **Position** tab.



Step 4: Select the **Subscript** option from the **Position** section. The selected text appears below the baseline.

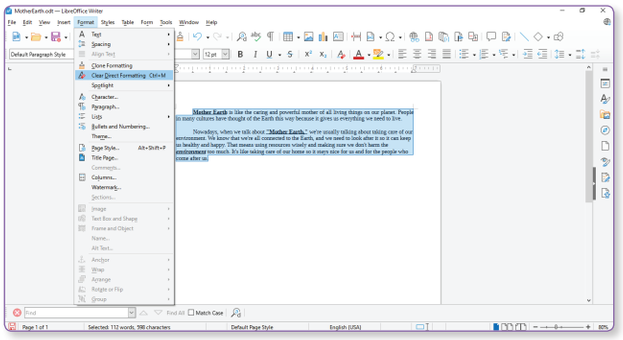


Removing the Formatting

We can remove the existing format on the text. To do so, follow the given steps:

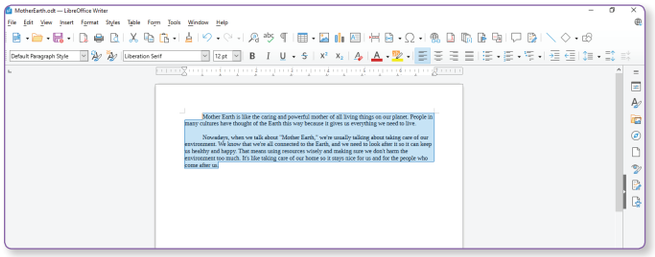
Step 1: Select the text.

Step 2: Click on **Format** menu, then select the **Clear Direct Formatting**.



OR

Right-click to open the shortcut menu and select the **Clear Direct Formatting** option.



SHORT KEY

To Remove formatting:

Ctrl + M

After the existing formatting is removed you can apply a fresh new format as per your need.

INFO MAIL

Subject: To copy the format of selected text and apply it to some other text

To copy the format of selected text and apply it to some other text, do the following:

Step 1: Select the text to copy the format (Font style, size, colour, etc.).

Step 2: Click on Clone Formatting tool present on the Standard Toolbar. The mouse pointer will change to the paint bucket.

Step 3: Select the text where you want to apply the formatting. The format of the text previously selected will be copied to the presently selected text.

FORMATTING A PARAGRAPH

Collection of relevant sentences written together will make a paragraph. A paragraph can be easily formatted using **Format** menu → **Paragraph** option → Choose the relevant option from the Paragraph dialog box.

Indenting a Paragraph

Indentation means spaces before or after a line. To indent a line or a paragraph, follow the given steps:

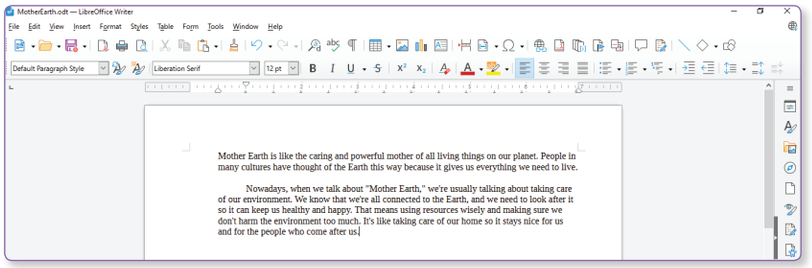
Step 1: Place the text cursor anywhere in the paragraph.

Step 2: Click on the **Increase Indent** or **Decrease Indent** tool present on the formatting toolbar.

Step 3: Each time when you click on the **Increase Indent** tool, the current paragraph's indent will increase. Click on **Decrease indent** tool to remove or decrease the indent.

Another way to indent a line or a paragraph is click on the **Format** menu → **Paragraph** option → **Indent & Spacing** tab. Chose the indentation options from Indent section. You can create paragraph or line spacing also using this tab.

You can also use ruler to indent a line or a paragraph.



The given document is indented using horizontal ruler with:

- First line indentation
- Left indentation
- Right indentation

Aligning a Paragraph

Alignment refers to the placement of text/paragraph with respect to the margins of the page.

The alignment with respect to the left and right margins of a page is called **horizontal alignment**. There are four types of horizontal alignment:

- Align Left : Text is aligned on the left margin with irregular alignment on the right side. This is default alignment in LibreOffice Writer document.
- Align Right : Text is aligned on the right margin with irregular alignment on the left side.

- Align Center : Text is aligned keeping in mind the centre of the page with irregular placement of text on both left and right margins.
- Justified : Text is aligned properly on both left and right margins.

SHORT KEY

To use left alignment: Ctrl + L

To use right alignment: Ctrl + R

To use center alignment: Ctrl + E

To use justified alignment: Ctrl + J

The alignment of the text with respect to top and bottom margins of text in a cell of a table is called **vertical alignment**. This gets activated only when data is selected in a table. There are three types of vertical alignment:

- Top: Text is aligned with respect to the top margin
- Center: Text is aligned with respect to the vertical centre of the cell.
- Bottom: Text is aligned with respect to the bottom margin.

This text is left aligned. Alignment refers to the placement of text/paragraph with respect to the margins of the page. The alignment with respect to the left and right margins of a page is called horizontal alignment.

This text is right aligned. Alignment refers to the placement of text/paragraph with respect to the margins of the page. The alignment with respect to the left and right margins of a page is called horizontal alignment.

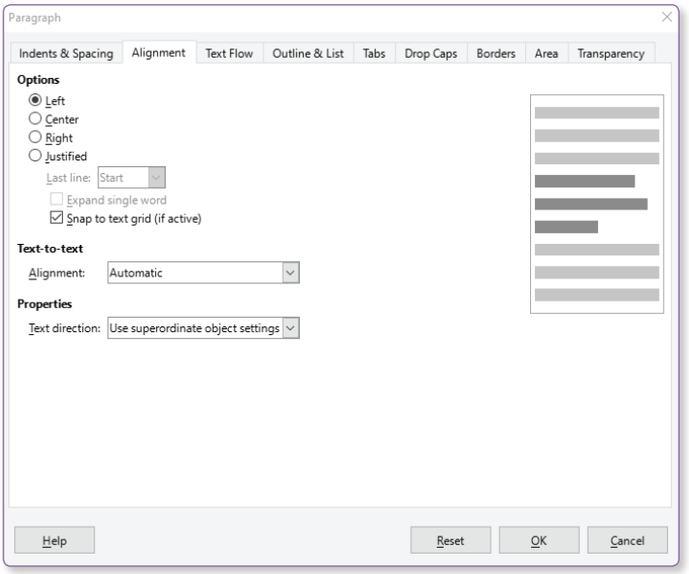
This text is centred. Alignment refers to the placement of text/paragraph with respect to the margins of the page. The alignment with respect to the left and right margins of a page is called horizontal alignment.

This text has justified. Alignment refers to the placement of text/paragraph with respect to the margins of the page. The alignment with respect to the left and right margins of a page is called horizontal alignment.

To change the alignment of the selected paragraph, follow the given steps:

Step 1: Click on **Format** menu and select the **Paragraph** option. The 'Paragraph' dialog box will appear on the screen.

Step 2: Click on **Alignment** tab.



Step 3: Select the required alignment option from the **Options** section and **Text-to-text** section.

Step 4: Click on **OK** button to apply the selected alignment option.

You can also change the alignment of the text by selecting **Format** menu → **Align Text** option → **Left/Centered/Right/Justified/Top/Center/Bottom** option.

INFO MAIL

Subject: To apply predefined paragraph style

Go to paragraph style on formatting toolbar. Select Text Body from the pop down menu. A predefined paragraph style will be applied to the current paragraph.

I KNOW

Tick (✓) if you know this.

- Indentation means spaces before or after a line.
- Alignment refers to the placement of text/paragraph with respect to the margin of the page.
- Highlighting Colour is used to highlight text which works similar to working of a highlighter pen on a printed document.
- Superscript is a number or letter written in smaller font and above the other character baseline.
- Subscript is a number or letter written in smaller font and below the other character baseline.

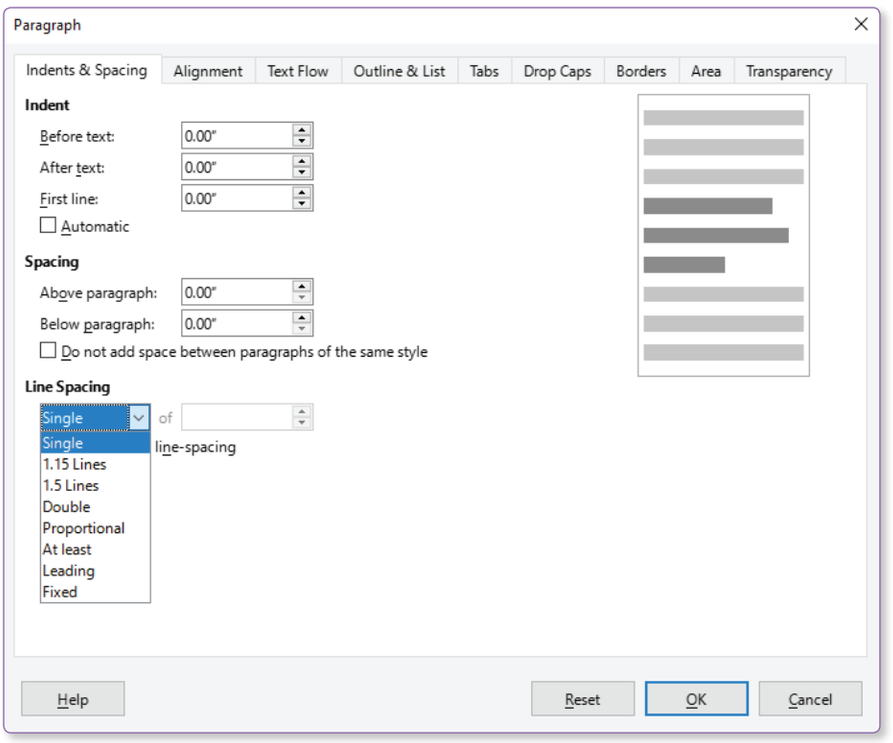
Line Spacing

Line spacing is the vertical gap between different lines of text in a paragraph. It is measured in lines or in points. It can be set to single spacing, 1.5 lines spacing, double spacing, etc. To change the line spacing, follow the given steps:

Step 1: Select the paragraph or the lines of text.

Step 2: Go to **Format** menu → **Paragraph** option. The Paragraph dialog box will appear.

Step 3: Click on the **Indent & Spacing** tab. Select any preferred option from the **Line Spacing** drop-down list.



Different options of Line Spacing are:

- **Single**: It provides single line spacing according to the point size of the font. It is the default line spacing that exists in a normal document.
- **1.15 lines**: It provides 15% greater than the indicated font size.
- **1.5 lines**: It provides one-and-a-half line size spacing according to the point size of the font.
- **Double**: It provides double line spacing according to the point size of the font.
- **Proportional**: It allows to enter a percentage value in the box for line spacing, where 100% corresponds to a single line spacing.
- **At least**: It sets minimum spacing between the lines. This option is useful if there are fonts and lines of different sizes in the paragraph.
- **Leading**: It sets the height of the vertical space that is inserted between two lines.
- **Fixed**: It sets the line spacing to exactly match the value that is entered in the box. This can result in cropped characters.

Step 4: After selecting any of these options, click on the **OK** button.

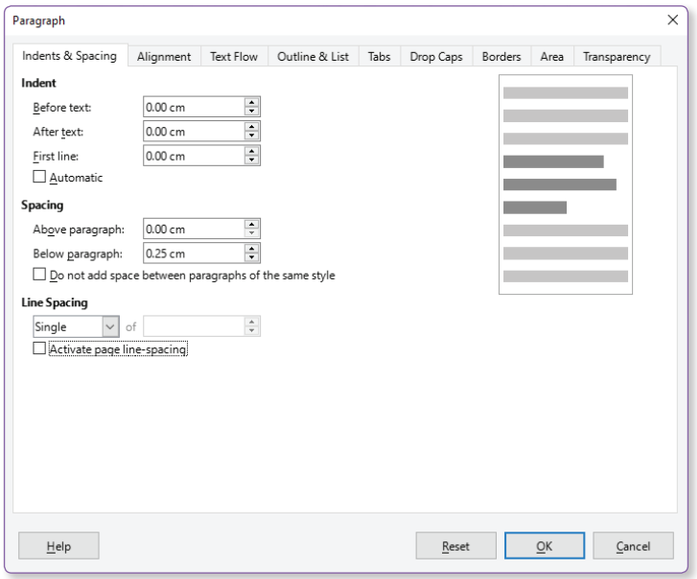
Paragraph Spacing

Paragraph spacing is the space or gap between two paragraphs. Space can be specified in lines or points. The **'Above paragraph'** is used to increase or decrease the space between the selected paragraph and the paragraph before the selected one whereas the **'Below paragraph'** is used to increase or decrease the space between the selected paragraph and the paragraph next to the selected one. To set the spacing before and after a paragraph, follow the given steps:

Step 1: Select the paragraph and click on the **Format** menu → **Paragraph** option. The Paragraph dialog box will appear.

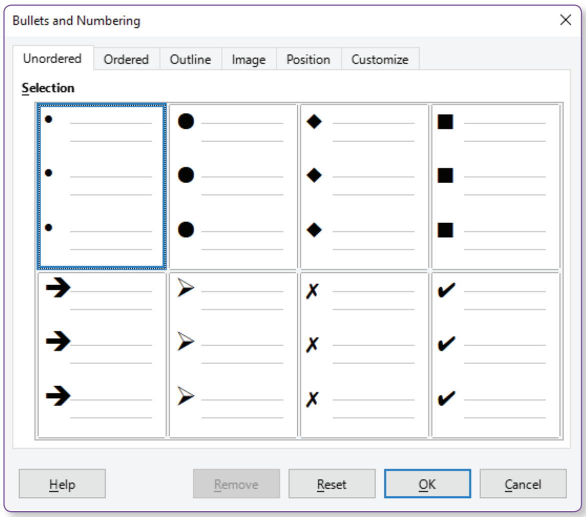
Step 2: Click on the **Indents & Spacing** tab.

Step 3: Set the desired value of paragraph spacing in the **Spacing** section.

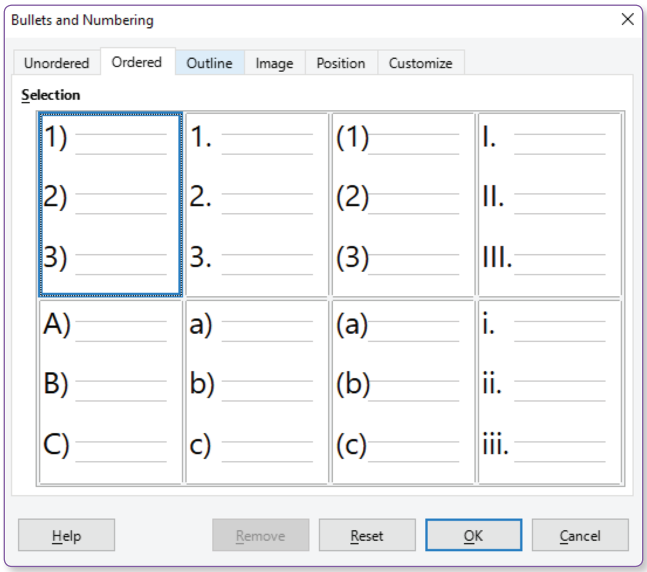


Bullets and Numbering

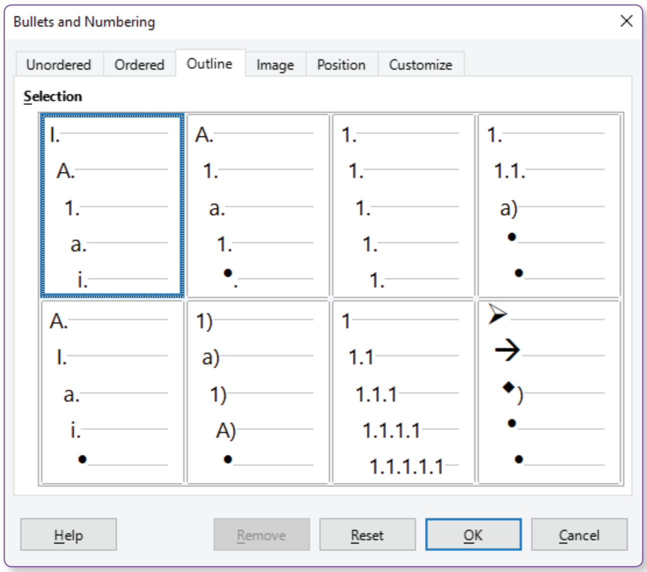
Bullets are used to create a list where the sequence of the options is not important. For example, list of friends, shopping list, list of participants, etc. This kind of list is known as unordered list.



Numberings are used to create a list where sequence plays an important role. For examples, steps of experiments in Science, recipe steps, steps of instructions, etc. This kind of list is known as ordered list.



A nested list (outline list) can also be created as shown here:



To add bullets or numbering follow the given steps:

Step 1: Select the **Format** menu.

Step 2: Click on **Bullet and Numbering** option. The Bullets and Numbering dialog box will appear.

Step 3: Select the preferred option from the Bullets and Numbering dialog box.

Step 4: Click on the **OK** button.

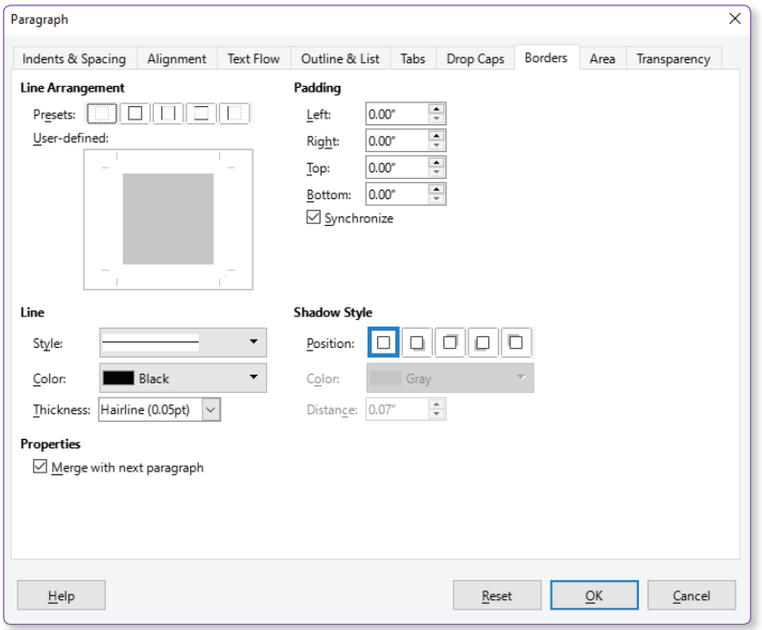
You can also add bullets and numbering by using Toggle Unordered List and Toggle Ordered List button present on formatting toolbar, respectively.

Paragraph Border and Background

A border can be applied to a text or a paragraph or to whole page. To apply border to a paragraph, follow the given steps:

Step 1: Select the paragraph.

Step 2: Click on **Format** menu → **Paragraph** option. The **Paragraph** dialog box will appear.



Step 3: Click on **Borders** tab.

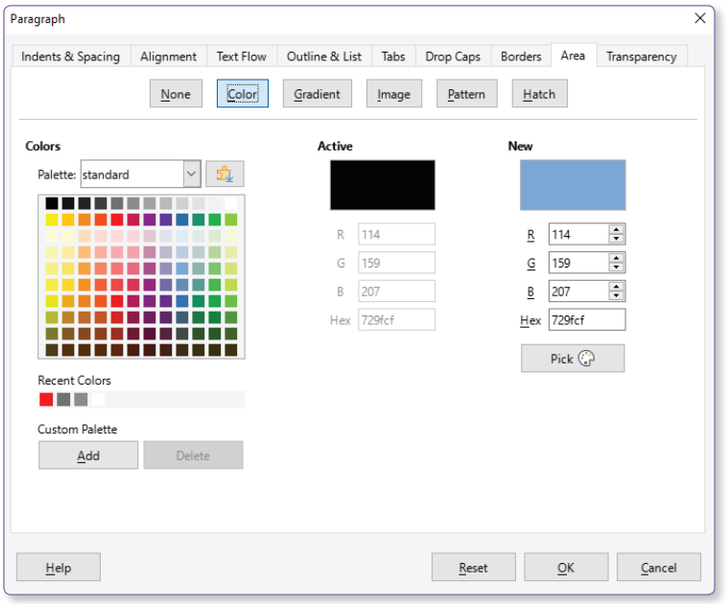
Step 4: Select the desired style and colour of the border.

Step 5: Click on **OK** button.

To add background colour to the paragraph, follow the given steps:

Step 1: Select the paragraph.

Step 2: Select the **Format** menu → **Paragraph** option → **Area** tab → **Color** option.



Step 3: Select the desired background colour.

Step 4: Click on the **OK** button.

The selected colour will appear in the page background.

FORMATTING A PAGE

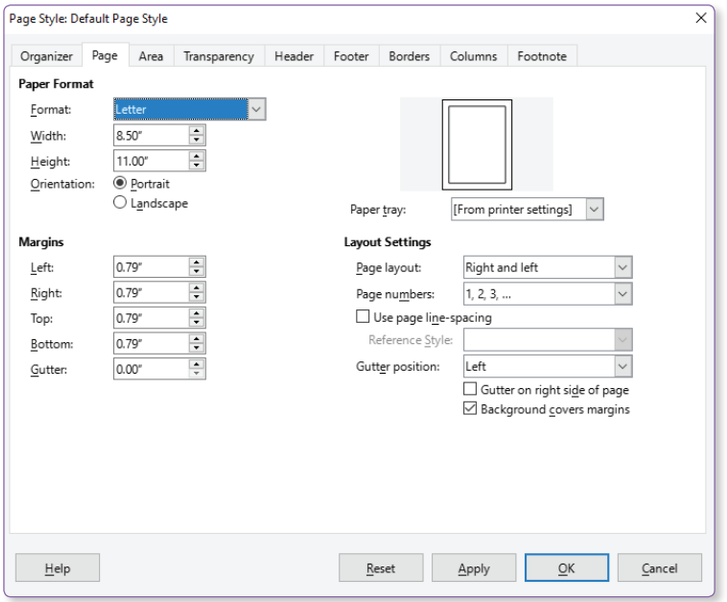
A page is formatted with respect to page size, page break, borders, background, margins, header and footer, page number, etc.

To change the various parameters of the page, follow the given steps:

Step 1: Click on the **Format** menu.

Step 2: Click on the **Page Style** option. The **Page Style: Default Page Style** dialog box will appear.

Step 3: Select the desired option.



There are other ways also to format a page.

Page Orientation

Page Orientation means the direction in which a document is printed or displayed on the screen. There are two types of orientation:

- **Portrait**: When the page is oriented vertically with the height more than the width.
- **Landscape**: When the page is oriented horizontally with the width more than the height.

To change the orientation of a page, follow the given steps:

Step 1: Click on the **Format** menu → **Page Style** option → **Page** tab.

Step 2: Select the desired orientation in from the **Paper Format** section.

Step 3: Click on the **OK** button.

Page Margins

Margin is the distance of the text from the edges of the paper. There are five types of margins available in Writer:

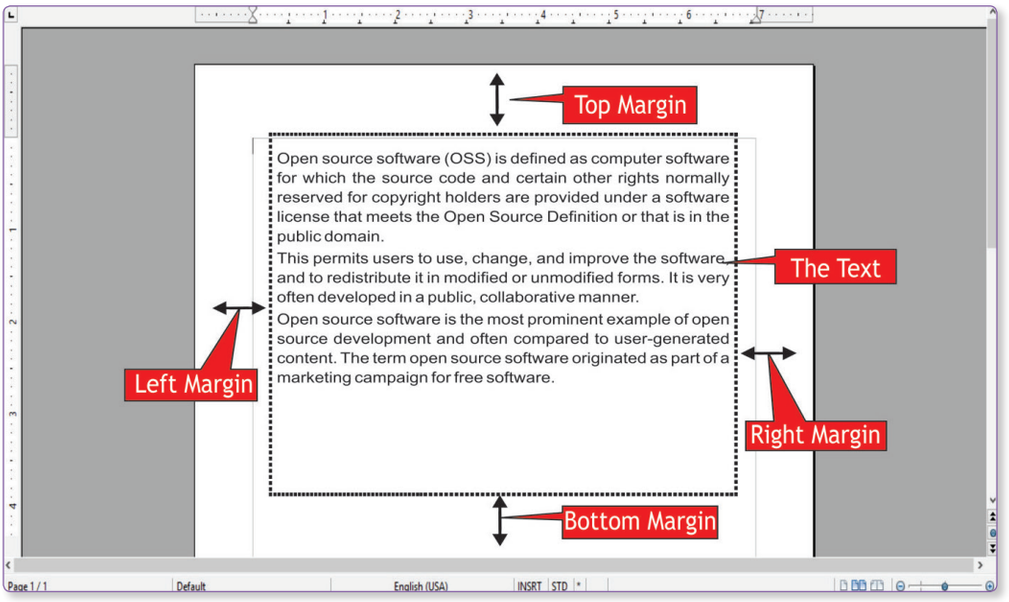
- **Left Margin**: The distance of the text from the left edge of the paper.
- **Right Margin**: The distance of the text from the right edge of the paper.
- **Top Margin**: The distance of the text from the top edge of the paper.
- **Bottom Margin**: The distance of the text from the bottom edge of the paper.
- **Gutter Margin**: The extra margin on any side of the page that will be used in binding.

To set the margins of a page, follow the given steps:

Step 1: Click on the **Format** menu → **Page Style** option → **Page** tab.

Step 2: Set the margins that you want in the **Margins** section.

Step 3: Click on the **OK** button.



Page Size and Format

The size of the page can be changed in a Writer document. To do so, follow the given steps:

Step 1: Click on the **Format** menu → **Page Style** option → **Page** tab.

Step 2: Select the page format from the Format drop-down list in the **Page Format** section. Here you can choose from the pre-defined page sizes.

OR

Mention the page size that you want in the Width and Height boxes in the **Page Format** section.

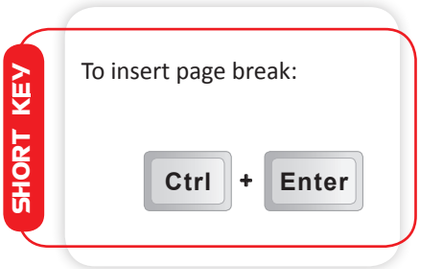
Step 3: Click on the **OK** button.

Inserting Page Break

When you create a document and start adding the content to it, the content moves to next page when the current page is filled. This is an example of automatic page break. Sometimes there is a requirement to break the page forcefully, even though the current page has space, and take the cursor along with the content to the next page. This can be done by following the given steps:

Step 1: Click on the **Insert** menu.

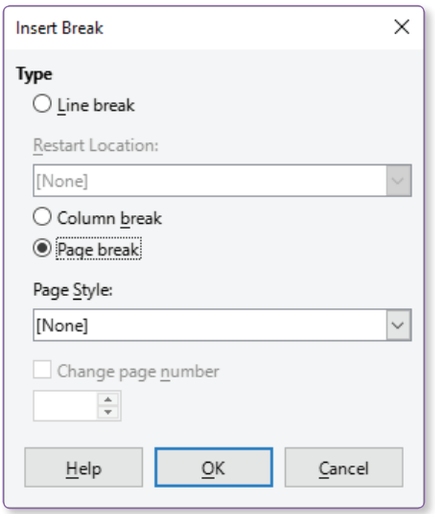
Step 2: Click on the **Page Break** option.



Other than page break, you can use line break and column break as well. Line break works similar to using Enter key in a paragraph. Column break is used when a page is divided into columns and you want to start a new column even though there is the space in the current column. To insert them, follow the given steps:

Step 1: Position the cursor at the point you want to start the next page.

Step 2: Select I**nsert** menu → **More Breaks** option → **Manual Break** option. The **Insert Break** dialog box will appear.



Step 3: Select the type of break you want.

Step 4: Click on the **OK** button.

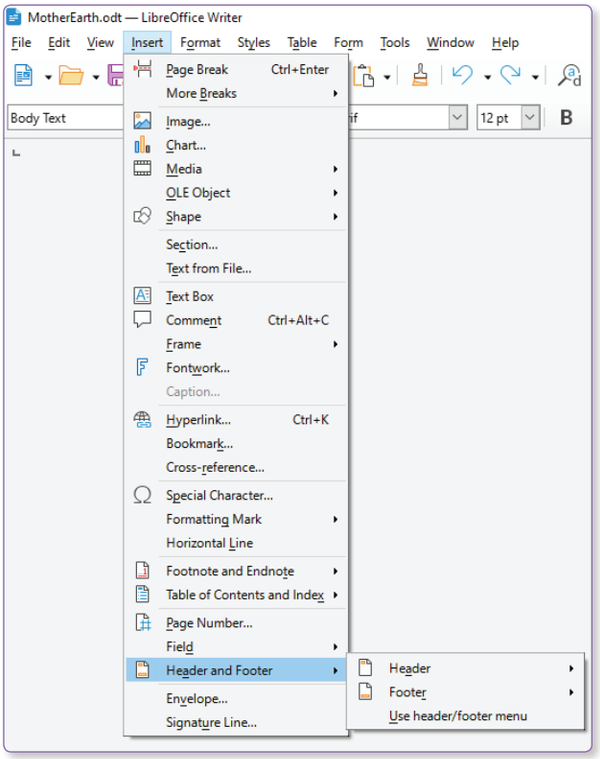
Inserting Header and Footer

Header appears at the top of each page in a document like the author's name, document name, book title, chapter name, company logo, etc. Footers appear at the bottom of each page like page number, document information, etc. In a document with multiple pages adding header and footer increases the readability of the document.

To add header and footer in a document, follow the given steps:

Step 1: Click on the **Insert** menu.

Step 2: Click on the **Header and Footer** option.



Step 3: Click on the **Header** option to add header.

OR

Click on the **Footer** option to add footer.

Step 4: Select the desired option.

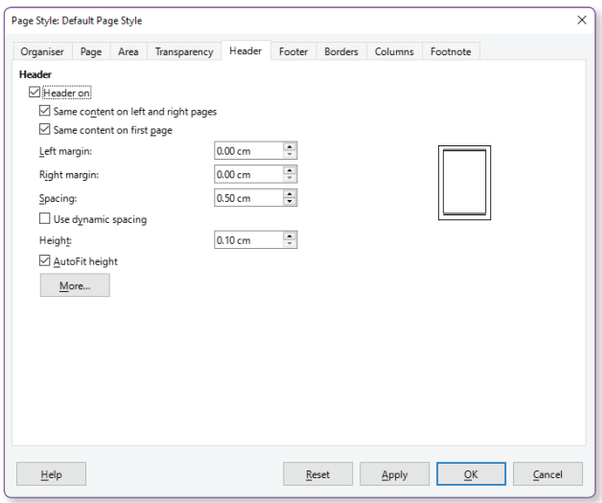
Step 5: Write the text that you want in the header or footer.

The header and footer margins can also be changed.

To change the header margins, follow the given steps:

Step 1: Click on the **Format** menu → **Page Style** option.

Step 2: Click on **Header** tab.



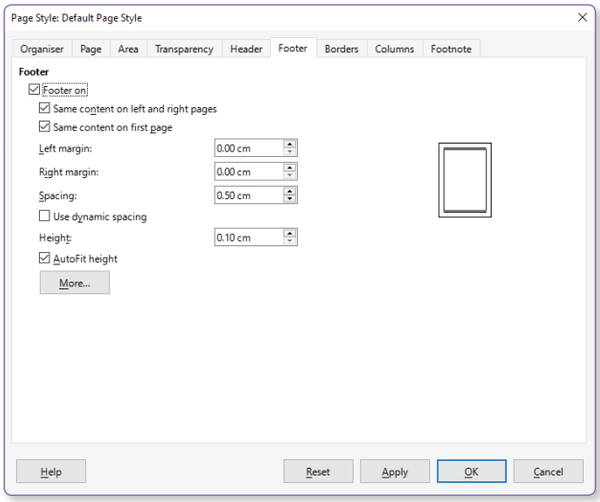
Step 3: Select the desired option to set the margins of the header.

Step 4: Click on the **OK** button.

To change the footer margins, follow the given steps:

Step 1: Click on the **Format** menu → **Page Style** option.

Step 2: Click on **Footer** tab.



Step 3: Select the desired option to set the margins of the footer.

Step 4: Click on the **OK** button.

Inserting Page Numbers

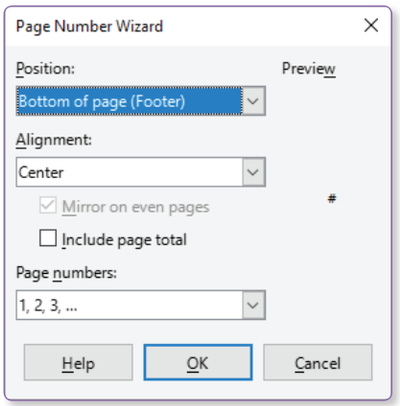
To enter page numbers in the footer section, follow the given steps:

Step 1: Click on the **Insert** menu → **Page Number** option. The **Page Number Wizard** dialog box will appear.

Step 2: Select **Bottom to page (Footer)** option from the **Position** drop-down menu.

Step 3: Select the style of the page number from the **Page numbers** drop-down menu.

Step 4: Click on the **OK** button.

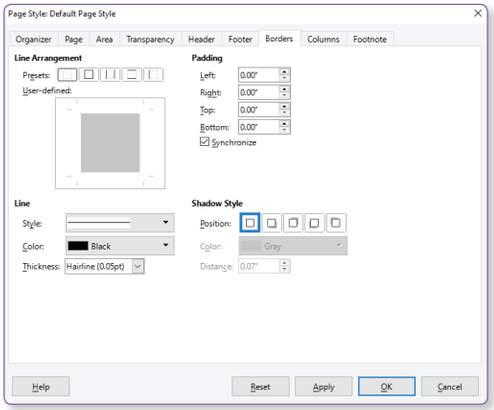


Page Border and Background

To apply border to a page, follow the given steps:

Step 1: Click on the **Format** menu → **Page Style** option.

Step 2: Click on **Borders** tab.



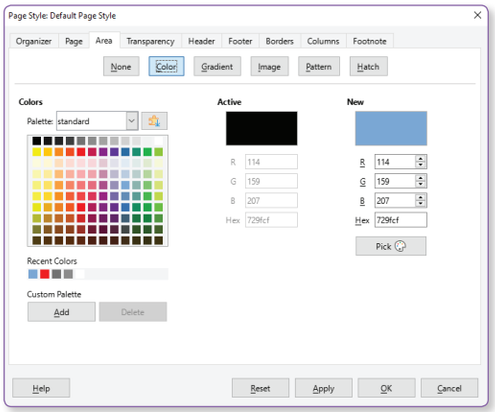
Step 3: Select the desired style and colour of the border.

Step 4: Click on **OK** button.

To apply background colour to a page, follow the given steps:

Step 1: Click on the **Format** menu → **Page Style** option.

Step 2: Click on **Area** tab.



Step 3: Click on the **Color** button.

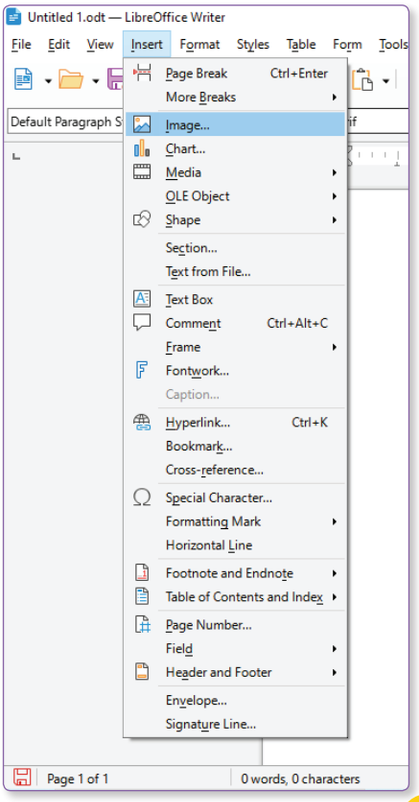
Step 4: Select the colour that you want to apply in the background of the page. Click on the **OK** button.

Inserting Images

An image you wish to add in your document should be stored in the hard disk, external storage such as Pen drive, CDs, or Google Drive. To insert an image in a document, follow the given steps:

Step 1: Place the cursor in the document where you want to insert the image.

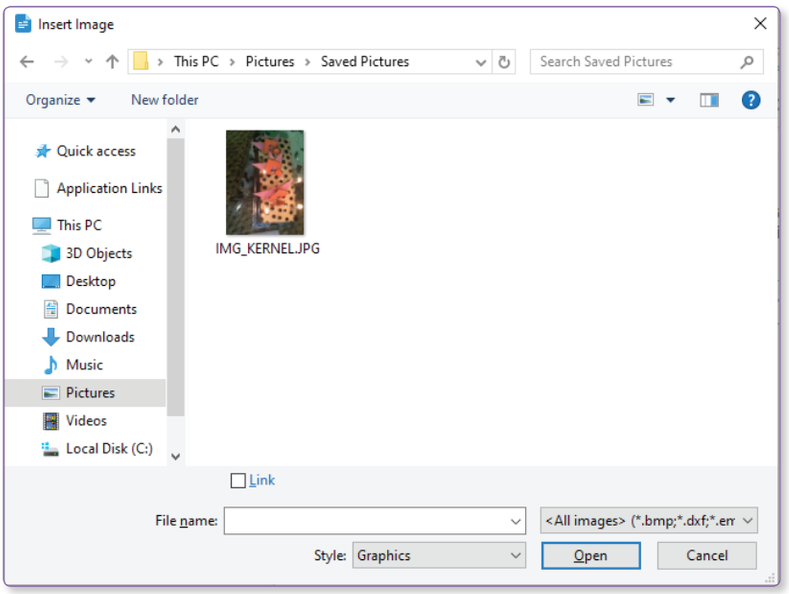
Step 2: Select the **Insert** menu → **Image** option. The **Insert Image** dialog box will appear.



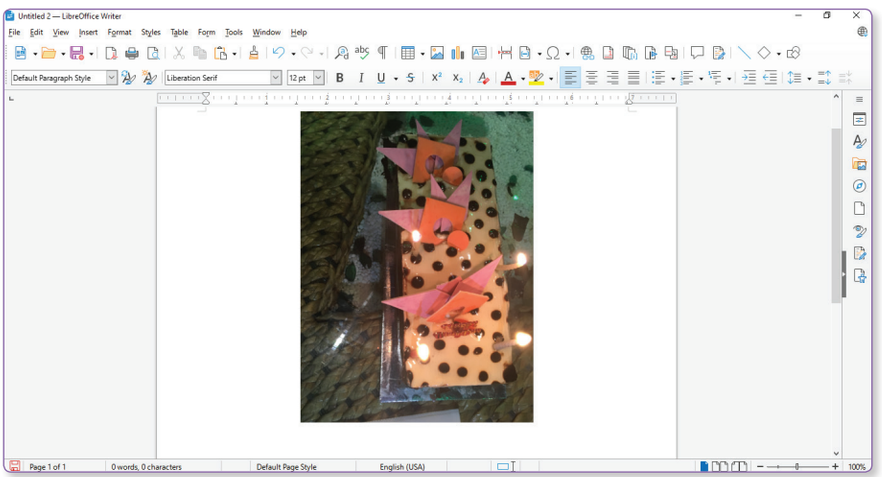
OR

Click on the **Insert Image** button  from the standard toolbar. The **Insert Image** dialog box will appear.

Step 3: Select the image and click on the **Open** button.



The selected image will be inserted at the desired position.



Formatting an Image

An image once inserted can easily be formatted. When an image is selected, the tools of formatting toolbar change to tools that helps in formatting an image (image toolbar) as shown here.

We can also open this toolbar using **View** menu → **Toolbars** option → **Image**.

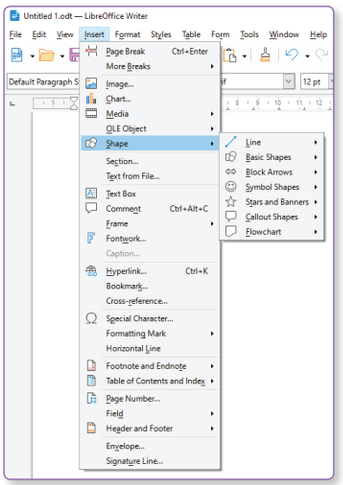
Some of the most commonly used options in the image toolbar are:

- **Filter:** It helps to apply different effect on the selected image.
- Default **Image Mode:** It affects the display of the graphic from normal colour to grayscale, black/white, or watermark.

- Default: The graphic is displayed unaltered in colour.
- Grayscale: The graphic is displayed in 256 shades of gray.
- Black/White: The graphic is displayed in black and white.
- Watermark: The brightness and contrast of the graphic are reduced to the extent that the graphic can be used as a watermark (background).

- **Crop Image:** It works like a scissor to cut the unwanted parts of the image without resizing it.
- **Flip Vertically:** It flips the selected object vertically from top to bottom.
- **Flip Horizontally:** It flips the selected object horizontally from left to right
- **Rotate 90° Left:** It rotates the selected object 90° left.
- **Rotate 90° Right:** It rotates the selected object 90° right.
- **Rotate:** It can rotate the selected object around its default pivot point (centre point) or a pivot point that you designate.
- 0% **Transparency:** It helps you adjust the degree of transparency of the picture between 0% (opaque) and 100% (fully transparent).
- **Color:** It adjusts the values of the three RGB colours, the brightness, contrast and the Gamma value.

Inserting Shapes



Shapes can be inserted in a Writer document. To insert a shape, follow the given steps:

Step 1: Select the **Insert** menu → **Shape** option. Another sub-menu will appear.

Step 2: Select the type of shape from the sub-menu.

Step 3: Select the desired shape.

Step 4: Double click the mouse on the page where you want to add the shape.

Shapes can also be inserted in a document using drawing toolbar. You can insert drawing toolbar by clicking on the **View** menu → **Toolbars** option → **Drawing**. Drawing toolbar will show just above the status bar.

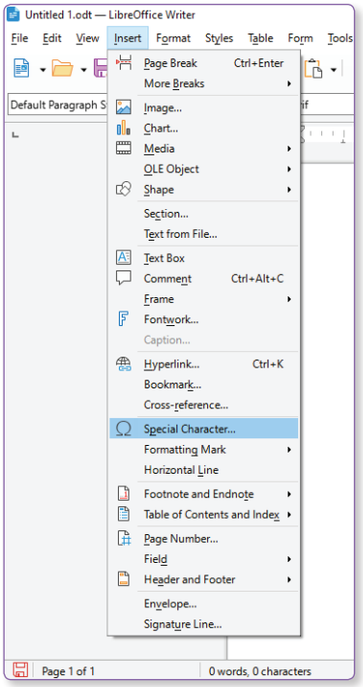
Drawing toolbar has all the shapes including text box and flowcharts.

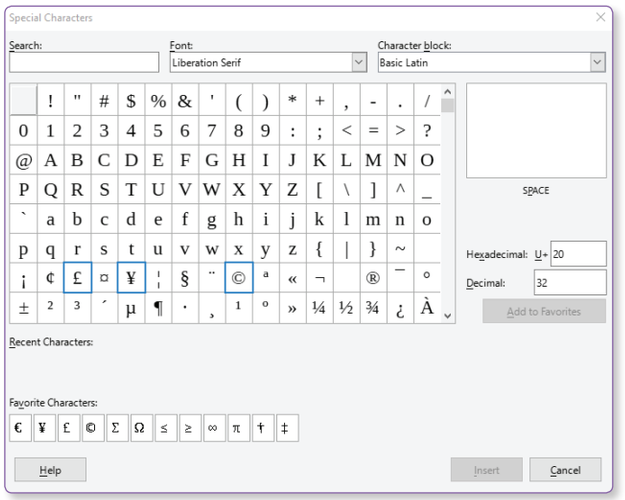
Inserting Special Characters

Special characters like ¶, ↔, µ, etc., which cannot be typed by using the keyboard can be easily inserted in a Writer document. To insert special characters, follow the given steps:

Step 1: Place the cursor in the document where you want to insert special character.

Step 2: Click on the **Insert** menu → **Special Character** option. The **Special Characters** dialog box will appear.





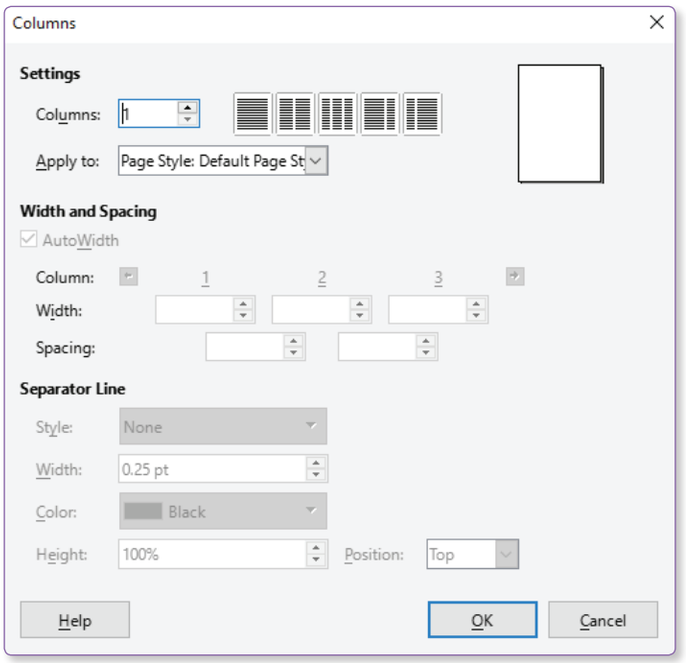
Step 3: Select the required special character.

Step 4: Click on the **Insert** button.

Creating Multiple Columns in a Document

In a document a page can be divided into two or more columns just like in magazines and newspapers. We can easily arrange the text into columns before or after adding the text. To create multiple columns, follow the given steps:

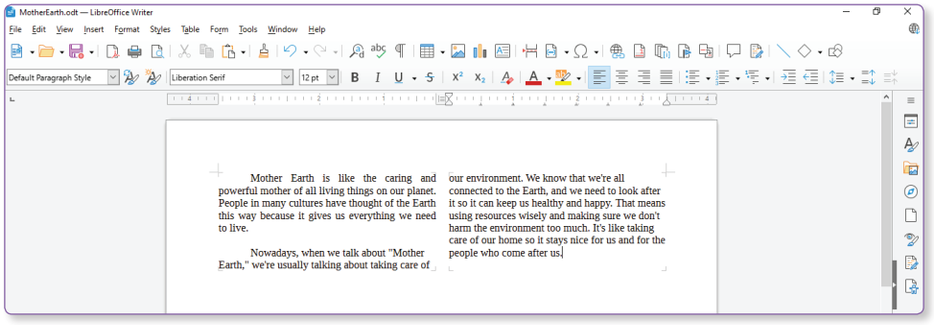
Step 1: Click on the **Format** menu → **Columns** option. The **Columns** dialog box will appear.



Step 2: Enter the number of columns in the **Columns** text box. Fill the **Width** and **Spacing** section, if it is required.

Step 3: Click on the **OK** button.

The document will be divided into the specified columns.



CREATING AND WORKING WITH TABLES

The representation of data in the form of rows and columns is called a table. A table can be created with one row and one column also. The intersection of a row and a column makes a cell. Some of the examples of tables are list of friends, students' details, employees' details, etc.

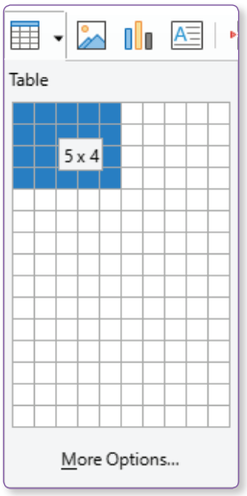
We can create table in the given ways:

- **By using standard toolbar:**

  To create table using standard toolbar, follow the given steps:

  Step 1: Place the cursor in the document where you want to insert the table.

  Step 2: Click on the **Insert Table** button on the Standard toolbar. A drop-down grid will appear.



  Step 3: Select the size of the table from the grid by drag mouse over it.

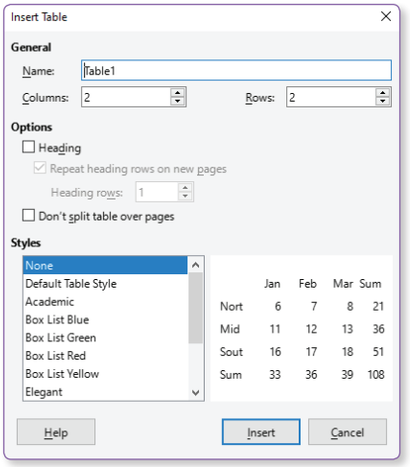
  Step 4: Click on the left button of the mouse to add the table in the document.

- **By using menu bar:**

  To create table using menu bar, follow the given steps:

  Step 1: Place the cursor in the document where you want to insert the table.

  Step 2: Click on the **Table** menu → **Insert Table** option. The **Insert Table** dialog box will appear.



Step 3: Specify the number of rows and columns you want to add. Fill the other details if you want (other details are optional).

Step 4: Click on the **Insert** button.

After creating a table, you can explore more features related to it. To do so, click on the table, then click on the **Table** menu → **Properties** option. It will open the **Table Properties** dialog box.

SHORT KEY

To Open Insert Table dialog box:

Ctrl + F12

Inserting New Rows in the Existing Table

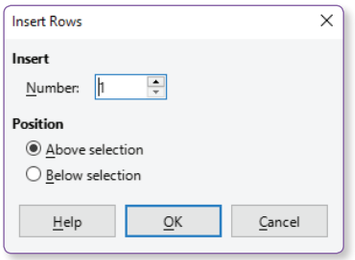
New rows can be inserted in an existing table in Writer. To insert rows in the table, follow the given steps:

Step 1: Place the cursor in the row before or after which you want to add new rows.

Step 2: Click on the **Table** menu → **Insert** option → **Rows**. The **Insert Rows** dialog box will appear.

OR

Right-click on the row. A shortcut menu will appear. Click on the **Insert** → **Rows** from the shortcut menu. The **Insert Rows** dialog box will appear.

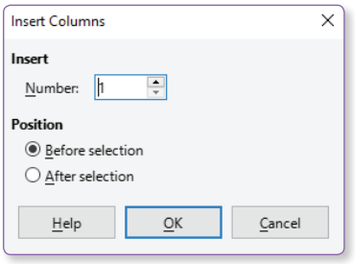


Step 3: Specify the number of rows to be inserted in the **Insert** section, and select the Above selection or Below selection on the **Position** section.

Step 4: Click on the **OK** button.

Inserting New Columns in the Existing Table

New columns can be inserted in an existing table in Writer. To insert columns in the table, follow the given steps:



Step 1: Place the cursor in the column before or after which you want to add new columns.

Step 2: Click on the **Table** menu → **Insert** option → **Columns**. The **Insert Columns** dialog box will appear.

OR

Right-click on the column. A shortcut menu will appear. Click on the **Insert** → **Columns** from the shortcut menu. The **Insert Columns** dialog box will appear.

Step 3: Specify the number of columns to be inserted in the **Insert** section, and select the Before selection or After selection on the **Position** section.

Step 4: Click on **OK** button.

Deleting Rows

To delete one or more rows, follow the given steps:

Step 1: Place the cursor or select the row you want to delete.

Step 2: Click on the **Table** menu → **Delete** option → **Rows**.

OR

Right-click on the row. A shortcut menu will appear. Click on the **Delete** → **Rows** from the shortcut menu.

Deleting Columns

To delete one or more columns, follow the given steps:

Step 1: Place the cursor or select the column you want to delete.

Step 2: Click on the **Table** menu → **Delete** option → **Columns**.

OR

Right-click on the row. A shortcut menu will appear. Click on the **Delete** → **Columns** from the shortcut menu.

Merging and Splitting Cells

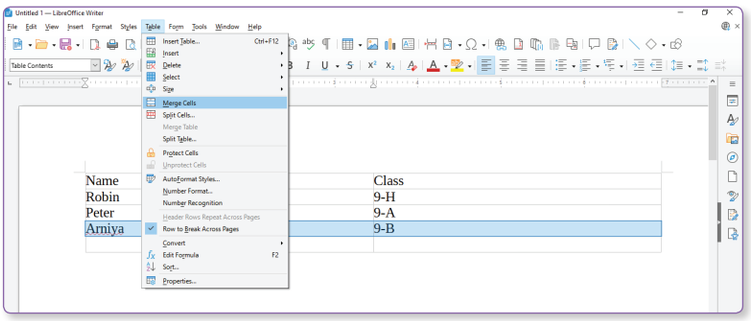
Merging cells mean combining two or more cells to form a single cell. Splitting cell means dividing one cell into two or more cells.

Merging Cells

To merge the cells, follow the given steps:

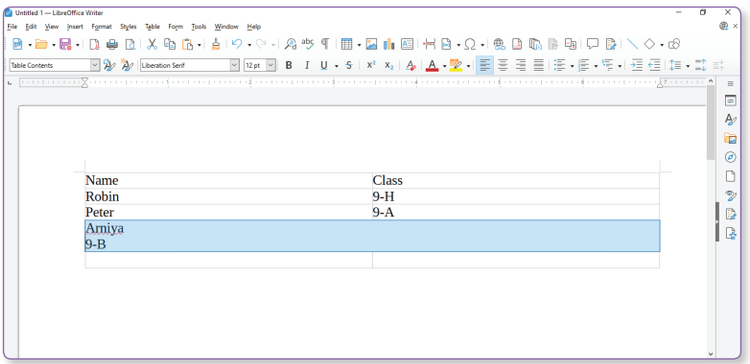
Step 1: Select two or more cells in the tables.

Step 2: Click on the **Table** menu → **Merge Cells** option.



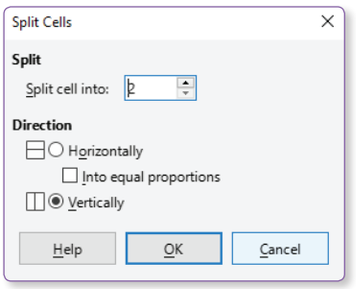
OR

Right-click on the selected cells. A shortcut menu will appear. Click on the **Merge Cells** option. The cells will be merged.



Splitting Cells

To split a cell, follow the given steps:



Step 1: Place the cursor in a cell in the tables.

Step 2: Click on the **Table** menu → **Split Cells** option. The **Split Cells** dialog box will appear.

OR

Right-click on the cells. A shortcut menu will appear. Click on the **Split Cells** option. The **Split Cells** dialog box will appear.

Step 3: Perform the required changes.

Step 4: Click on the **OK** button.

Merging and Splitting Tables

You merge two or more tables into one and split a table into two or more tables in Writer.

Merging Tables

To merge the tables, follow the given steps:

Step 1: Delete the content between the two table.

Step 2: Click on any of the tables.

Step 3: Click on the **Table** menu → **Merge Tables** option.

Splitting Tables

To split a table, follow the given steps:

Step 1: Place the cursor in a cell of the row that will be at the top of the second table.

Step 2: Click on the **Table** menu → **Split Table** option. The **Split Table** dialog box will appear.

Step 3: Perform the required changes.

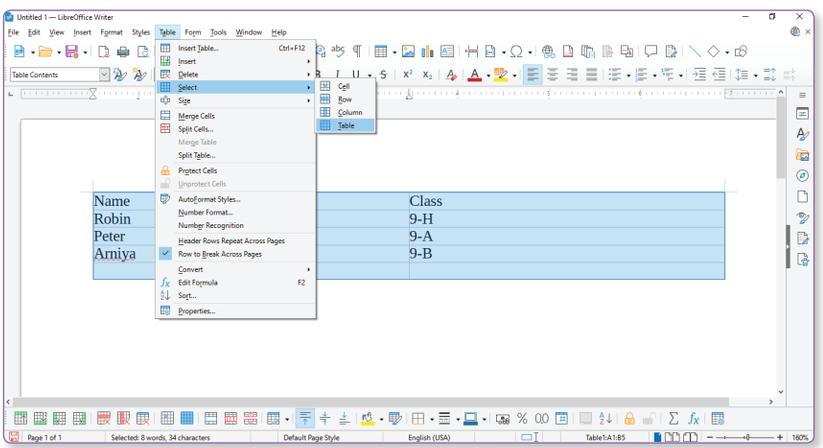
Step 4: Click on the **OK** button.

Copying a Table

To copy a table from one part of the document and paste it onto another part, follow the given steps:

Step 1: Click anywhere on the table.

Step 2: Click on the **Table** menu → **Select** option → **Table**. The table will be selected.



Step 3: Press **Ctrl + C** or click on the **Copy** button on the standard toolbar.

Step 4: Move the cursor to the desired position where you wish to copy the table.

Step 5: Press **Ctrl + V** or click on the **Paste** button on the standard toolbar.

Moving a Table

To move a table from one part of a document to another part, perform the following steps:

Step 1: Click anywhere on the table.

Step 2: Click on the **Table** menu → **Select** option → **Table**. The table will be selected.

Step 3: Press **Ctrl + X** or click on the **Cut** button on the standard toolbar.

Step 4: Move the cursor to the desired position where you wish to copy the table.

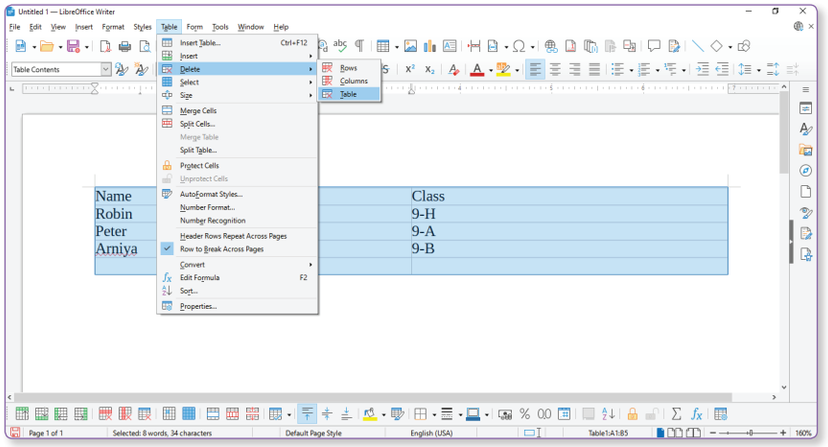
Step 5: Press **Ctrl + V** or click on the **Paste** button on the standard toolbar.

Deleting a Table

To delete a table, follow the given steps:

Step 1: Click anywhere in the table.

Step 2: Select the **Table** menu → **Delete** option → **Table**.



You can also delete a table by selecting from the end of the paragraph before the table to the start of the paragraph after the table. And then pressing **Delete** key or **Backspace** key.

PRINTING A DOCUMENT

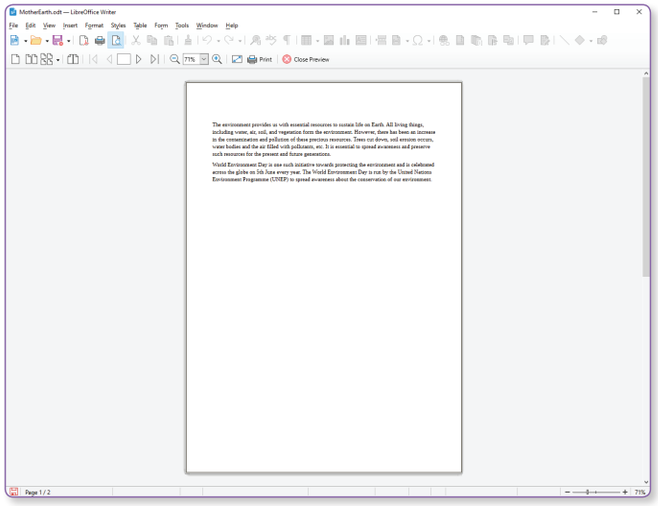
Sometimes you need the hardcopy of the document that you have created in Writer. Therefore, Writer provides you the feature of printing a document. You can check the way the printout will look like by using print preview feature of the Writer. You can also control the number of pages you want to print from a document.

Print Preview

We can view and check the document before an actual printout is taken. This preview of the document is called **Print Preview**. It gives a fair picture as how the document will appear on paper after printout and in case you wish to change the indentations, borders, colours or any other format of the page then it can be easily done.

To see the print preview, click on the **File** menu → **Print Preview** option OR click on the **Toggle Print Preview** button present on the standard toolbar.

The document will appear in print preview format with the **Print Preview** toolbar as shown here:



Print Preview toolbar will appear in the place of formatting toolbar.

Some of the options present in **Page Preview** toolbar are:

- **Single Page Preview** : It displays single page in print preview.
- **Two Pages Preview** : It displays two pages in print preview.
- **Multiple Pages Preview** : It displays multiple pages in print preview.
- **To Move in Print Preview** : It helps us move in the document in print preview.
- **Book Preview** : It displays the document in the book form means it arrange the pages as they will appear in a book.
- **Preview Zoom** : It helps us zoom in and zoom out the document in print preview.
- **Full Screen** : It helps us view the document in full screen mode in print preview. To come out from this mode, click on the **Full Screen** button Full Screen.
- **Print** Print : It use to print the document.
- **Close Preview** Close Preview : It use to close the print preview.

Controlling Printing

Printing a document means getting the output in the form of hardcopy. To print a document, follow the given steps:

Step 1: Click on the **File** menu.

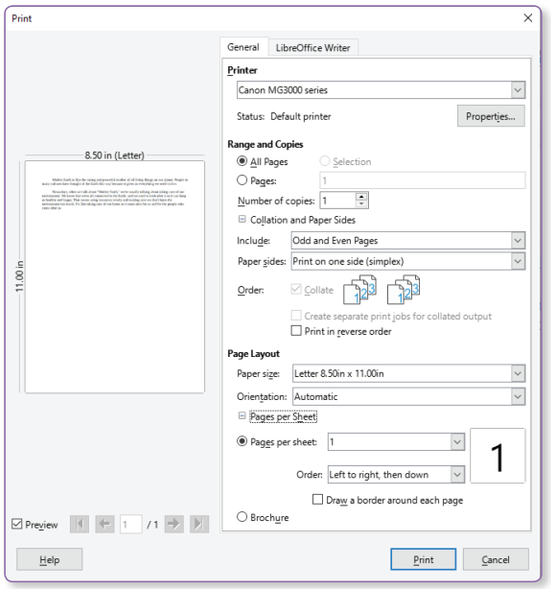
Step 2: Click on the **Print** option. The **Print** dialog box will appear.

OR

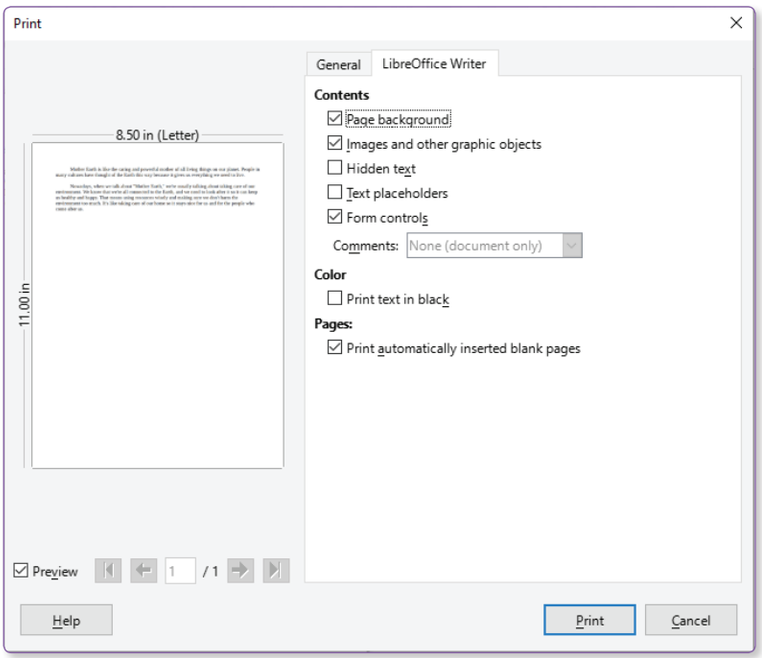
Click on the **Print Preview** option, then click on the **Print** button from the **Print Preview** toolbar. The **Print** dialog box will appear.

In Print dialog box, you can view the pages by using move controls 1 /5 . It has two tabs:

- **General tab:** It is divided into three sections Printer, Range and Copies, and Page Layout. In **Printer** section, you can select the printer from which you want the printouts. To select the printer, click on the down arrow in the Printer section, a drop down list will appear. This list contains the names of the printers (only those which are installed on your computer), you can select the printer which you want from here. You can also change the printer properties by clicking on the Properties button. In **Range** and **Copies** section, you can select the pages that you want to print and number of copies of the document to be printed. In **Page Layout** section, you can select the layout of the page to be printed.



- **LibreOffice Writer tab:** It is divided into three sections Contents, Color, and Pages.



Step 3: Click on the **Print** button.

You can also print a document by using Print button from the standard toolbar.

SHORT KEY

To print a document:

Ctrl + P

Printing All Pages, Single and Multiple Pages

One can select the printing option as per their choice. There are three options to print the number of pages in a document.

1. To print all the pages in sequence, choose the option **All Pages** from the Range and Copies section.
2. To print a single page, or number of non-consecutive pages, choose the option **Pages**, and give the page numbers separated by comma. If you want to print the pages that are consecutive give the range of pages, first and last page separated by hyphen (for example 3-8).
3. To print only the selected text, choose the option **Selection**.

Fill in the blanks.

1. To see the print preview, click on the _____ button present on the standard toolbar.
2. Print Preview toolbar appears in the place of _____ toolbar.
3. _____ displays two pages in print preview.
4. To print a single page, choose the option _____ from the Range and Copies section.

MAIL MERGE

Mail Merge is an important feature of any word processor document. It is the process of merging a main document with the file of mailing addresses to create documents that can be used as invitations, letters, mailing labels, or printing certificates for several people.

Since, the main document is merged with the mailing address, hence it is named as Mail Merge. There are three important files involved in this process:

- **Main Document:** It is the document that has a common letter or an invitation that needs to be sent to multiple recipients. We can either create this before we start with the mail merge process or it can be created in the first step of the mail merge wizard.
- **Data Source:** It is a data file which contains the name and address records from which mailing labels and envelopes can be derived. LibreOffice can create the database from spreadsheets, text files including Writer documents, and databases such as MySQL.
- **Merged File/Form Letter:** It is the merged document that will be obtained after the data source file and the main document is merged during the process of Mail Merge.

Mail Merge can be used to print

- Form letters, a document to send to a list of recipients
- Mailing labels, labels for physical file folders, and similar purposes
- Envelopes

Let us assume that the school is planning to celebrate its annual day and wishes to invite all the parents. Writing the same invitation letter for the annual day celebration to 2000 parents in a school will be a tedious and time-consuming process manually. This process is automated by sending a bulk mail to all parents in a fraction of the time by using mail merge feature of a word processor.

INFO MAIL

Subject: What is wizard?

Wizard is a step by step sequence of dialog boxes that appears with instructions and provides a user interface to complete a specific task in application software. For example, Mail Merge wizard in word processors.

Steps of Mail Merge for Creating a form letter

To create a mail merge file, follow the given steps:

Step 1: Create a new Writer document and type a letter. Here we used the Annual Day Celebration Invite, that needs to be sent to the multiple parents and, saved it with a name **Mail_Document_Invite.odt**.

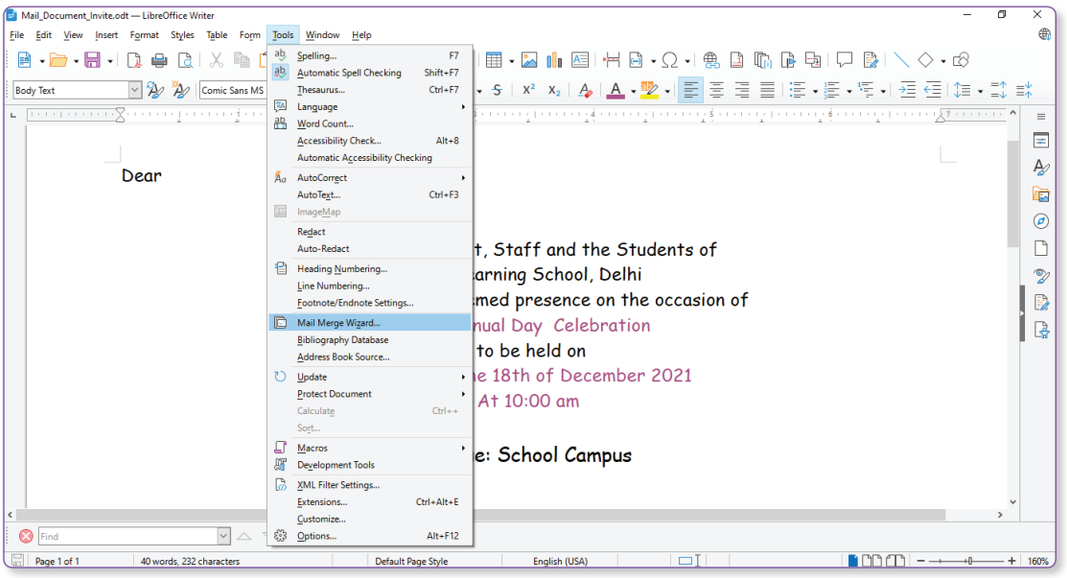
Dear

The Management, Staff and the Students of
ABC Learning School, Delhi
Request your esteemed presence on the occasion of
10th Annual Day Celebration
to be held on
Saturday, the 18th of December 2021
At 10:00 am

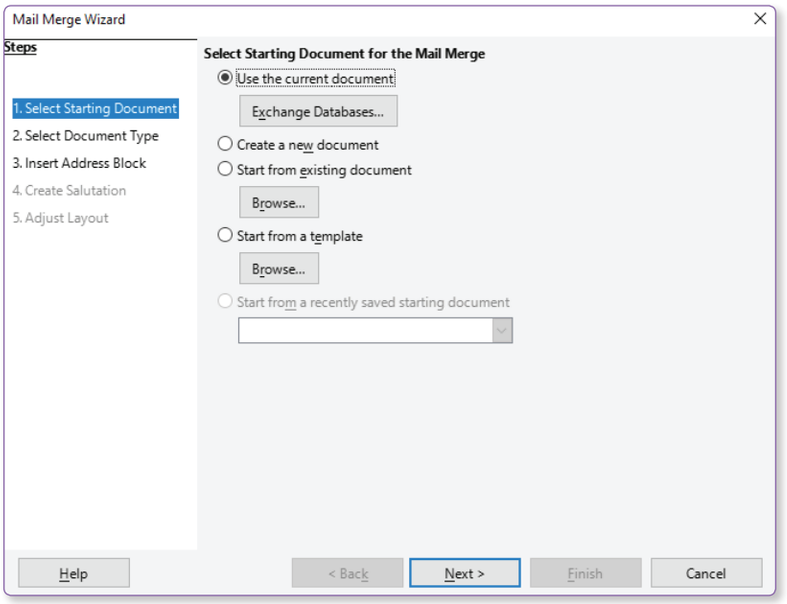
Venue: School Campus

You can also open an existing form letter.

Step 2: Click on the **Tool** menu → **Mail Merge Wizard** option.



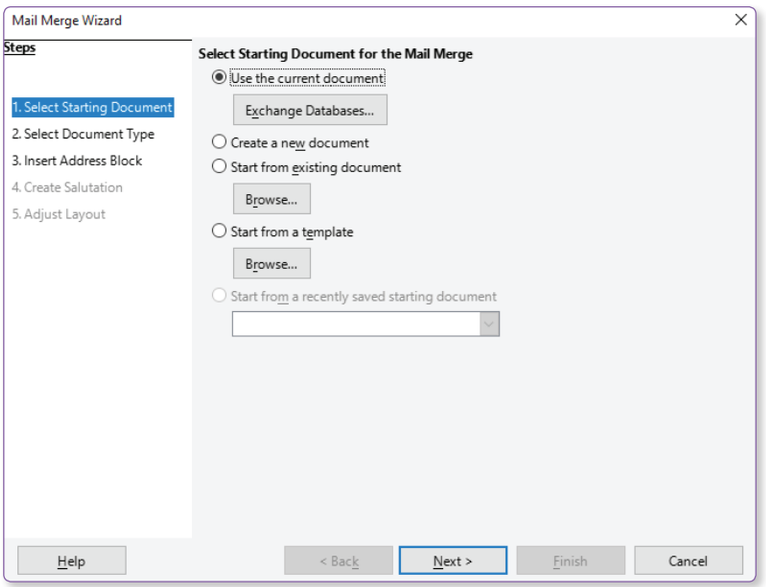
The Mail Merge Wizard dialog box will appear.



It is divided into two section Left section shows **Steps** and the right section changes according to the Steps selection. In the Steps section, five steps are given:

1. Select Starting Document
2. Select Document Type
3. Insert Address Block
4. Create Salutation
5. Adjust Layout

Step 3: Click on the **Select Starting Document** step. The right section changes to **Select Starting Document for the Mail Merge** section.



In this section you have to select the main document. For this, various options are given:

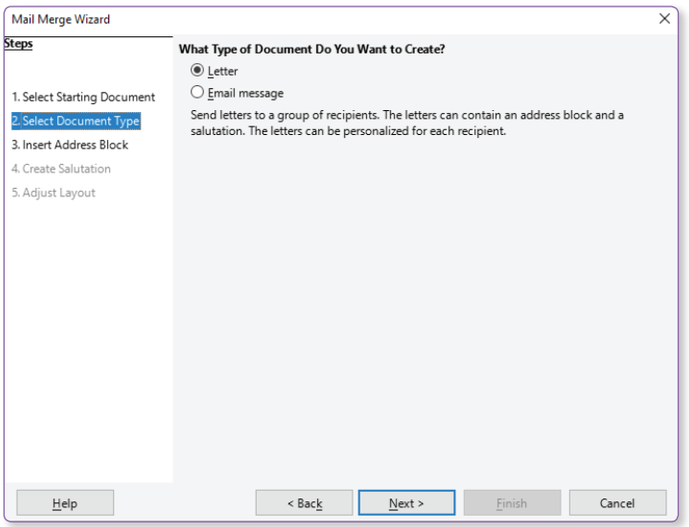
- **Use the current document**: Select this option, if document is already created and is open in an active window.
- **Create a new document**: Select this option, if you want to create a new invitation letter at this time.

- **Start from existing document**: Select this option, if you want to use an existing document. Click on Browse option, it will open the Open dialog box. Select the file that you want to use.
- **Start from a template**: Select this option, if you want to use an existing template for the main document. Click on Browse option, it will open the New dialog box. Select the desired Categories and Templates and click on the OK button.
- **Start from a recently saved starting document:** Select this option, if you want to use a recently saved file as the main document.

Since we have already created the invitation letter, so we have selected **Use the current document** option.

Then, click on the **Next** > button.

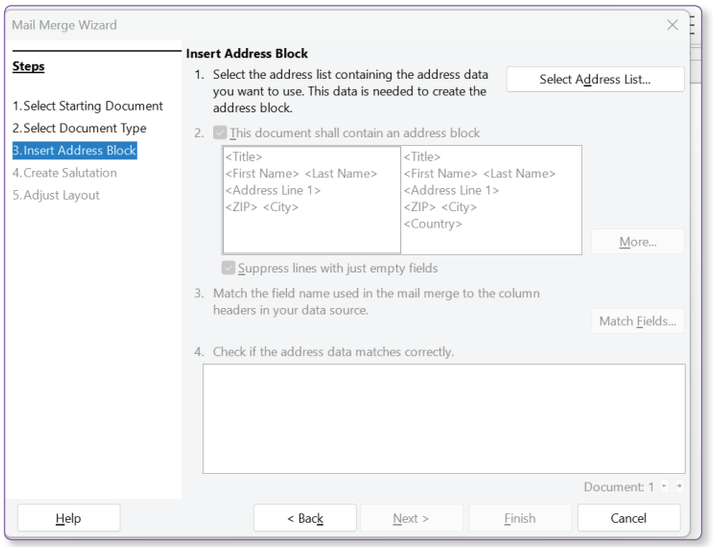
Step 4: The **Select Document Type** step will be selected automatically. The right section will change to **What Type of Document Do You Want to Create?** section.



It will help you create a Letter or Email message. Since we are designing an invitation letter. Here we have selected Letter option.

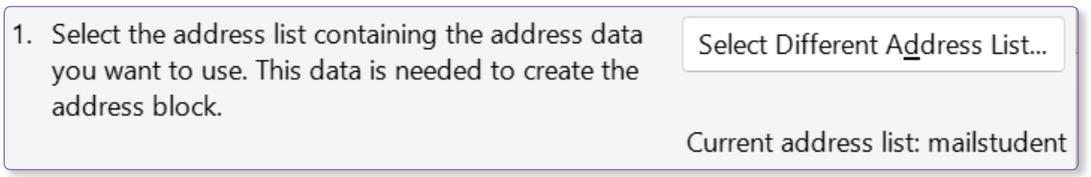
Then, click on the **Next** > button.

Step 5: The **Insert Address Block** step will be selected automatically. The right section will change to **Insert Address Block** section.

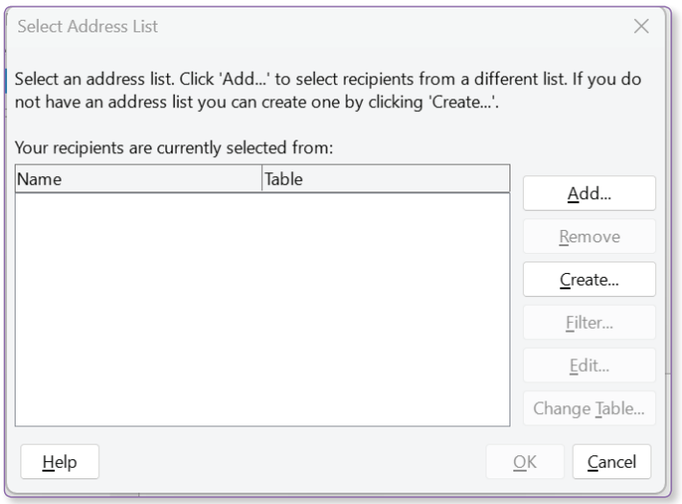


In this step we will add data source file. Here we can add an already created data source file or can create a new data source file. Let's divide this step into further parts for easy understanding.

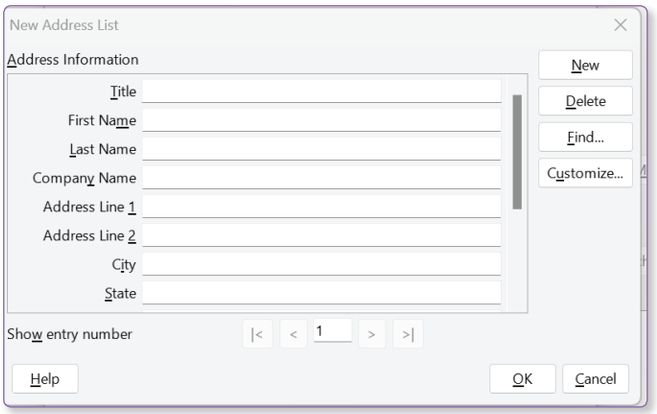
1. Click on the **Select Different Address List** button.



The **Select Address List** dialog box will appear.

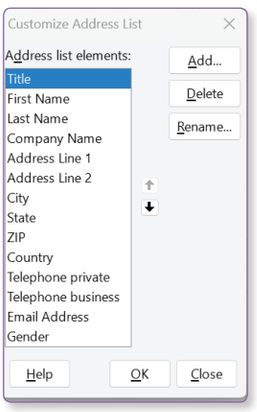


- If you want to add an already created file, then click on the **Add** button in the Select Address List dialog box. The Open dialog box will appear. Select the file and click on **OK** button. The selected file will appear on the list in the Select Address List dialog box. Select it and Click on the **OK** button.
- If you want to create a new data source file, then click on the **Create** button in the Select Address List dialog box. The **New Address List** dialog box will appear.



Here, we can either use the default field of the address book that are available in the **Address Information** section when the New Address List dialog box appears or we can create a new fields of the address book by clicking on the **Customize** button.

When we click on the **Customize** button, the **Customize Address List** dialog box will appear.



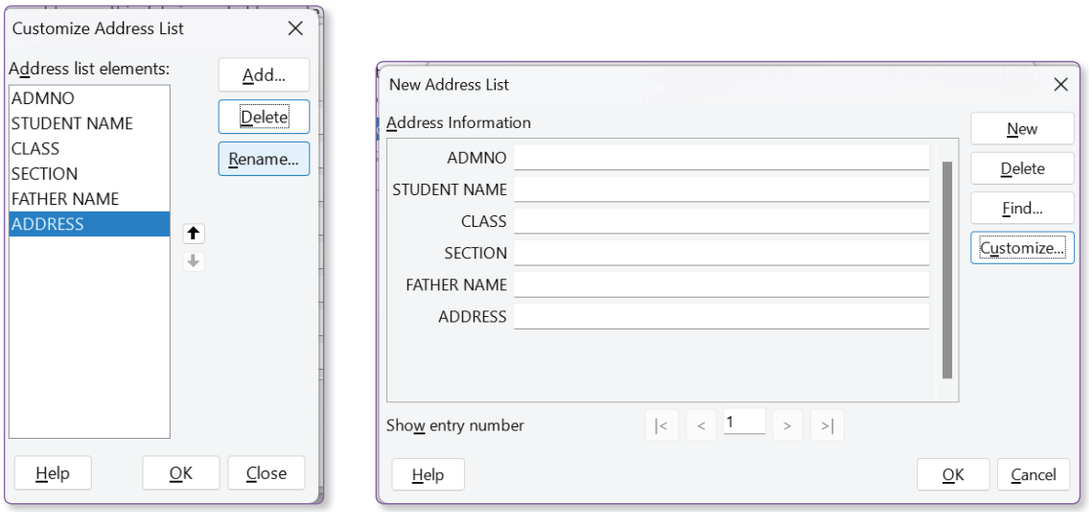
Here field names are given in **Address list elements**. You can also change the order of appearance of the fields using the up/down arrow button present on the dialog box. You can also add, delete or rename any field name, for this three buttons are available:

a. **Add button:** It is used to add a new field.

b. **Delete button:** It is used to delete an unnecessary field.

c. **Rename button:** It is used to change the name of the field.

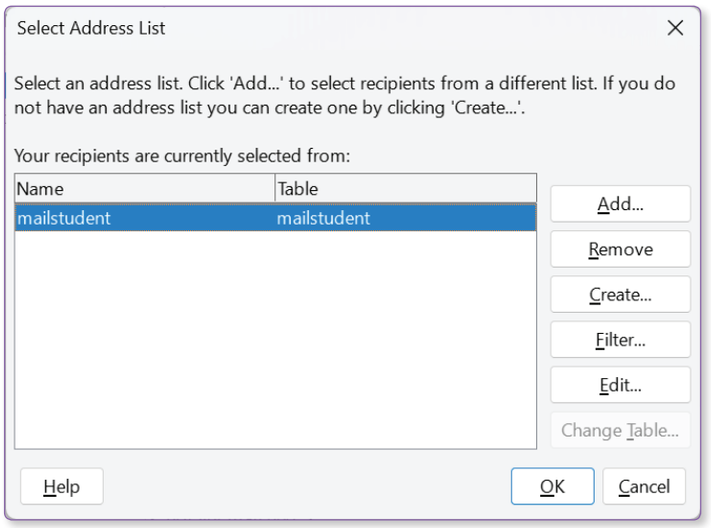
Here, we have added the following fields:



After adding the fields, click on the **OK** button. The **New Address List** dialog box will appear again. But the field names in **Address Information** section will be changed to the new fields.

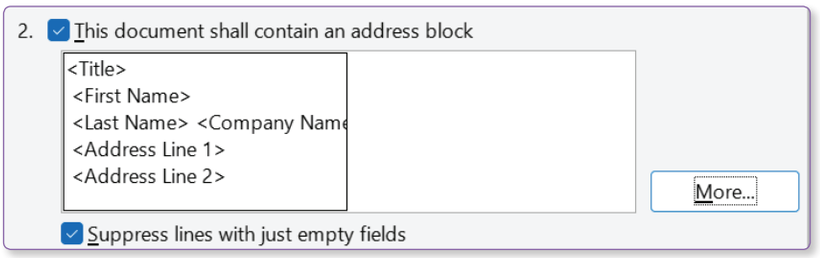
Now, fill in the information of the first student and click on **New** button to save the previous and add another. Keep on repeating this step to save the data of the students. After this click on **OK** button to save the file.

After clicking on the **OK** button, the **Save As** dialog box will appear, which will allow you to save the list of recipient in .CSV format (here we have saved the file with the name mailstudent.csv). After saving the list, the **Select Address List** dialog box will appear again. This will display the various recipient lists created till now. Select **mailstudent** list and click on the **OK** button.

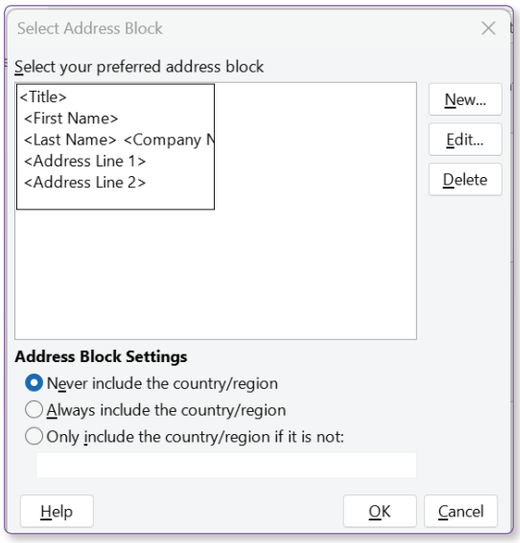


The Mail Merge Wizard dialog box will appear again.

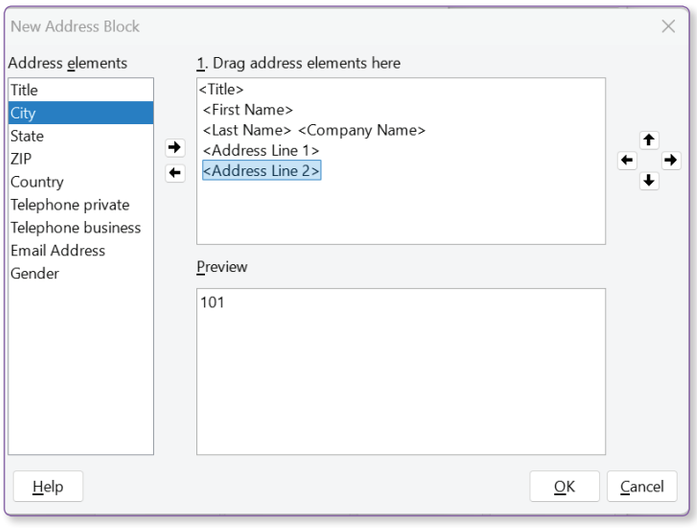
2. Click on the **More** button.



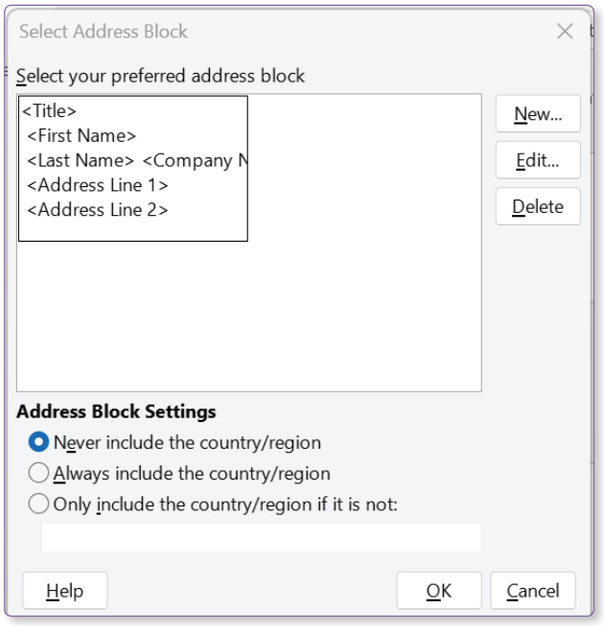
The **Select Address Block** dialog box will appear.



Click on the **New** button. The **New Address Block** dialog box will appear.

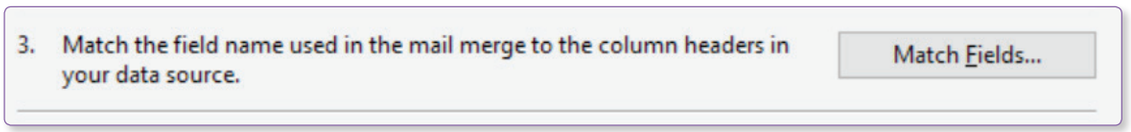


Select the fields from **Address Elements,** click on Right Arrow button  to move the fields to **1. Drag address elements here** box. Use the four arrows button present on the right side of the **1. Drag address elements here** box to adjust these fields on different lines. You can also drag and drop the fields from the left box to the right box. After this click on the **OK** button. The Select Address Block dialog box will appear again with the newly created address block.

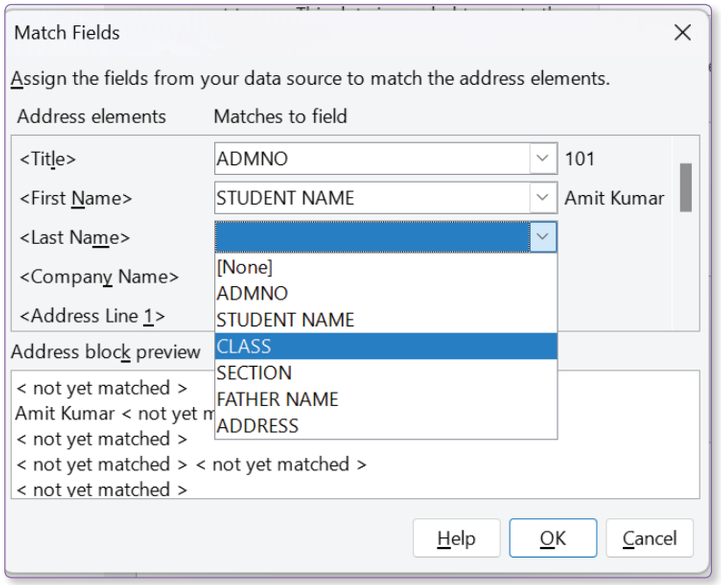


Click on the **OK** button. This will open Mail Merge Wizard dialog box again.

3. Click on the **Match Fields** button.



The Match Fields dialog box will appear. Click on the drop down arrow key of the **Matches to field** elements to match the fields with address elements.



Here we have matched the field and address elements as follows:

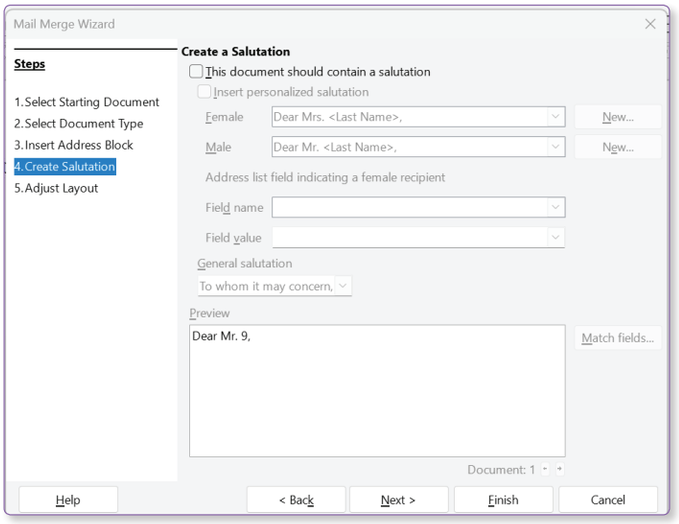
- <Title> : ADMNO
- <First Name> : STUDENT NAME
- <Last Name> : CLASS

- <Company Name> : SECTION
- <Address Line 1> : FATHER NAME
- <Address Line 2> : ADDRESS

Click on the **OK** button. This will open Mail Merge Wizard dialog box again.

4. Click on the **Next >** button. to move to step 4 of the Mail Merge wizard.

Step 6: The **Create Salutation** step will be selected automatically. The right section will change to **Create a Salutation** section.



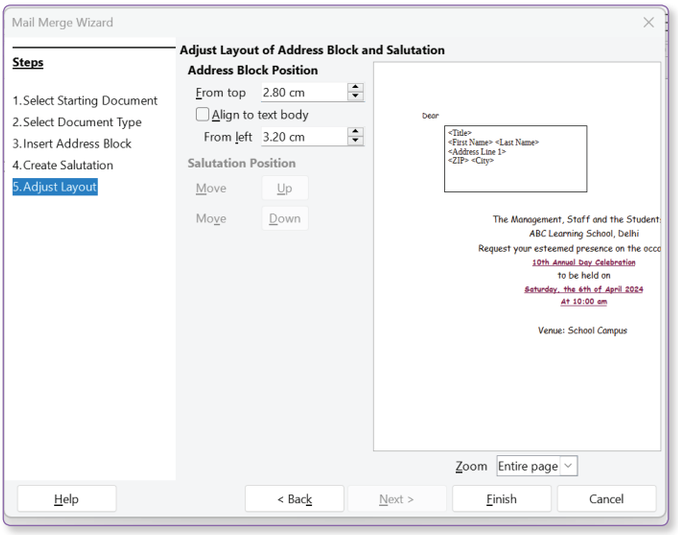
Salutation is a word or phrase used as greetings in the beginning of a letter like, To whomsoever it may concern, Dear sir or madam, etc. If you wish to add salutation in your letter, then tick the **This document should contain a salutation** check box and select any option from the Create a Salutation section. Otherwise, do not tick it.

Since, in our case, we do not need a salutation so nothing needs to be selected.

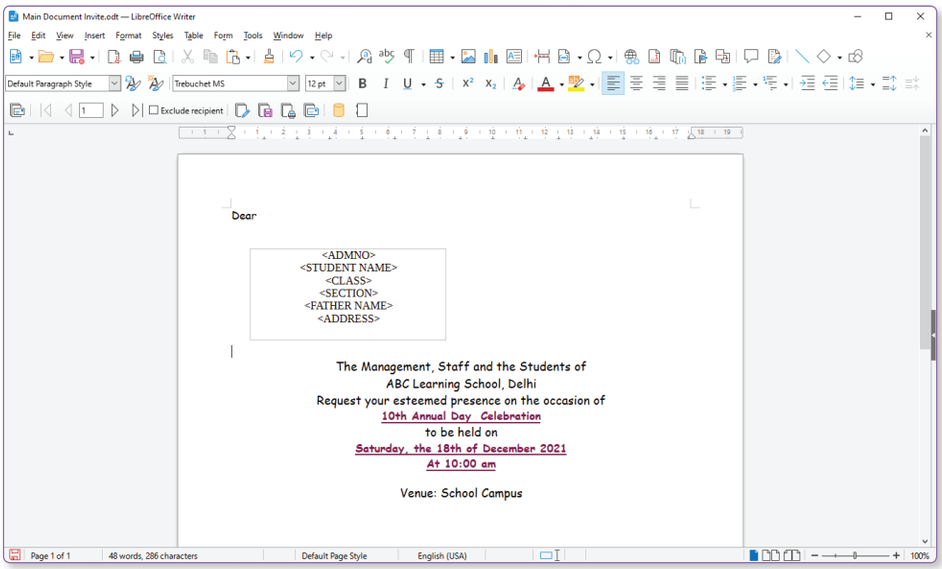
Click on the **Next>** button.

Step 7: The **Adjust Layout** step will be selected automatically. The right section will change to **Adjust Layout of Address Block and Salutation** section.

Here, you adjust the layout of the parent information that will be inserted from the data source file on the main document. You can set the top and left margin.



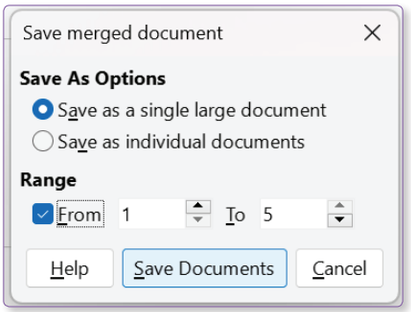
Step 8: Click on the **Finish** button to merge the letter with the recipient's address. The Writer will display the merged document with the Mail Merge toolbar below the formatting toolbar.



The Mail Merge toolbar have various buttons, some of them are as follows:

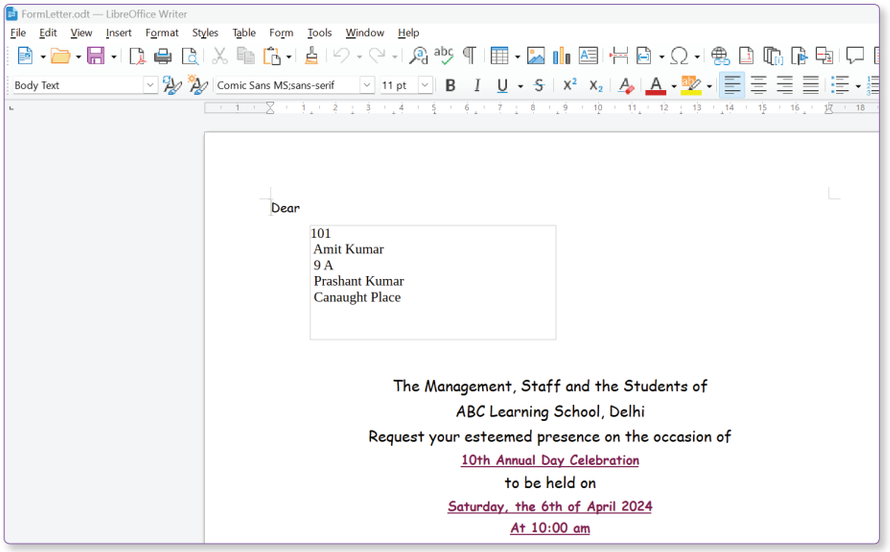
- **Edit Individual Documents** Button : Click on this button to merge the letter with the address of the recipients. Here you can verify all letters of the recipients before printing.
- **Exclude Mail Merge Entry** Checkbox Exclude recipient : If you want to exclude some of the recipient, tick this checkbox.
- **Save Merged Documents** button : To save the merged document, click on this button.
- **Print Merged Documents** button : To print the merged document, click on this button.
- **Send Email Messages** button : To send the letters by email, click on this button.

Here, we have clicked on the **Save Merged Document** button. The Save merged document dialog box will appear.



Click on the **Save Documents** button. The **Save As** dialog box will appear. Select the location where you want to save the file. Type the name of the file in the **File name** box. Here we give the name FormLetter.odt. Click on the **Save** button. This brings us to the end of mail merge.

Now you can open the merged document that is saved as FormLetter.odt to see the merged document.



REVISIT

- A process of making and maintaining a document is called documentation.
- A typewriter is a machine used for writing by pressing keys that print letters on paper.
- A word processor is an application software which is commonly used to create, edit, format, and print a document.
- Office suite is a collection of programs, which are useful for word processing, spreadsheet preparation, presentation, and database management.
- **Normal view** is the default view of a document. It gives you a complete view of the document as it appears in the print out.
- The Text Cursor is a flashing vertical line in the body of the text. It indicates where the next character will be inserted or where actions like highlighting text will begin.
- **Space bar** Key, **Enter** Key and **Tab** Key are Non Printing characters of the document as they do not appear when the document is printed.
- Find and replace feature is used to locate a specific text in a document and in case required it can be replaced also.
- Thesaurus is different from a dictionary. It will have words with similar meanings or opposite meanings.
- Formatting refers to proper arrangement of text in a presentable form with different font styles, size, and colour in a document.
- Superscript is a number or letter written in smaller font and above the other character baseline.
- Subscript is a number or letter written in smaller font and below the other character baseline.
- Collection of relevant sentences written together will make a paragraph.
- Alignment refers to the placement of text/paragraph with respect to the margins of the page.
- Line spacing is the vertical gap between different lines of text in a paragraph.
- Paragraph spacing is the space or gap between two paragraphs.
- Header appears at the top of each page in a document.
- Footers appear at the bottom of each page like page number, document information, etc. In
- The representation of data in the form of rows and columns is called a table.
- Mail Merge is the process of merging a main document with the file of mailing addresses to create documents that can be used as invitations, letters, mailing labels, or printing certificates for several people.

Exercise

Solved

SECTION A (Objective Type Questions)

A. Choose the correct option.

1. What is the default extension of the files saved in LibreOffice Writer?
   a. .odt b. .Ods
   c. .doc d. .xls
2. Letters and reports are the examples of which kind of files?
   a. Spreadsheet b. Database
   c. Documents d. presentation
3. A _____ is a computer application used for editing, formatting, storing, retrieving and printing the document.
   a. Database b. Digital representation
   c. Word Processor d. Spreadsheet
4. WYSIWYG means _____ .
   a. What You See Is Was You Get b. What You See Is What You Get
   c. Where You See Is What You Get d. What you see is where you get
5. The sub-menu item with right hand side arrows '▸' means, clicking on it will open _____ .
   a. A dialog box b. Another sub-menu
   c. A drop-down list d. None of these
6. The toolbar with the icons of Cut, Copy and Paste is called _____ .
   a. Standard Toolbar b. Formatting Toolbar
   c. Menu bar d. Title Bar
7. The vertical bar/cursor blinking on the top left corner of the blank document is called _____ .
   a. Insertion Point b. Cursor Point
   c. Modify Point d. Modify Cursor
8. _____ is a feature of a word processor where when a word does not fit on the line then it automatically flows on the new line without pressing Enter key.
   a. Print screen b. Word wrap
   c. Indentation d. Tables
9. What is the shortcut key for selecting the whole document?
   a. Ctrl+C b. Ctrl+S
   c. Ctrl+A d. Ctrl+Z
10. _____ is the document which has a common letter or the invitation that needs to be sent to multiple recipients.
    a. Salutation b. Main Document
    c. Letter d. Mail merge

Ans. 1. a 2. c 3. c 4. b 5. b 6. a 7. a 8. b 9. c 10. b

B. Fill in the blanks.

1. A process of making and maintaining a document is called _____ .
2. We can either create _____ before we start with the mail merge process or it can be created in the first step.
3. Top most bar of Writer window is called _____ .
4. _____ is the default name of the document.
5. _____ appears below the title bar.
6. _____ is a data file which contains the name and address records from which mailing labels and envelopes can be derived.
7. Printing a document means getting the output in the form of _____ .

8. _____ means dividing one cell into two or more cells.
9. The intersection of a row and a column makes a _____ .
10. _____ appears at the bottom of each page like page number, document information, etc.

Ans. 1. documentation 2. Main Document 3. Title Bar 4. Untitled 1 5. Menu bar 6. Data Source 7. hardcopy 8. Splitting cells 9. cell 10. Footer

C. State whether the following statements are true or false:

1. A table once created cannot be modified.
2. An image once inserted can easily be formatted.
3. We can save a file with a password in Writer.
4. Another copy of the same file can be created using Save As.
5. A file can be merged with a data source created only in an open office.

Ans. 1. False 2. True 3. True 4. True 5. False

SECTION B (Subjective Type Questions)

A. Short answer type questions:

1. Name any three commonly used word processing software.

Ans. The commonly used word processing software are:

- Word Pad
- Microsoft Word
- Google Docs
- OpenOffice Writer
- LibreOffice Writer

2. Differentiate between cut-paste and copy–paste.

Ans. **Cut and Paste:** It moves a selected text from one place to another.
Copy and Paste: It makes a duplicate copy of selected text.

3. What are non-printing characters?

Ans. Spacebar Key, Enter Key and Tab Key are non-printing characters of the document as they do not appear when the document is printed. They help in the formatting of a document specially when we need to keep a track of tabs and the spacing for the proper layout of a document.

4. Name any two different ways of selecting text and define them.

Ans. The two different ways to select a text are:

- **Non-consecutive Text**
  It is selecting the text which is located at different places throughout the document.
- **Vertical Block**
  Vertical block selection can be done in a paragraph or 'column' of text that is separated by spaces or tabs.

5. Define Mail Merge.

Ans. Mail Merge is an important feature of any word processor document. It is the process of merging a Main Document with the Data source file to create documents that can be used as invitations, letters, mailing labels, or printing certificates for several people. Since the main document is merged with the mailing address, hence it is named as Mail Merge.

B. Long answer type questions:

1. What is meant by horizontal alignment? Define any four types of horizontal alignment available in Writer.

Ans. The alignment with respect to the left and right margins of a page is called horizontal alignment. There are four types of horizontal alignment:

a. **Align Left:** Text is aligned on the left margin with irregular alignment on the right side. This is default alignment in LibreOffice Writer document.
b. **Align Right:** Text is aligned on the right margin with irregular alignment on the left side.
c. **Align Center:** Text is aligned keeping in mind the centre of the page with irregular placement of text on both left and right margins.
d. **Justified:** Text is aligned properly on both left and right margins.

2. What is the use of bullets and numbering? Give steps to insert them in a document.

Ans. Bullets are used to create a list where the sequence of the options is not important. For example List of friends, Shopping List, List of participants, etc.
Numberings are used to create a list where sequence plays an important role. For examples, steps of experiments in Science, recipe steps, steps of instructions, etc.

To add bullets or numbering follow the given steps:
Step 1: Select the Format menu.
Step 2: Click on Bullet and Numbering option. The Bullets and Numbering dialog box will appear.
Step 3: Select the preferred option from the Bullets and Numbering dialog box.
Step 4: Click on the OK button.
You can also add bullets and numbering by using Toggle Unordered List and Toggle Ordered List button present on formatting toolbar, respectively.

3. What is Header? How do we insert it in a document?

Ans. Header appears at the top of each page in a document like the author's name, book title, company logo, etc.
To add header in a document, follow the given steps:
Step 1: Click on the Insert menu.
Step 2: Click on the Header and Footer option.
Step 3: Click on the Header option to add header.
Step 4: Select the desired option.
Step 5: Write the text that you want in the header.

4. What are tables? How can we insert them in a document using standard toolbar?

Ans. The representation of data in the form of rows and columns is called a table. Some of the examples of tables are list of friends, students' details, employees' details, etc.
To create table using standard toolbar, follow the given steps:
Step 1: Click on the Insert Table button on the Standard toolbar. A drop-down grid will appear.
Step 2: Select the size of the table from the grid by drag mouse over it.
Step 3: Click on the left button of the mouse to add the table in the document.

5. How can we create multiple columns in a document?

Ans. To create multiple columns, follow the given steps:
Step 1: Click on the Format menu → Columns option. The Columns dialog box will appear.
Step 2: Enter the number of columns in the Columns text box. Fill the Width and Spacing section, if it is required.
Step 3: Click on the OK button.

C. Competency-based/Application-based questions:

21st Century Skills #Technology Literacy

1. Hina has created a Writer document. She wants to set the page in such a way so that width of the page is more than height. Name the orientation that she should use for this.

Ans. Landscape

2. Ronit is formatting a document in Writer. He has to add indent in a paragraph. Which tool from the formatting toolbar should he use for this?

Ans. Increase Indent tool

Unsolved

SECTION A (Objective Type Questions)

A. Choose the correct option.

1. Footer is available in which of the following menus?
   a. File Menu
   b. Insert Menu
   c. View Menu
   d. Edit Menu

2. To check the spelling, we should go to which of the following menus?
   a. Tools Menu
   b. Insert Menu
   c. View Menu
   d. Edit Menu

3. Which of the following techniques is used to select the end of a word in Writer?
   a. Ctrl + A
   b. Ctrl + Shift + Right Arrow
   c. Ctrl + Shift + Left Arrow
   d. None of the above

4. Which of the following is a shortcut key to Redo any operation?
   a. Ctrl + R
   b. Ctrl + Y
   c. Ctrl + X
   d. Ctrl + Z

5. What option should be used to change the word 'Books' to the word 'Copies' in a document?
   a. Find
   b. Find and Replace
   c. Spell check
   d. Spelling and grammar check

B. Fill in the blanks.

1. _____ toolbar contains the various options for formatting a document.
2. Writer has three ways to view a document: Normal, Web, and _____ .
3. While saving a file for the first time, we use _____ option.
4. _____ can be used to preview a page before it is printed.
5. The submenu item with three dots '...' just after the sub-menu name, denote that it will open a _____ .

C. State whether the following statements are true or false:

1. There are two types of orientation in Writer.
2. Current file name is shown in Status Bar.
3. We cannot open LibreOffice Writer file in MS-Word.
4. Writer does not permit to copy a selected text in to another document.
5. While typing, if an incorrect spelling is detected, a red wavy line is marked under it. After correcting it, the red line is converted into green line.

SECTION B (Subjective Type Questions)

A. Short answer type questions:

1. Name three different types of documents created in Mail Merge.
2. Give three important features of word processors.
3. What is Thesaurus?
4. How do we remove an existing formatting in a document?
5. Write the names of the case conversion present in Writer.

B. Long answer type questions:

1. Give the steps to undo a task?
2. Write the steps to use Find and Replace in a document?
3. Explain two different ways of using spell check feature in LibreOffice writer.
4. Suppose, you have to insert an image in a Writer document. How can you do so?
5. Your friend wants to add ¶ das in a Writer document. He doesn't know how to add it, so he asked for your help. Write the steps that you will tell him, to resolve his problem?

21st Century Skills #Technology Literacy

C. Competency-based/Application-based questions:

1. Harleen wants to add a colour in the background of a paragraph in a Writer document. What steps should she follow to do so?
2. Jasper has created a table with two columns and six rows in a Writer document. He wants to merge two cells of the first row to type the heading of the table. How can he do so?

21st Century Skills #Technology Literacy

Video based question

Scan the QR Code

Go through the video session to learn how to work with LibreOffice writer while making **Table Of Contents** for a document. https://youtu.be/5jUwr7wnUaU

- State the reasons mentioned in the video, why should we have Table of Contents for a document.
- How can we add heading 2 and heading 3 in the Table of Contents in LibreOffice Writer?

GROUP DISCUSSION

21st Century Skills #Communication

Discuss how life changed with the supremacy of word processing applications over typewriters.

LAB ACTIVITY

21st Century Skills #Creativity

1. Make a table, "My Schedule", that contains your daily routine using the tables option.
2. You are planning to celebrate your birthday. Using the mail merge feature, design an invitation card to be sent to 10 friends.
3. Create a collage of wild animals and use the picture toolbar to edit each picture giving a different effect.
4. Write an article on "No life without Water" and use the important features like:
   a. Thesaurus
   b. Special characters
   c. Synonyms
   d. Pictures
   e. Formatting text
5. Let's prepare a document in LibreOffice Writer on the topic "Single Use Plastic Ban". The presentation of the final document should look like this:

> Some facts about Single Use Plastic
>
> 1. We produce 300 million tons of plastic each year worldwide, half of which is for single-use items. That's nearly equivalent to the weight of the entire human population.
> 2. Whopping 91 percent of all plastic isn't recycled at all. Instead it ends up in landfills or in the environment.
> 3. Left alone, plastics don't really Break Down, but just Break Up. Over time, sun and heat slowly turn plastics into smaller and smaller pieces until they eventually become what are known as Microplastics. These microscopic plastic fragments, no more than 5 millimeters long, are hard to detect—and are just about everywhere. They end up in the water, eaten by wildlife, and inside our bodies.
> 4. When eaten they can easily accumulate inside an animal's body and cause health issues, like punctured organs or fatal intestinal blockages.
> 5. Many of the chemicals in plastics are known Endocrine Disruptors, and research has suggested that human exposure could cause health impacts including Hormonal Imbalances, Reproductive Problems like Infertility, and even Cancer.
> 6. In 2015 researchers from the University of Georgia estimated that between 4.8 million and 12.7 million metric tons of plastic per year make their way into the oceans via people living within 30 miles of a coast.
> 7. Recent studies found plastic in the guts of 90 percent of the seabirds tested and 100 percent of the turtles. Alarmingly, scientists estimate that there will be more plastic than fish in the ocean by weight in 2050.
> 8. Plastic production contributes to Planet Warming Greenhouse Gas emissions at every point in its life cycle. The process of drilling for plastic's source materials, oil and gas, leads to methane leaking and flaring and is often combined with clearing forests and wetlands that otherwise would have sequestered carbon. Refineries where crude oil is turned into plastic make up one of the most greenhouse gas–intensive industries in the manufacturing sector.

6. Make a list of all subjects you are studying in class 9. Also make a sub-list of the subject that combined under Science and Social Studies. Use bullets and numbering at appropriate places.

CAREER HERE

A person well-versed with word processing software can work in clerical and executive positions in publishing houses, MNCs, legal documentation, etc.

UNIT

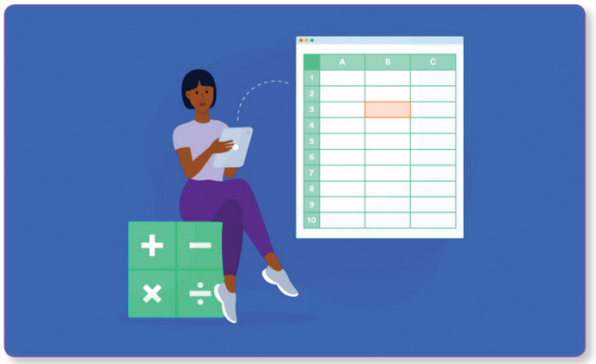
4

Electronic Spreadsheet

TOPICS COVERED

- Introduction to Spreadsheet
- Getting Started with LibreOffice Calc
- Saving a Spreadsheet
- Printing a Sheet
- Entering Data
- Using Cell Address in Formula
- Delete a Column or a Row
- Formatting data in the Sheet
- Find and Replace
- Creating Charts
- LibreOffice
- Creating a Spreadsheet
- Opening an Existing Spreadsheet
- Navigation in a Sheet
- Mathematical Operators Used in a Formula
- Insert a Column or a Row
- What are Functions?
- Speeding Up the Data Entry
- Cell Referencing

A spreadsheet can be defined as text and numbers that have been organised into rows and columns. LibreOffice Calc is of great importance to those who maintain accounts for sales, bills, or do mathematical calculations as it is used to create electronic spreadsheets using the data. Let us now read about LibreOffice Calc.



INTRODUCTION TO SPREADSHEET

The electronic spreadsheet program is used for storing numeric data in an organised form so that the calculation and analysis of the data can easily be done. LibreOffice Calc is an open-source spreadsheet available in the LibreOffice suite. This application software is most commonly used for managing financial and accounting documents, creating data reports, generating invoices, data analysis from scientific and statistical research, and doing a variety of calculations on data.

Some other commonly used spreadsheet software are Microsoft Excel, OpenOffice Calc, and Apple Inc. Numbers and Google Sheets.

The basic reasons for using a spreadsheet are as follows:

- Data can easily be organised in tabular form using rows and columns.
- Mathematical calculations like sum, average, minimum, etc. can easily be done either by using user-defined formulae or by using built-in functions.

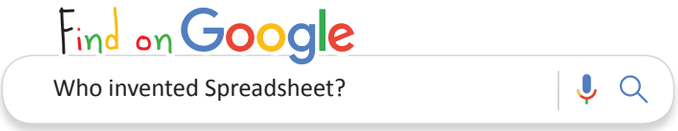
- Data once created can be rearranged in ascending or descending order, filtered based on a criterion and so on.
- Data validation and data analysis can be done by using the Pivot table, Goal seek, etc.
- Graphical representation of data can be done using charts.

LIBREOFFICE

LibreOffice is an open source online office suite which includes applications like LibreOffice Writer, LibreOffice Calc etc., to enhance your productivity and creativity with tools and features available. LibreOffice Calc is the spreadsheet component of the LibreOffice software package.

LibreOffice Calc is used to perform the following activities accurately and efficiently:

- Tabulation of data.
- Simple mathematical calculations.
- Complex calculations using formula and functions.
- Arranging data in ascending and descending order (sorting).
- Filtering the required data.
- Check the validity of data.
- Protection of data using passwords.
- Saving for future use.



GETTING STARTED WITH LIBREOFFICE CALC

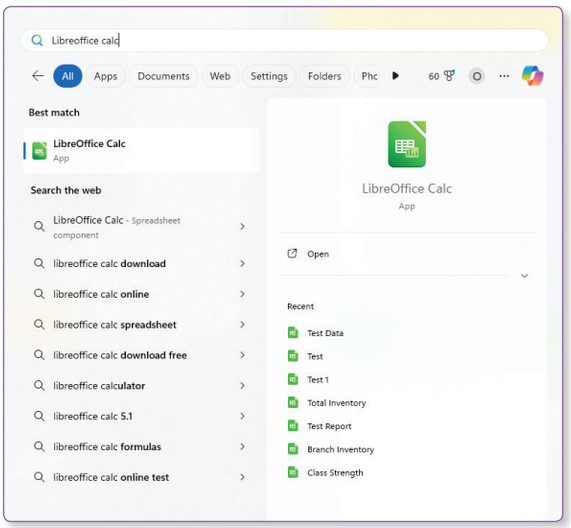
When installing the operating system Linux (Ubuntu), LibreOffice gets installed by default along with the icons for each component of LibreOffice (Writer, Calc, Impress, etc.). These icons are then placed on the launcher.

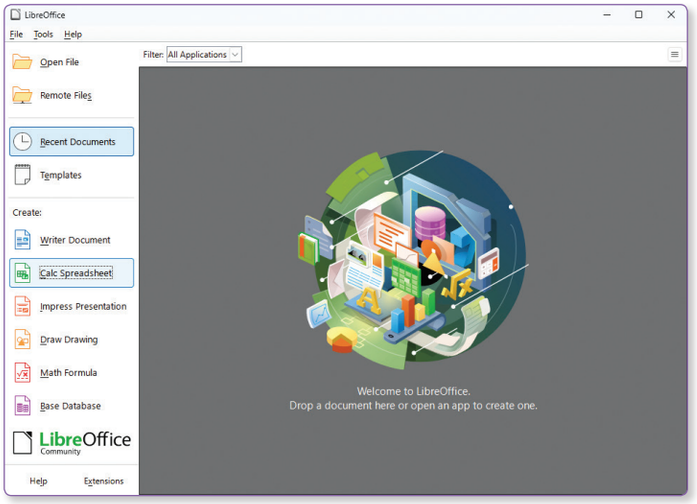
In Windows 11, you need to download LibreOffice from its official website and install it on your computer.

After installing LibreOffice suite, you can use a spreadsheet following the given steps:

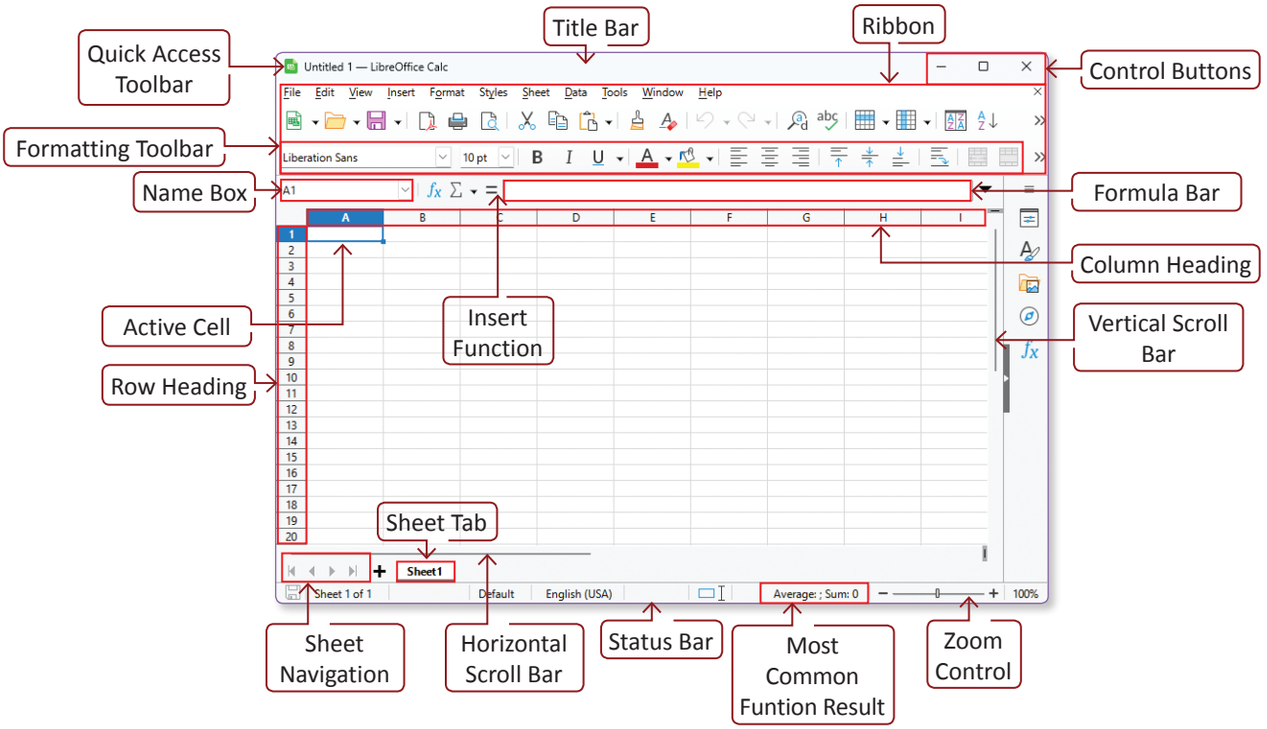
Step 1: Type **LibreOffice Calc** in the search bar at the Taskbar.

Step 2: Click on the **LibreOffice Calc** app.





The following window appears with the important components as explained below:



Title Bar

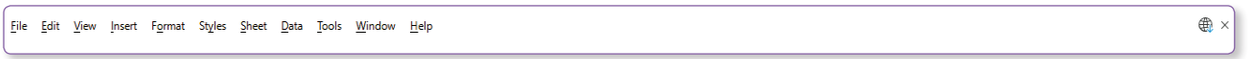
It is the topmost bar with the default unsaved file name “Untitled 1” for a new document. When the spreadsheet is newly created, its name is Untitled X, where X is a number. The first created spreadsheet takes the name as Untitled 1, second is Untitled 2 and so on. When the file is saved, this default name will be changed to a new name given by the user. The name of the application window-LibreOffice Calc appears next to it. For example: Untitled 1-LibreOffice Calc

The maximize, minimize, and close buttons are available in the title bar at the right corner to control the window.

Menu Bar

This bar just below the Title bar is the Menu bar. This bar has different menus like File, Edit, View, Insert, Format, Tools, Data, Window, and Help. Each menu is like a category that contains different related options that are used to perform different tasks.

For example, the options related to the file, such as New, Open, Save, Print, etc., are present in the File menu.



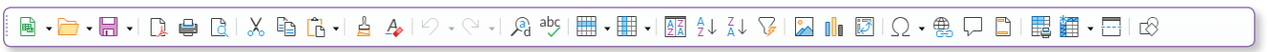
The various menu items are briefly explained below.

- **File:** This contains commands that apply to the entire spreadsheet — Open, Save, Wizards, Export as PDF, Print, Digital Signatures and so on.
- **Edit:** This contains editing commands, such as Undo, Cut, Copy, Paste, Select, Find & Replace and so on.
- **View:** This contains commands for modifying the user interface, such as Toolbars, Column & Row Headers, Full Screen, Zoom and so on.
- **Insert:** This contains commands for inserting elements into a spreadsheet, such as Image, Media, Chart, Object, Shapes, Date, Time, Headers, and Footers.
- **Format:** This contains commands for modifying the layout of a spreadsheet — Cells, Rows, Columns, Page, Styles and Formatting, Alignment and so on.
- **Styles:** This contains commands for modifying and managing styles, such as Heading1, Update Selected Styles, Manage Styles, etc.
- **Sheet:** This contains commands to insert and delete cells, rows and columns, such as, Insert Sheets, Rename Sheets, Fill Cells, etc.
- **Data:** This contains commands for manipulating data, such as Define Range, Subtotals, Pivot Table, Consolidate, and so on.
- **Tools:** This contains various functions to check and customise spreadsheets—Spelling, Language, Solver, Macros and so on.
- **Window:** This contains commands to display window — New Window, Close Window.
- **Help:** This contains links to the help system included in the software and other miscellaneous functions — LibreOffice Help, License Information, Check for Updates and so on.

Toolbars

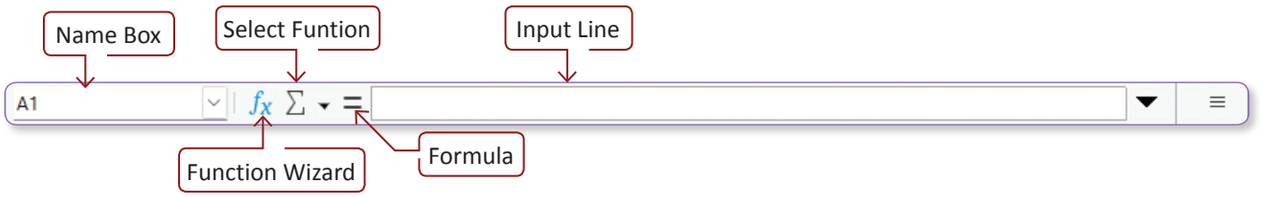
Just below the menu bar, there is a set of three default toolbars present. These toolbars provide a wide range of common commands and functions. Placing the mouse cursor over any icon displays a small box called a **tooltip**. It gives a brief explanation of the icon function.

- **Standard Toolbar:** It consists of some standard operations which are common across all the applications of LibreOffice software. Some of these are New, Open, Cut, Copy, Paste, Save, etc.



- **Formatting Toolbar:** It consists of the tools used to format the spreadsheet. Formatting the spreadsheet includes options like change of Font Name, Font Size, Font Color, Alignment, Number Formatting, etc.

- **Formula Bar:** It is the most important bar in a spreadsheet and is used for entering and editing a formula.



It contains different options explained as follows:

- **Name Box:** It displays the name or reference of an active cell or a selected cell range.
- **Function Wizard:** It is used to insert functions through interactive step-by-step processes.
- **Sum:** It is used to insert a sum function directly for the currently selected cell range.
- **Function:** It adds a formula to the current cell. By clicking on the Function icon inserts an equals (=) sign into the selected cell and the Input line allows formula to be entered.
- **Input Line:** It is used to enter a formula that needs to be applied in the current cell or selected cell range. It also displays the contents of the selected cell (i.e., data, formula, or function) and allows editing of the cell contents. To edit inside the Input line area, click in the area, then type the changes. To edit within the current cell, just double-click in the cell.

Spreadsheet

The sheet in Calc is also referred to as **spreadsheet**. The spreadsheet can have many sheets. Each sheet can have many individual cells arranged in rows and columns. The sheet tab shows its default name as Sheet1, Sheet2, Sheet3.

- **Rows:** Rows are accessed horizontally on a sheet and are identified by numbers 1, 2, 3, 4, and so on, written on the left side of the sheet. Each sheet has a maximum of 1,048,576 (2^{20}) rows.
- **Columns:** Columns are accessed vertically on a sheet and are identified by alphabets A, B, C, …, Z, AA, AB, AC, …., AZ, BA to BZ, CA, to CZ, and so on, written on the top of each sheet. Each sheet has a maximum of 16384 (2^{14}) columns, i.e., from A to XFD.
- **Cell:** The intersection of a row and column is called a **cell**. Each cell in a spreadsheet is referred to by an address which is formed by a combination of the column alphabet first and the row number later. For example, the D5 address refers to a cell formed by the intersection of the D column and the 5th row. A cell can have any data like text, numbers, formulas, etc.

Quiz Bee

Write the cell address of:

- 12th row and 10th column
- 10th row and 16th column
- 26th row and 31th column
- 15th row and 39th column

- **Active Cell:** In a spreadsheet, the cell is the place where we enter the data. Before entering any data in the cell, it has to be first selected by placing a cursor on it. When we position the mouse cursor on a cell, it gets selected, and is ready to take data from the user. The currently selected cell is called an **active cell**. The address of the active cell is displayed in the name box and is always highlighted with a black thick border.

The active cell can be edited in two ways:

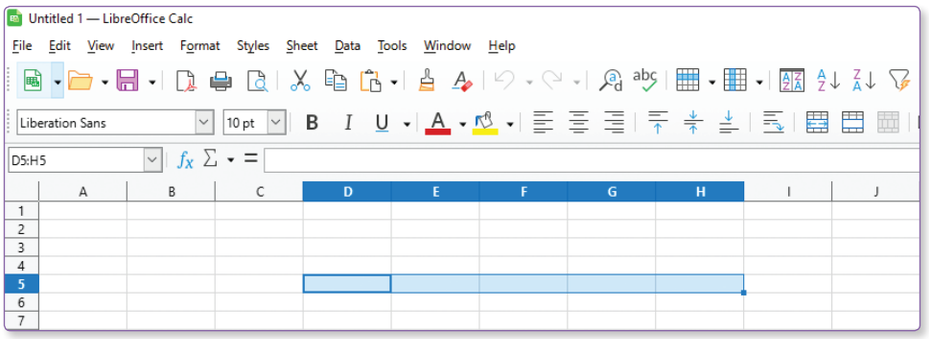
- Double click using a mouse.
- Press the F2 function key.

In both the cases the cursor will blink and the cell is ready to be edited.

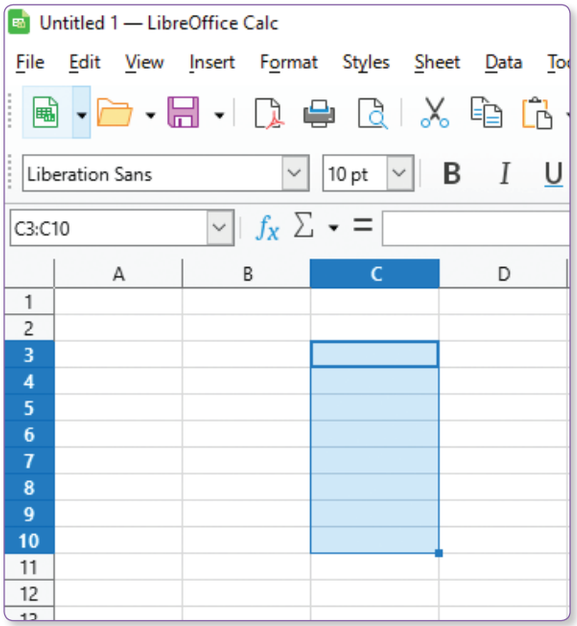
- **Cell Range:** A group of continuous cells selected with a mouse or keyboard is known as a **cell range**. Any data such as text, numbers, and formulae can be entered in a cell range.

  Cell range can be classified into three types:

  - **Row Range:** The selection of cells done row-wise horizontally will form a row range. The cell address is represented by single row number with columns varying. In the given figure, the row range starts from cell D5 to cell H5. It is represented as D5:H5.

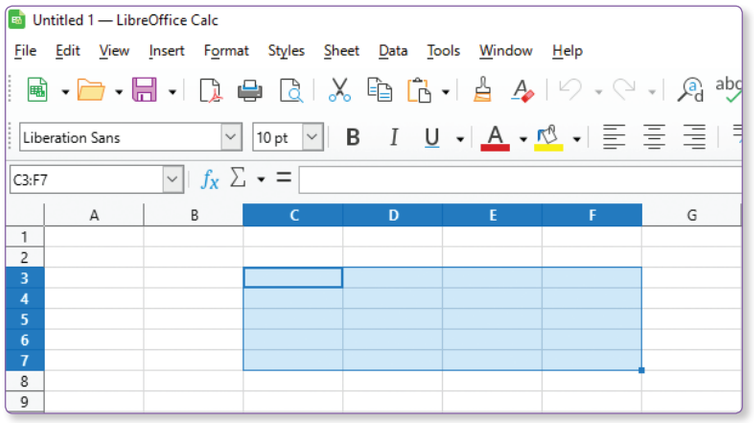


  - **Column Range:** The selection of cells done column-wise vertically will form a column range. The cell address is represented by a single column letter and multiple row number in a sequence. In the given figure, the column range starts from cell C3 to cell C10. It is represented as C3:C10.



  - **Row and Column Range:** When a selection of cells covers both rows and columns, it forms a grid of selected cells. The cell range is referred to by using the starting top left corner of selected cell address and ends with bottom right most selected cell address i.e. the edges of the front diagonal formed of the selected matrix.

In the given figure, the selection covers cells starting from C3 to F7. This selection or the cell range is represented as C3:F7.



Quiz Bee

Look at the ranges shown in the given sheet and answer the following questions:

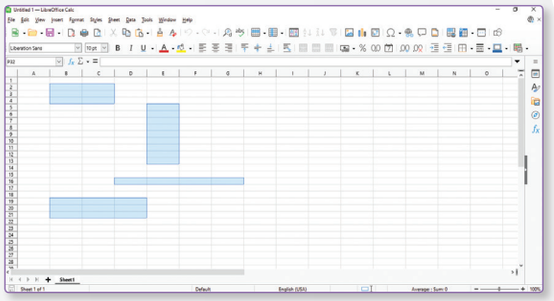
a. How many cell ranges are shown in the above spreadsheet?

b. Give the cell address of each of the above ranges.

c. Which cell range represents column range?

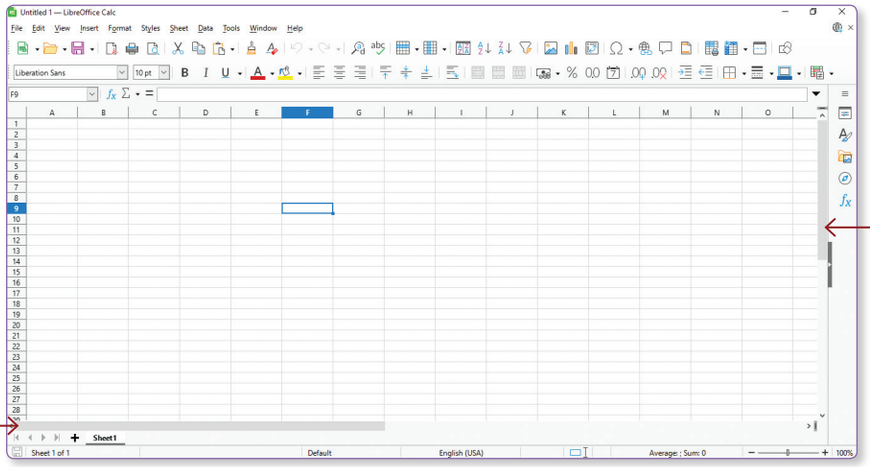
d. Which cell range represents row range?

e. Which cell range is a combination of both row and column range?



Scroll Bars

The scroll bars are used to navigate a sheet. To move on the left or right side of the screen, we use the **Horizontal scroll bar**. To move upward or downward in a sheet, we use the **Vertical scroll bar**.



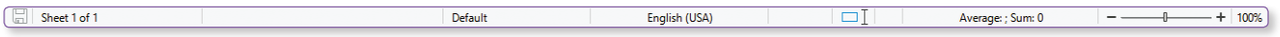
Sheet Tabs

A spreadsheet file can contain many individual sheets. At the bottom of the grid of cells in a spreadsheet are sheet tabs. Each tab represents a sheet in a spreadsheet. The sheet is like a page of a sheet. These sheet tabs are like pages or sheets of a sheet. In a sheet, a sheet can be renamed, edited, deleted or new sheets can be added.

The currently active sheet is highlighted and has an active cell.

Status Bar

It gives the status of the sheet in terms of insert or overwrite mode, sheet sequence number, page style and many more.



Quiz Bee

Answer the following questions:

1. Which bar is used to navigate a sheet?
2. What are the actions that can be performed in a sheet?

Find on Google

How can you remove duplicate values in a range of cells in LibreOffice Calc?

CREATING A SPREADSHEET

To work in 'Calc', the user needs to know how to work with Spreadsheet. 'Calc' opens with a new spreadsheet named 'Untitled1' as the default spreadsheet where the user can begin to work or create a new spreadsheet. To do so:

Step 1: Click on the **File** menu and select the **New** option.

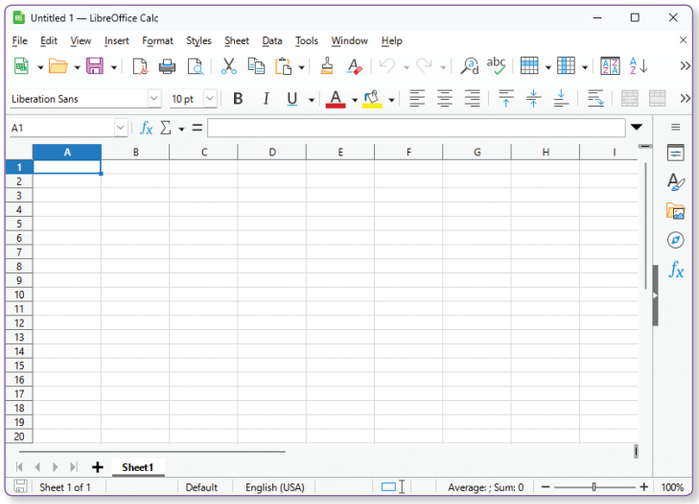
A sub-menu appears.

Step 2: Click on the **Spreadsheet** option.

Or

Click on the **New** button from the **Standard** toolbar.

A new spreadsheet named **Untitled 1** appears on the screen. A new spreadsheet displaying the active sheet **Sheet1** appears on the screen with cell **A1** as the active cell.



SHORT KEY

To create a new spreadsheet:

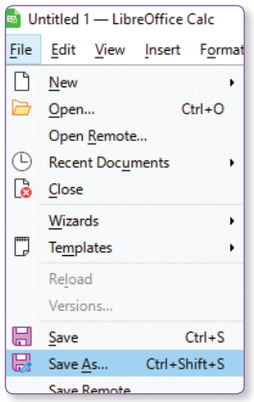
Ctrl + N

It will be saved with the given name. The extension of a file in Calc is **.ods**.

SAVING A SPREADSHEET

If a Spreadsheet is saved for the first time, it must be assigned with a new file name. Perform the following steps to save a spreadsheet:

Step 1: Click the **File** → **Save** as option from the **Menu** bar.



Or

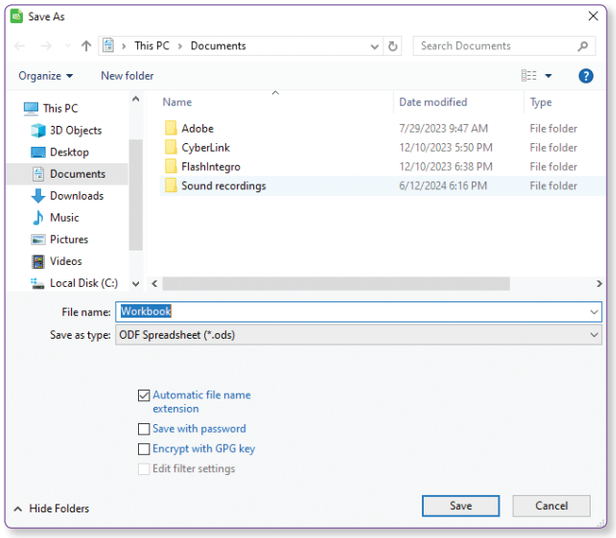
Press **Ctrl + Shift + S** keys from the keyboard.

The **Save As** dialog box appears on the screen.

Step 2: Select the folder where the spreadsheet has to be saved.

Step 3: Type a name for the spreadsheet.

Step 4: Click on the **Save** button or press the **Enter** key.



OPENING AN EXISTING SPREADSHEET

To open an existing spreadsheet:

Step 1: Click the **File** → **Open** option from the **Menu** bar.

The **Open** dialog box appears on the screen.

Step 2: Navigate the folder from where the spreadsheet is stored.

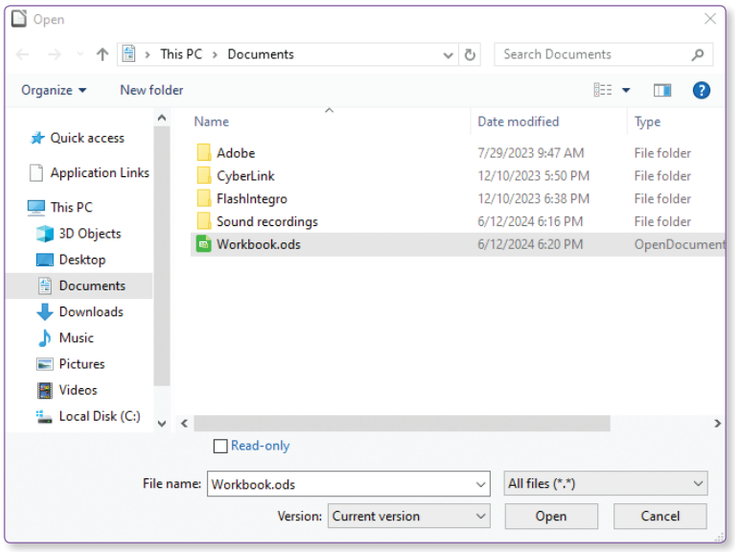
SHORT KEY

To open an existing Spreadsheet:

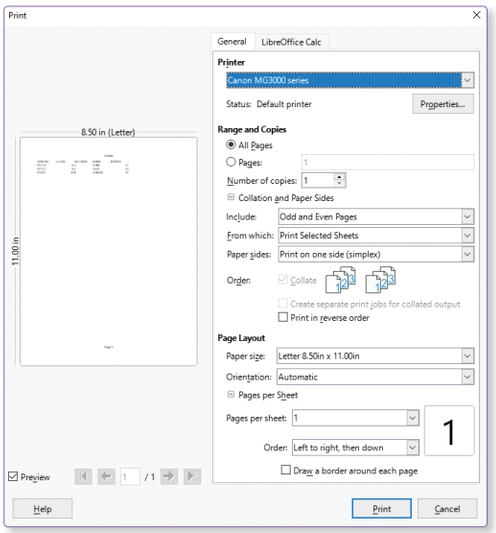
Ctrl + O

Step 3: Select the spreadsheet that you want to open.

Step 4: Click on the **Open** button to open the selected spreadsheet.



PRINTING A SHEET



Following are the steps to print a sheet:

Step 1: Select the **Print** option from the **File** menu.

OR

Click on the **Print** button from the **Standard** toolbar.

The **Print** dialog box opens.

Step 2: In the **Print** dialog box, specify the options such as:

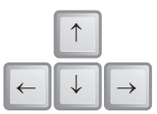
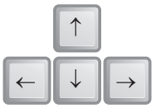
- Name of the printer that is attached and is being used for printing.
- To print all sheets or selected sheets or selected cells.
- The range of pages to be printed.
- Number of copies to be printed.

Step 3: Click on the **Print** button.

The sheet will be printed.

NAVIGATION IN A SHEET

Given below are some shortcut keys to move the active cell in a sheet.

Key/Keys Combination	Explanation
Arrow keys 	Moves a single cell in the direction of the arrow key.
Ctrl + Arrow keys 	Moves the cell to the end/beginning of the row/column moving in the direction of the arrow key.

Key/Keys Combination	Explanation
Home	Moves to the first cell of the current row.
End	Moves to the last cell containing the text of the current row.
Pg Down	Moves one screen down in the sheet.
Pg Up	Move to one screen up on the sheet.
Ctrl + Home	Makes A1 as active cell
Ctrl + End	Make the last cell on the sheet with data as the active cell.
F2	Enters the active cell into the edit mode.
Ctrl + F2	Opens the Function Wizard.
Shft+Ctrl+F5	Moves the cursor to the Name Box.

Quiz Bee

Can you tell the address of:

- First cell of a sheet
- Last cell of a sheet

INFO MAIL

Subject: To rename a sheet

A sheet can easily be renamed by using the given steps:

1. Double-click on the sheet tab.
   It will open the **Rename Sheet** dialog box.
2. Delete the existing sheet name and type a new name in the **Name** text box.
3. Click the **OK** button or Press the **Enter** key.

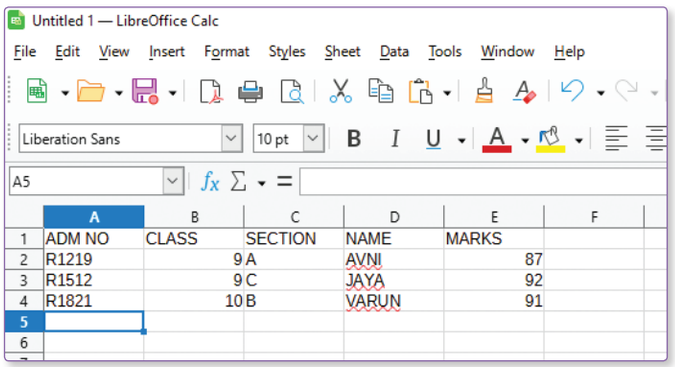
ENTERING DATA

When you enter a data in an active cell then it is always done using the given steps:

Step 1: Select a cell by positioning the pointer in a cell.

Step 2: Type your data in that cell.

Step 3: Press the **Enter** key on the keyboard or click on another cell using the mouse.



	A	B	C	D	E	F
1	ADM NO	CLASS	SECTION	NAME	MARKS	
2	R1219	9	A	AVNI	87	
3	R1512	9	C	JAYA	92	
4	R1821	10	B	VARUN	91	
5						
6						

The data entered in a cell can be:

- **Label/Text:** Any set of characters like letters, numbers, or special characters that can be entered in a cell is called a **label**. Labels in a cell are always left-aligned by default.
- **Value/Number:** The numbers like salary, marks, etc. that can be entered in a cell are called **value**. It can be in decimals also. Values in a cell are always right-aligned. If you enter a number preceded by zero, then it is ignored and only the number will be displayed. To show the preceding '0', the data type has to be specified as 'Text'.
- **Formula:** An expression that begins with an "=" sign is called a **formula** in a spreadsheet. It can have a value, cell address, or function. The equal sign indicates that the following part after the equal sign is a formula and not just a name or number. A formula can be directly entered in a cell or by typing it in an Input line of the formula bar. An expression without an equals "=" sign is treated as text and no calculations will be done. For example, A1+B1+10 will not give any answer because it is not preceded by an "=" sign. The advantage of using a formula is that if a number in a cell used as a cell reference in a formula changes then the result is automatically updated.

If A1 has value 10 and B1 has Value 20 then write the given formula in cell C1 as =A1+B1. The Answer displayed in cell C1 will be 30. Now go to cell A1 and change the value 10 to 20. What will happen to the value in Cell C1?

MATHEMATICAL OPERATORS USED IN A FORMULA

The mathematical operators that can be used in a formula for calculations in a spreadsheet are:

+	Addition	=10+2	12
-	Subtraction	=10-2	8
*	Multiplication	=10*2	20
/	Division	=10/2	5
^	Exponential (Power)	=10^2	100

When multiple operators are used in an expression, the operators are evaluated in the order of precedence as given below:

Order of precedence	Operator
1	()
2	^
3	/ *
4	+ –

In the above order of precedence, / and * are in the same order. Similarly, + and - are in the same order. In an expression, if the operators of the same order are present, then the order of evaluation of the expression will be from left to right. Let's see some examples given below:

Formula	Evaluation	Result
=2+3-4/2	=5–4/2 =5–2	3

Formula	Evaluation	Result
=10+2*4^2/2	=10+2*16/2 =10+32/2 =10+16	26
=6*6-(1+3)/2^2	=36–4/4 =36–1	35
=3+5*4^2	=3+5*16 =3+80	83
=10/5+2-(1+2)^2+10	=2+2-3^2+10 =2+2-9+10 =4-9+10 =-5+10	5

Evaluate the following equations using operator precedence and then test the result in the spreadsheet:

1. =8-4/2
2. =5*5+8
3. =3+5*4
4. =2^5+8
5. =3+2^2
6. =5+6*2^2
7. =8/4*4
8. =-4/2+2
9. =1+2^2-2
10. =4*3/2
11. =5+6^2*4-3
12. =(2+3-1)*6+212/6
13. =64/6+2*4-1
14. =7+2-1*1/1^2

USING CELL ADDRESS IN FORMULA

Instead of giving direct values in a formula, we can also give addresses of the cells containing values. When the values of the cells change, the results obtained by the formula also get updated accordingly. For example, to get the sum of the values in the cells A1 and A2, the formula =A1+A2 will be used in the cell A3.

Let us do the activity given below to see how this works:

Case 1:

Cell A1 has 5, cell A2 has 8, and cell A3 has =5+8.

What is the result in cell A3?

Ans: It will be 13

Case 2:

Now, change the values in cell A1 to 10, cell A2 to 7.

Cell A3 has =5+8

What changes do you see in cell A3?

Ans: No changes as the formula is still adding 5+8 and not changed to new values of cell A1 and A2.

Case 3:

Now, change the formula in cell A3 as =A1+A2

What changes do you see in cell A3?

Ans: The result is updated with new value 17

Case 4:

Now, change the value in cell A1 to 5, A2 to 20.

Cell A3 has formula=A1+A2

What changes do you see in cell A3?

Ans: The result is updated with new value 25.

Notice that, the results obtained from a formula (based on cell addresses) always get updated automatically when the values of these cells mentioned in the formula change.

INSERT A COLUMN OR A ROW

In LibreOffice Calc, inserting columns or rows is crucial for maintaining data clarity and flexibility. For example, suppose a sales report where you track monthly sales figures for various products. If you realise you need to add a new product category or additional months of data, inserting columns or rows allows you to seamlessly expand your spreadsheet. This not only keeps your data organised but also ensures that calculations and analyses remain accurate and up-to-date.

For Columns

The steps to insert columns in a sheet are as follows:

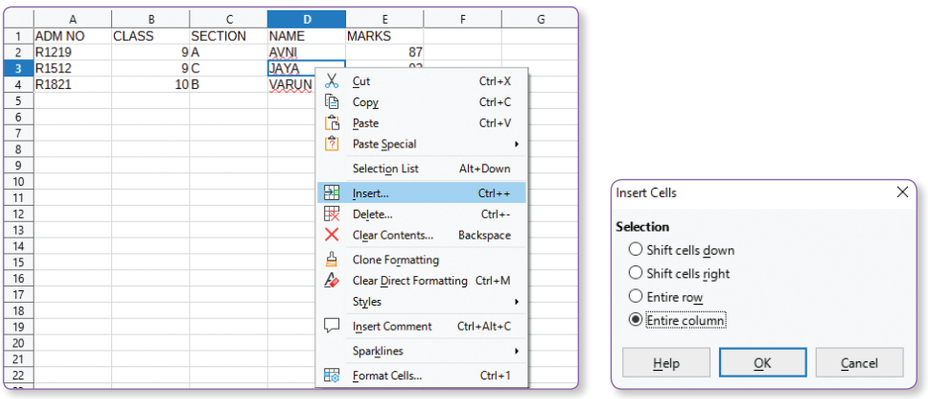
Click on the **Sheet** → **Insert Columns** → **Columns Before or Columns After option from the Menu bar.**

OR

Step 1: Right-click on the selected cell.

Step 2: Click on the **Insert** option from the context menu.

The **Insert Cells** dialog box will appear.



Step 3: Click on the **Entire column** radio button to insert a column in a sheet.

Step 4: Click on the **OK** button.

A new column gets inserted to the left of the selected cell.

For Rows

The steps to insert rows in a sheet are as follows:

Click on the **Sheet** → **Insert Rows** → **Rows Above or Row Below option from the Menu bar.**

OR

Step 1: Right-click on the selected cell.

Step 2: Click on the **Insert** option from the context menu.

The **Insert Cells** dialog box will appear.

Step 3: Click on **Entire row** radio button to insert row in a sheet.

Step 4: Click on the **OK** button.

A new row gets inserted above the selected cell.

DELETE A COLUMN OR A ROW

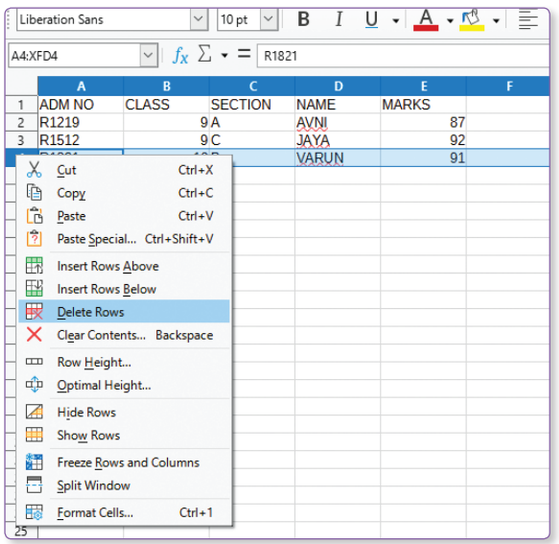
To delete a row, perform the following steps:

Step 1: Select the row(s) that you want to delete.

Step 2: Click on the **Sheet** → **Delete Rows** option from the **Menu** bar.

OR

Right-click on the selected row and select the **Delete Rows** option from the context menu.



The selected row(s) gets deleted.

To delete a column, perform the following steps:

Step 1: Select the column(s) that you want to delete.

Step 2: Click on the **Sheet** → **Delete Columns** option from the **Menu** bar.

OR

Right-click on the selected column and select the **Delete Columns** option from the context menu.

The selected column(s) gets deleted.

I KNOW

Tick (✓) if you know this.

- ► Labels in a cell are always left aligned by default.
- ► Values in a cell are always right aligned.
- ► Formulas always begin with an equal = sign.

WHAT ARE FUNCTIONS?

A function is a pre-defined formula in a spreadsheet that has a name followed by parentheses. For example, MAX(), MIN(), SUM(), etc. We write the arguments of the function inside the parentheses in the form of values, cell addresses, or cell ranges, so that the output of the function is generated based on the given arguments. A comma (,) is used to separate the arguments in a function.

Spreadsheet applications contain various functions to meet the needs of different fields.

The different ways of writing functions are listed below:

- When values are in a continuous range of cells

  =Min(D7:D11)
- When values are scattered in different cells

  =Min(D7,E12,Y56,B32)
- When values are constants

  =Min(100,200,3452)
- When values are a combination of cell range and a different cell address

  =Min(D7:D10,G40)
- When values are a combination of constant and cell address

  =Min(120,D9:D11,R12)

Functions simplify the process of calculations and can be used to perform simple and complex calculations. The name of the function in LibreOffice Calc is not case-sensitive.

Let us now do some of the commonly used functions using the given sheet:

	A	B	C	D	E	F
1						
2						
3						
4		MY SHOPPING LIST				
5						
6		Article	Quantity	Price Per Unit	Amount	
7		Trousers	2	3500	7000	
8		T-shirt	3	2000	6000	
9		Shoes	3	4200	12600	
10		Socks	4	1500	6000	
11		Jeans	2	5000	10000	
12		TOTAL	14	16200	41600	
13						
14		Max. Quantity Purchased		4		
15		Min. Price of an Article		1500		
16		Average Price of an Article		3240		
17		Count of the Article Purchased		5		
18						
19						
20						

SHORT KEY

To open the Function Wizard:

Ctrl + F2

- **Sum():** It returns the sum of the given values. For example, adding up the total amount spent on shopping in the above sheet can be done using different ways as given below:

  =Sum(E7,E8,E9,E10,E11)

  OR

  =Sum(E7:E11)

  OR

  =Sum(E7:E9,E10:E11)

  OR

  =Sum(E7:E10,E11)

INFO MAIL

Subject: To calculate sum

Select the cells and click on Σ icon on the formula bar and the sum of the cells will be automatically calculated. This is another way of adding the selected cells or using the Sum function.

- **Min():** It returns the minimum value out of the given values. Let us find the minimum price of an article in the above sheet.

  =Min(D7:D11)

  OR

  =Min(D7,D8,D9,D10,D11)

  OR

  =Min(D7:D9,D10:D11)

  OR

  =Min(D7:D10,D11)

- **Max():** It returns the maximum value out of the given values. Let us find the maximum quantity purchased in the given sheet.

  =Max(C7:C11)

  OR

  =Max(C7,C8,C9,C10,C11)

  OR

  =Max(C7:C9,C10:C11)

  OR

  =Max(C7:C10,C11)

- **Count():** It returns the count of the number of cells that contain numeric values. Let us count the number of articles in the given sheet.

  =Count(C7;C8;C9;C10;C11)

  OR

  =Count(C7:C9;C10:C11)

  OR

  =Count(C7:C10;C11)

  OR

  =Count(C7:C11)

- **Average():** It returns the average of the given values. Let us find the average price of an article in the given sheet.
  =Average(D7:D11)
  OR
  =Average(D7,D8,D9,D10,D11)
  OR
  =Average(D7:D9,D10:D11)
  OR
  =Average(D7:D10,D11)

Let us practise the formulas and functions learnt so far using the following spreadsheet.

	A	B	C	D	E	F	G
1	Name	Salary	Casual Leave	Medical Leave	Total (Casual+ Medical)	Sanctioned Leaves	Balance Leaves
2	PREETI	13000	2	1		8	
3	SIMRAN	15000	1	3		8	
4	LUBNA	10000	3	5		8	
5	PRIYA	12000	2	1		8	
6	SHIPRA	9000	2	0		8	
7	Min. Salary						
8	Max. Salary						
9	Employees						
10							

Give answers of the following queries using functions:

a. Total number of employees - To be entered at B9

Ans. **B9=COUNT(A2:A6)**

b. Lowest Salary - To be entered at B7.

Ans. **B7=MIN(B2:B6)**

c. Highest Salary to be entered in B8

Ans. **B8=MAX(B2:B6)**

d. Total leaves of PREETI (Casual Leave + Medical leave) - To be entered at E2

Ans. **E2= C2+D2**

e. Copy the formula entered in E2 for all other employees.

Ans. **E3= C3+D3** **E4= C4+D4** **E5= C5+D5** **E6= C6+D6**

f. Balance leaves of PREETI - To be entered at G2

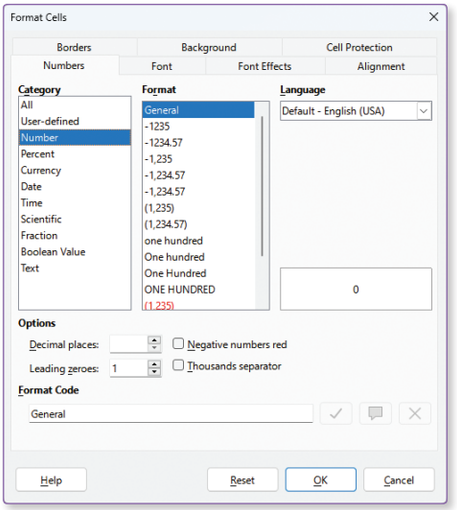
Ans. **G2=F2-E2**

g. What is the average salary of employees?

Ans. **=AVERAGE(B2:B6)**

FORMATTING DATA IN THE SHEET

Data in a cell without the formatting appears to be dull and non-interesting. The same data with different formatting style will make it more presentable. Formatting data enhances the readability and visual appeal of your data, making it easier to interpret and analyse. By applying various formatting styles, such as adjusting fonts, colours, borders, etc. you can highlight important information, organise data logically, and ensure consistency throughout your spreadsheet. It will also draw attention to the important points without much effort. The **Format Cells** dialog box can be used to apply formatting to a cell or range of cell.



We can format the data by using any of the given ways:

- Click on the **Format** → **Cells** option from the **Menu** bar. It will open the **Format Cells** dialog box.

  OR

- Use the **Formatting** toolbar present just below the **Standard** toolbar.

  OR

- Right-click on the and select the **Format Cells** option from the context menu. It will open the **Format Cells** dialog box.

SHORT KEY

To open the Format Cells dialog box:

Ctrl + 1

The formatting of the data can be done by using some of the given tools:

- **Font:** It is used to change the font type such as Algerian, Calibri, Century Gothic, etc.
- **Font Size:** The default font size is 10, which can be increased or decreased.
- **Bold:** It makes the selected text appear thick.
- **Italic:** It makes the selected text appear slightly tilted.
- **Underline:** It underlines the selected text.
- **Align Left:** It aligns the selected text to the left within a cell.
- **Align Center:** It aligns the selected text to the center of the cell.
- **Align Right:** It aligns the selected text to the right within a cell.
- **Justified:** It aligns the selected text to both left and right cell borders.
- **Decimal Place:** It increases or decrease the decimal place of a number.
- **Wrap text:** It wraps the text within a cell, so all content is displayed within the cell boundaries.
- **Number Formatting:** This formats the numbers in a cell to display as currency, percentage, date, time, etc.

Formatting a Range of Cells with Decimal Places

To format the number with a decimal place, we can either use the two options (Add Decimal Place and Delete Decimal Place) present on the Formatting toolbar or use the Decimal Places option through the Format Cells dialog box.

Perform the following steps to do so:

Step 1: Select the range of cells containing the numbers.

Step 2: Click on the **Format** → **Cells** option from the **Menu** bar.

The **Format Cells** dialog box opens.

Step 3: Select the **Numbers** tab.

Step 4: Click on the **Number** category from the **Category** list box.

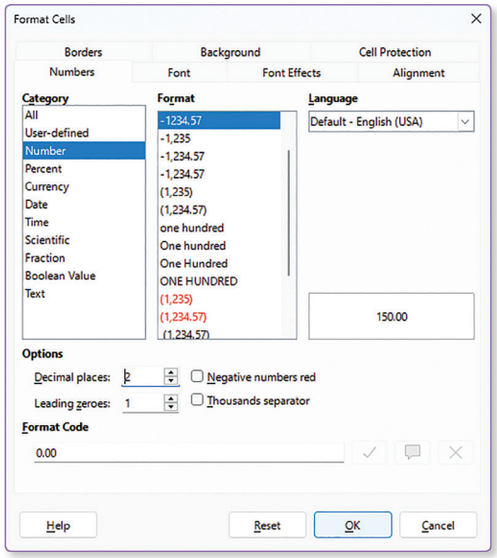
Cost Price
150
20
80
40
60

Step 5: Select the desired format of the number from the **Format** list box.

Step 6: Specify the decimal value in the **Decimal places** to **2** from the **Options** section.

Step 7: Click on the **OK** button.

The decimal is added in the number.



Cost Price
150.00
20.00
80.00
40.00
60.00

Formatting a Range of Cells as Labels

Numbers are not preceded by '0'. If you try to put zero before a number, then it will automatically be removed after moving to the next cell. In order to display zero before a number, it has to be converted into text which can be done by following the given steps:

City Codes
11
22
33
44
55

Step 1: Select the range of cells with the numeric values.

Step 2: Click on the **Format** → **Cells** option from the **Menu** bar.

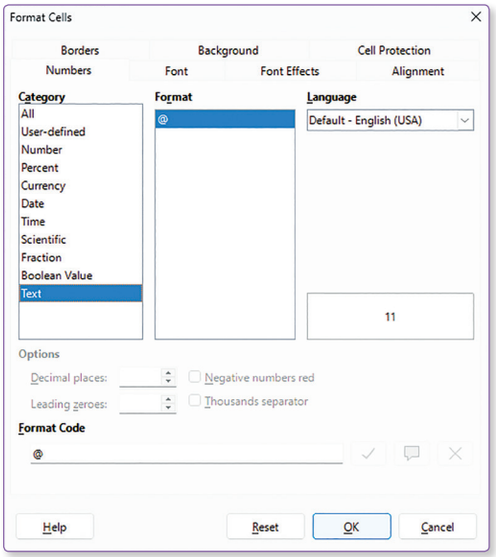
The **Format Cells** dialog box opens.

Step 3: Select the **Numbers** tab.

Step 4: Click on the **Text** category from the **Category** list box.

Step 5: Click on the **OK** button.

Now, you can add '0' before the number.



City Codes
011
022
033
044
055

Formatting of a Range of Cells as Scientific

To change the numbers as scientific notation, follow the given steps:

Country Population
4250000
43550000
1000000
25000000
900000000

Step 1: Select the range of cells with the numeric values.

Step 2: Click on the **Format** → **Cells** option from the **Menu** bar.

The **Format Cells** dialog box opens.

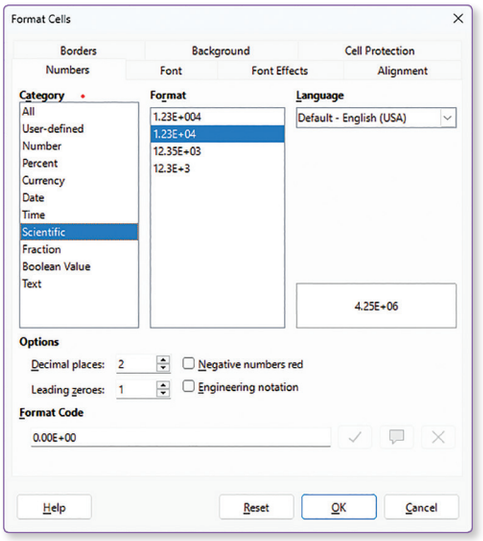
Step 3: Select the **Numbers** tab.

Step 4: Click on the **Scientific** category from the **Category** list box.

Step 5: Select the desired format of the number from the **Format** list box.

Step 6: Click on the **OK** button.

The values will appear in scientific notation.



Country Population
4.25E+06
4.36E+07
1.00E+06
2.50E+07
9.00E+08

Formatting a Range of Cells to Display Date

In a spreadsheet, by default the date format is in American Format, where mm-month, dd-date, yyyy-year. However, this default format can vary depending on the regional settings of your software and operating system. The date 12/09/2023 means that it is the 09th day of December 2023. In a spreadsheet application, the user can change this Date in many different formats. To change the format of the date to a different type, follow the given steps:

04/03/24
05/04/24
11/09/24

Step 1: Select the range of cells with the numeric values entered as a date.

Step 2: Click on the **Format** → **Cells** option from the **Menu** bar.

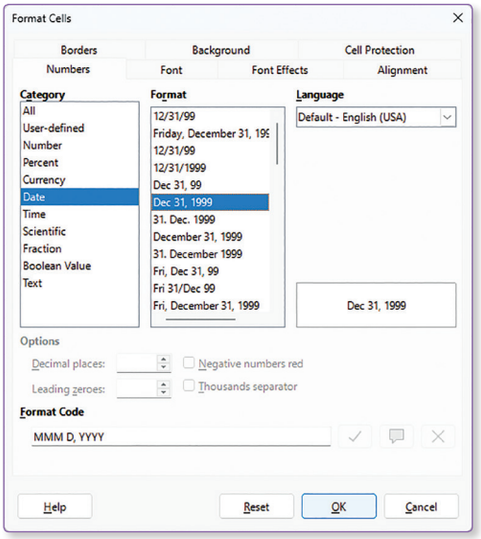
The **Format Cells** dialog box opens.

Step 3: Select the **Numbers** tab.

Step 4: Click on the **Date** category from the **Category** list box.

Step 5: Select the desired format of the number from the **Format** list box.

Step 6: Click on the **OK** button.



Apr 3, 2024
May 4, 2024
Nov 9, 2024

Formatting a Range of Cells to Display Time

Time is indicated on the computer as 10:35:53 AM. The common format of this is hh:mm:ss AM/PM . Here, hh means hours, mm means minutes and ss means second.

To change the format of time, follow the given steps:

Step 1: Select the range of cells with the numeric values entered as time.

Step 2: Click on the **Format** → **Cells** option from the **Menu** bar.

09:00:00 AM
09:30:00 AM
06:00:00 PM

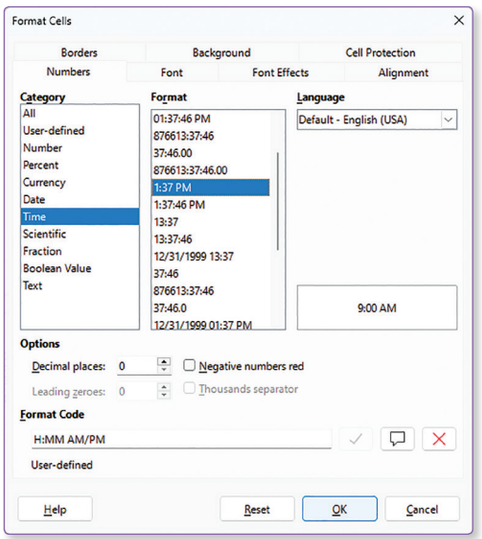
The **Format Cells** dialog box opens.

Step 3: Select the **Numbers** tab.

Step 4: Click on the **Time** category from the **Category** list box.

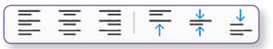
Step 5: Select the desired format of the number from the **Format** list box.

Step 6: Click on the **OK** button.



9:00 AM
9:30 AM
6:00 PM

Formatting the Alignment of the Cells

The default alignment of the data in a cell can be easily changed by using the alignment tools  (Align Left, Align Center, Align Right, Align Top, Center Vertical, Align Bottom) present on the Formatting toolbar or by using the Format Cells dialog box.

The steps to align the data in a cell are as follows:

Items
Card Board
Pencils
Pens
Ruler
Glue Stick

Step 1: Select the desired range of cells.

Step 2: Click on the **Format** → **Cells** option from the **Menu** bar.

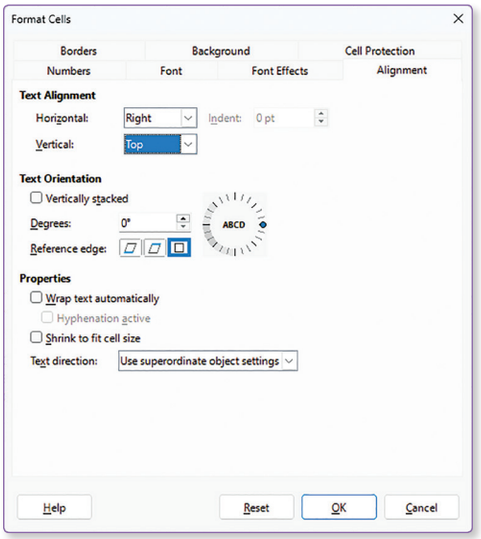
The Format Cells dialog box opens.

Step 3: Select the **Numbers** tab.

Step 4: Select the **Horizontal** and **Vertical** options under the **Text alignment** section.

Step 5: Click on the **OK** button.

The text is aligned according to the specified alignments.



Items
Card Board
Pencils
Pens
Ruler
Glue Stick

The **Wrap text automatically** option wraps the text in multiple lines to accommodate the text automatically within the column width by increasing the row height. The **Shrink to fit cell size** option reduces the font size of the contents to accommodate it within the column width.

SHORT KEY

To align the text in the cell:

Left:	Ctrl + L	Right:	Ctrl + R
Center:	Ctrl + E	Justify:	Ctrl + J

Quiz Bee

What are the different alignment options in LibreOffice Calc?

I KNOW

Tick (✓) if you know this.

- ► Data in a cell without the formatting appears to be dull and non-interesting.
- ► Numbers are not preceded by '0'.
- ► A function is an already created formula in a spreadsheet that has a name followed by circular brackets.

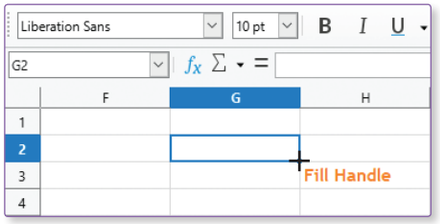
SPEEDING UP THE DATA ENTRY

LibreOffice Calc strongly supports the entering of text or other data. To speed up the process of data entry, there are a lot of important features in this program. We can drag and drop the cell content from one place to another by simply using a mouse click. Besides this, we can also use the Autofill feature, and cut/copy and paste the data to another place within the same or another sheet.

Let us now see how Autofill and copy/paste work in a spreadsheet.

Autofill Using Fill Handle for Generating Series

The Autofill feature helps you fill a predictable series automatically in a range of cells using the fill handle. This series could be a sequence of digits, months, days, time, etc. The fill handle (i.e., the plus sign (+)) appears when the mouse pointer moves over the bottom right corner of an active cell. The small black square in the bottom-right corner of the selected cell or range is called a **fill handle**.



Drag this handle down to the point till the series needs to be generated. It is important to write at least the first two members of the series as it would indicate the next elements in the sequence to be generated further.

Let us understand this by taking an example of generating a series of multiples of 5.

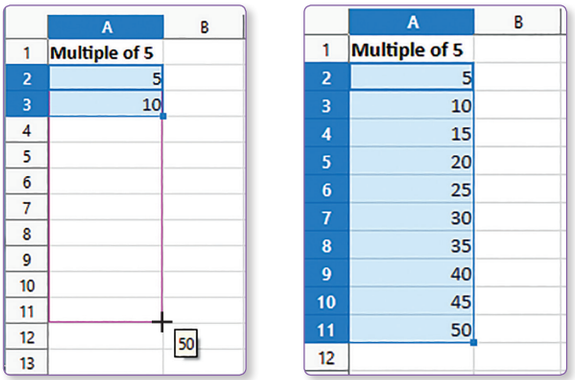
Step 1: Type in the cells the first two numbers of the series, i.e., 5 and 10.

Step 2: Select the two cells you just typed in.

Step 3: Move the cursor to the bottom right corner of the selection, you will see that the cursor changes to a thin plus sign (+). This thin plus sign is called a **fill handle**.

Step 4: Click and hold the left mouse button and drag the fill handle over the cells you want to fill. Here, drag the fill handle to the right (or down) to fill in the series.

The series is filled.



Now let us do another example. Consider the following spreadsheet and perform the given tasks:

	A	B	C	D	E	F
1	**Date (MM/DD/YY)**	**Month**	**Day**	**Serial Number**	**Odd Number**	**Even Number**
2	01/01/22	Jan	Mon	0	1	2
3				1	3	4
4						
5						
6						
7						
8						

- Select cell A2. Drag it till A11 using Fill Handle. You will get the Dates, automatically increased by 1.
- Select cell B2. Drag it till B11 using Fill Handle. You will get a list of Months.
- Select cell C2. Drag it till C11 using Fill Handle. You will get a list of Days of the week.
- Select cell D2. Drag it till D11 using Fill Handle. You will get the Serial numbers automatically increased by 1.
- Select cells E2 and E3. Drag them till E11 using Fill Handle. You will get a list of Odd numbers.
- Select cells F2 and F3. Drag them till F11 using Fill Handle. You will get a list of Even numbers.

After performing the above actions, the spreadsheet will look like as follows:

	A	B	C	D	E	F
1	**Date (MM/DD/YY)**	**Month**	**Day**	**Serial Number**	**Odd Number**	**Even Number**
2	01/01/22	Jan	Mon	0	1	2
3	01/02/22	Feb	Tue	1	3	4
4	01/03/22	Mar	Wed	2	5	6
5	01/04/22	Apr	Thu	3	7	8
6	01/05/22	May	Fri	4	9	10
7	01/06/22	Jun	Sat	5	11	12
8	01/07/22	Jul	Sun	6	13	14
9	01/08/22	Aug	Mon	7	15	16
10	01/09/22	Sep	Tue	8	17	18
11	01/10/22	Oct	Wed	9	19	20

Autofill Using Fill Handle for Copying the Formula

Autofill can also be used to copy a formula to a continuous range of cells. It saves the time and effort of writing long and complex formulae again and again. Moreover, it reduces the chances of making errors too.

Perform the following steps to do so:

Step 1: Create a sheet with the marks of English and Maths of 10 students as shown below:

Step 2: Write the sum formula in cell E3 to add the contents of cells C3 and D3.

	A	B	C	D	E
1					
2		NAMES	ENGLISH	MATHS	TOTAL
3		Ananya	96	90	=D3+E3
4		Arshia	92	91	
5		Advika	94	98	
6		Shinjini	97	93	
7		Aekagra	96	97	
8		Vedika	95	96	
9		Amber	94	91	
10		Deepti	93	99	
11		Rishab	95	92	
12		Rohan	91	91	

Step 3: Press the **Enter** key.

Step 4: Select the cell E3.

Step 5: Click and hold the left mouse button and drag the fill handle down till cell E12.

You will see that the formula is automatically copied to the rest of the cells with the cell address automatically adjusted accordingly as shown below.

	A	B	C	D	E
1					
2		NAMES	ENGLISH	MATHS	TOTAL
3		Ananya	96	90	186
4		Arshia	92	91	183
5		Advika	94	98	192
6		Shinjini	97	93	190
7		Aekagra	96	97	193
8		Vedika	95	96	191
9		Amber	94	91	185
10		Deepti	93	99	192
11		Rishab	95	92	187
12		Rohan	91	91	182

Using Copy and Paste for Copying the Formula

Following are the steps to copy a formula using the copy-paste command:

Step 1: Select the cell that contains the formula.

Step 2: Press the **Ctrl + C** keys to copy the contents of the selected cell.

Step 3: Select the cell to which the formula is to be pasted.

Step 4: Paste the contents in the selected cell.

Step 5: Press the **Ctrl + V** keys to paste the contents of the selected cell.

Quiz Bee

Complete the following spreadsheet. Use fill handle, wherever possible to automate the date entry. F2 should be sum values from B2 to E2. Drag the fill handle to copy the formula till F6.

G2 should be the average of values from B2 to E2. Copy this formula till G6 using the Auto Fill feature.

	A	B	C	D	E	F	G	H
1		City	Rainfall June, 21	Rainfall July, 21	Rainfall Aug, 21	Rainfall Sep, 21	Total	Average
2	1	Delhi	125	150	135	89		
3	2	Gurugram	119	152	135	75		
4	3	Noida	108	152	127	66		
5	4	Faridabad	99	145	123	68		
6	5	Ghaziabad	99	148	125	73		
7								

INFO MAIL

Subject: To show formulas in LibreOffice Calc

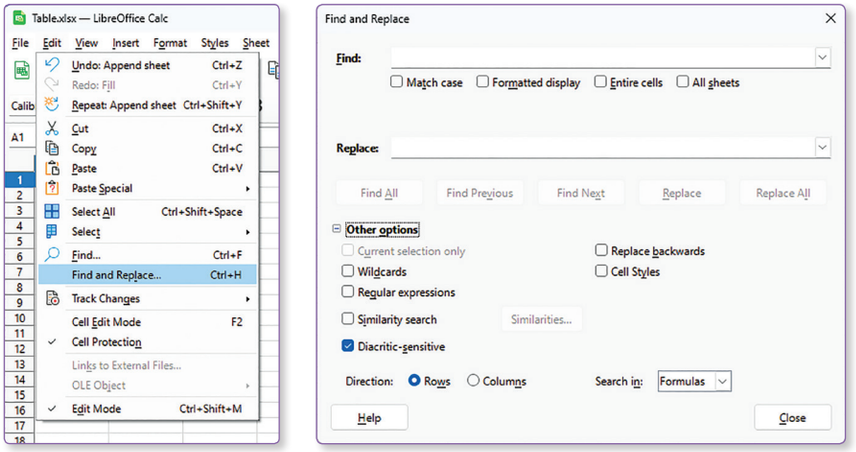
Step 1: Click on the View from the Menu bar.

Step 2: Click on the Show Formula option. Now, the formula is visible in place of result.

FIND AND REPLACE

In a spreadsheet, you can find text, formulas, and styles by using **Find and Replace** dialog box. To open Find and Replace dialog box, select the **Find and Replace** option from the **Edit** menu.

Text or numbers in cells may have been entered directly or may be the result of a calculation. The search method depends on the type of data you are searching for. By default, Calc searches the current sheet. To search through all sheets of the spreadsheet, select the **All sheets** check box.



You can navigate from one result to the next by using the **Find Next** button, you can highlight one result to the previous by using the **Find Previous** button or you can highlight all matching cells at once by using the **Find All** button, then apply another format or replace the cell contents by other content. The **Replace** button is used to replace the currently found occurrence and find the next. The **Replace All** button replaces all occurrences in the spreadsheet.

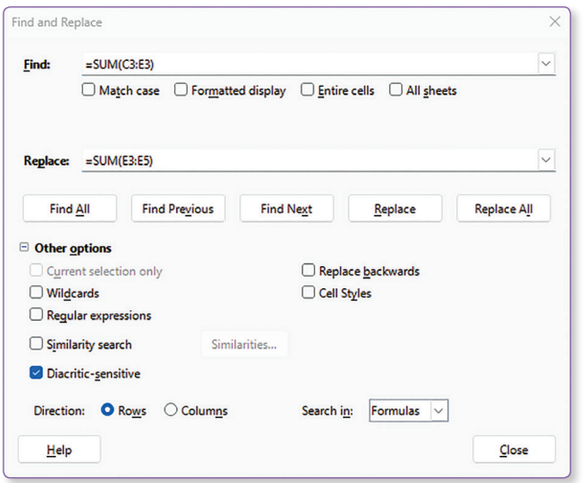
To Find Formulas or Values

You can specify in the Find and Replace dialog box either to find the parts of a formula or the results of a calculation. To do so, follow the given steps:

Step 1: Open the **Find and Replace** dialog box.

Step 2: Click on the **Other options** in the **Find and Replace** dialog box.

With **Formulas**, option, you will find all the parts of the formulas. With the **Values** option, you will find the results of the calculations.



Step 3: Select **Formulas** in the **Search in** list box.

Step 4: Type the formula that you want to find in the **Find** box.

Step 5: Type the new formula in the **Replace** box by which the formula is replaced.

Step 6: Click on the **Find Next** button to search for the formula.

Step 7: Click on the **Replace** button to replace the formula.

Cell contents can be formatted in different ways. For example, a number can be formatted as a currency, to be displayed with a currency symbol. You see the currency symbol in the cell, but you cannot search for it.

Finding and Replacing Text

To find and replace text, follow the given steps:

Step 1: Open the **Find and Replace** dialog box.

Step 2: Click on the **Other options** in the **Find and Replace** dialog box.

Step 3: Select **Values** in the **Search in** list box.

Step 4: Type the value that you want to find in the **Find** box.

Step 5: Type the new value in the **Replace** box.

Step 6: Click on the **Find Next, Find Previous, Find All, Replace,** or **Replace All** button.

If you closed the dialog box, you can press **Ctrl+Shift+F** to find the next cell without opening the dialog box.

CELL REFERENCING

We know that a cell address is a combination of a column name and a row number such as A5, B12, H23, etc. Using a cell address in a formula or a function is known as a **cell reference**.

For example, writing =H10 in cell D6 will refer to the value in cell H10, i.e., the value of D6 will be the value placed in cell H10. If any change in the value in cell H10 occurs, then the value in cell D6 will be automatically updated.

There are three types of cell referencing which are as follows:

- Relative Referencing
- Absolute Referencing
- Mixed Referencing

Relative Referencing

Whenever a formula or function is copied to some other cell, the address in the formula or function changes relative to the location where it is copied. This is known as **relative referencing**. In a spreadsheet, cell referencing by default is relative cell referencing. For example, when a formula is copied downwards or upwards in the cell, then the change in the row number relative to the location will occur. Similarly, if a formula is copied horizontally either to the left side or right side, then the change in the column name with respect to the position will occur.

Let us study the given sheet. A formula for calculating the Profit or Loss is written in cell F9 as =E9-D9. If we copy this formula two cells up (i.e., cell F7), then the row number will decrease by 2 and the new formula in cell F7 will be =E7-D7. Similarly, if we copy this formula to two cells down in the same column (i.e., cell F11), then the formula will have an increase of 2 in the row reference and the new formula in cell F11 will be =E11-D11.

	A	B	C	D	E	F	G
1							
2							
3							
4							
5			My Profit/Loss Account				
6			Items	Cost Price	Selling Price	Profit/Loss	
7			Card Board	150	200	=E7-D7	
8			Pencils	20	40		
9			Pens	80	120	=E9-D9	
10			Ruler	40	60		
11			Glue Stick	60	50	=E11-D11	
12							
13							

Absolute Referencing

Sometimes, we do not want the address in the formula to change with respect to the location and we need to fix a cell. Thus, if we copy the formula anywhere across a sheet, the cell address in the formula does not change. This fixing of a cell in a formula/function so that its location does not change with respect to the location where it is copied, then this type of referencing is known as **absolute referencing**. The dollar sign ($) is used in front of a column name and a row number to make it an absolute cell reference, like $A$10, $F$12, etc.

	A	B	C	D	E	F	G
1							
2		Selling of 5 Card Boards with same Cost Price and different Selling Price					
3							
4							
5			My Profit/Loss Account				
6			Items	Cost Price	Selling Price	Profit/Loss	
7			Card Board	150	200	=E7-$D$7	
8					210		
9					195	=E9-$D$7	
10					145		
11					160	=E11-$D$7	
12							
13							

Let us study the given sheet to understand the concept better. The cost price of all five cardboards are the same, so we will fix the cell D7 by writing $ in front of the row number and column name to make an absolute reference as $D$7. This cell will remain the same across the whole sheet in a cell reference.

Mixed Referencing

The combination of a fixed row and a relative column like R$5, E$10, G$23, etc. or a fixed column and a relative row like $F12, $R9, $H7, etc. in a cell referencing is known as **mixed referencing**. In the sheet given below, the column needs to be fixed but the row may change when the formula is copied down or above. This is done by using the $ sign in front of the column name as shown below.

	A	B	C	D	E	F
1	**Current Selling**			**Discount**		
2	**Level**	**Price**		**5%**	**10%**	**20%**
3	Standard	15000		=$B3*D$2		
4	Premium	25000				
5	Deluxe	35000				
6						

When you copy the formula entered in the cell to other cells then, you will see how the mixed cell referencing works.

	A	B	C	D	E	F
1	**Current Selling**			**Discount**		
2	**Level**	**Price**		**5%**	**10%**	**20%**
3	Standard	15000		=$B3*D$2	=$B3*E$2	=$B3*F$2
4	Premium	25000		=$B4*D$2	=$B4*E$2	=$B4*F$2
5	Deluxe	35000		=$B5*D$2	=$B5*E$2	=$B5*F$2

Prepare the given sheet by writing the formula for the given instructions:

	A	B	C	D	E	F
1	**MY PERCENTAGE CALCULATION**					
2						
3	**NAME**	**WEEKLY TEST**	**HALF YEARLY**	**FINALS**	**TOTAL**	
4	SONIA	87	78	89		
5	RITI	78	90	88		
6	ARJUN	76	97	87		
7	ABHISHEK	89	92	86		
8	SHEFALI	67	90	80		
9						

- Calculate the total marks of Arjun and display the result in cell E6.
- Calculate the highest marks in the weekly test and display the result in cell B9.
- Calculate the lowest marks in the finals and display the result in cell D9.
- Calculate 20% of Shefali's weekly test marks and display the result in cell F8.
- Calculate the percentage of Riti's total marks and display the result in cell F5.

CREATING CHARTS

Charts are considered as an effective tool of communication in a spreadsheet program. It represents the data in a pictorial form, which is easy to read and understand. The numbers in the data when represented in a graphical form help us to comprehend the data in a better way.

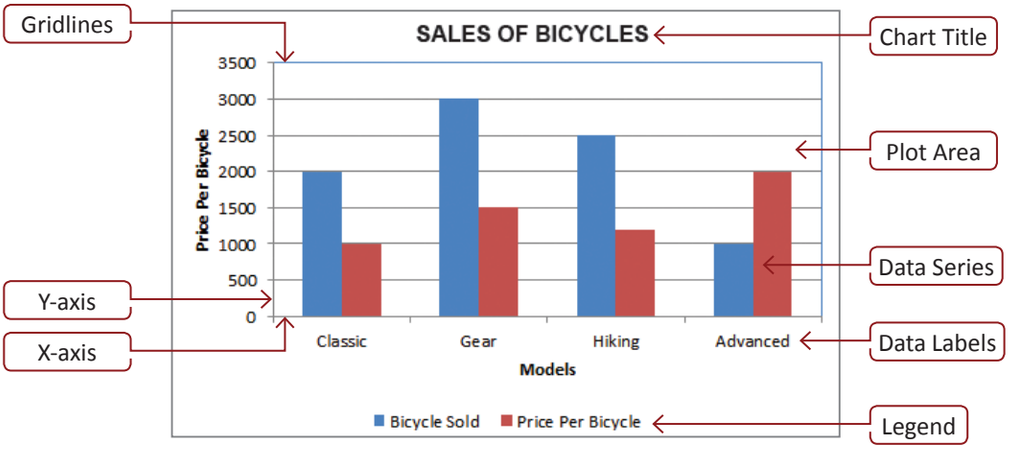
In LibreOffice Calc, we can insert the charts in two different ways, which are as follows:

Click on the **Insert** → **Chart** option from the **Menu** bar.

OR

Click on the **Chart** icon  on the **Standard** toolbar.

A chart typically consists of the following components:

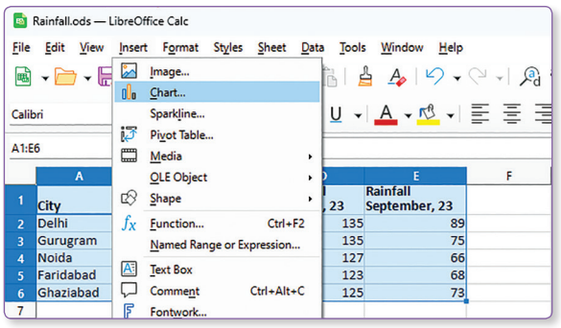


- **Chart Title:** It describes the main aim and content of the chart.
- **X-axis:** It is the horizontal axis of the chart. It is also called the category axis.
- **Y-axis:** It is the vertical axis of the chart. It is also called the value axis.
- **Plot Area:** It is the rectangular area bounded by the two axes. It contains the actual chart and includes the plotted data, data series, category, and value axis
- **Data Series:** It is related to the set of values. It is represented by the bars or slices that represent the data values.
- **Data Labels:** It shows information about a data series or its individual data points.
- **Gridlines:** These can be either horizontal or vertical lines depending on the selected chart type. It makes it easier to read and understand the values.
- **Legend:** It is a key which shows the meanings of symbols and colours used in the chart.
- **Chart Area:** It includes all the objects and elements of a chart.

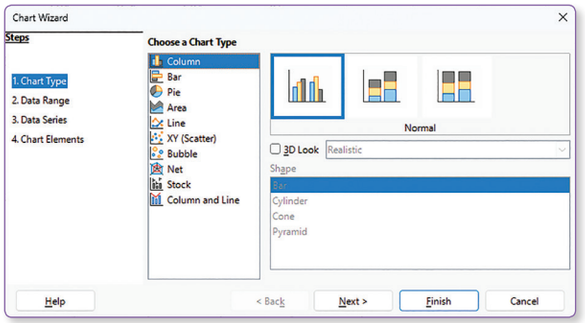
Let us create a chart using the data in the already created sheet. The steps for creating and formatting the chart are given below:

Step 1: Select the cell range for which a chart is to be inserted. In the given sheet we are selecting A1:E6.

Step 2: Click on the **Insert** → **Chart** option from the **Menu** bar.



It will open **Chart Wizard** as shown below:



The **Chart Wizard** shows the 4 steps to create a chart.

Step 3: In the **Chart Type** step, select the **Chart Type** as **Column** from the **Choose a Chart Type** list box. It will insert a column chart when you click on the **Finish** button.

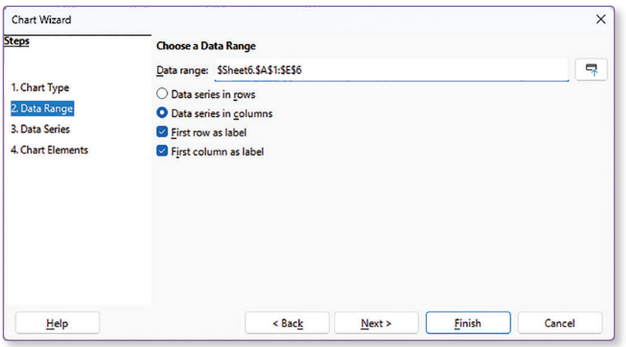
You may format your chart before inserting it by following the next three steps - **Data Range, Data Series,** and **Chart Elements** from the Steps section.

Step 4: To format a chart, Click on the Next **button** in **Chart Wizard**. It shows the following options:

- **Data Range:** You can edit the selected range by changing the cell address in this text box.
- **Data Series:** It means the collection of data values which can be row-wise or column-wise represented in a chart. You can choose anyone from here.
- **Row or Column Label:** The text that appears for row and column values represented in charts can be selected from here.

Step 5: Choose the desired option.

Step 6: Click on the **Next** button.

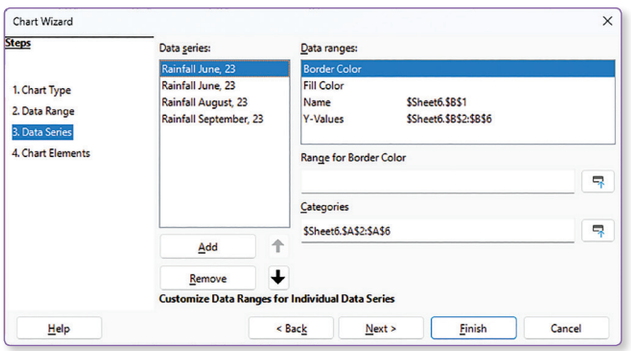


The following options appear in the Chart Wizard:

- **Data series:** Data series that can be added or modified.
- **Data ranges:** Data ranges for the series that can be added or modified.

Step 7: Choose the desired options.

Step 8: Click on the **Next** button.

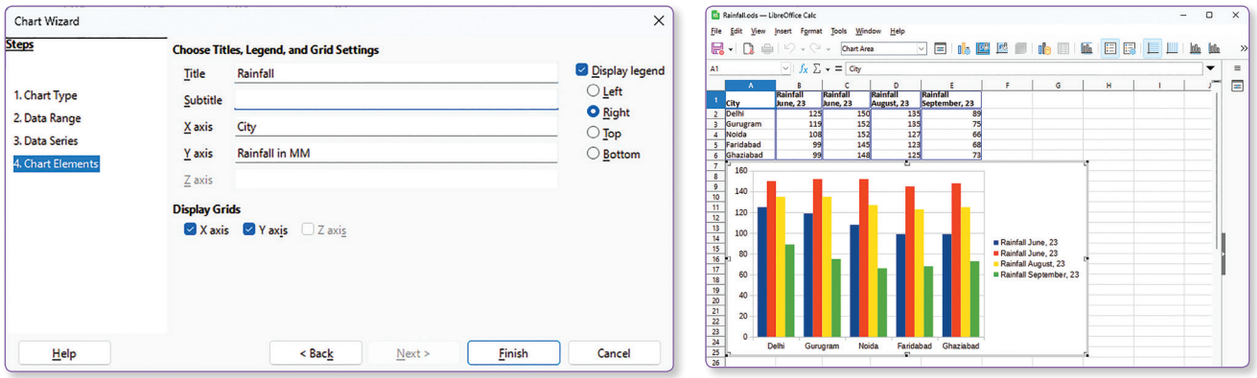


The **Chart Elements** step appears with the following options:

- **Chart Title:** It is used to specify the title to the chart.
- **Chart Subtitle:** It is used to specify the subtitle of the chart.
- **X axis:** It is used to specify the label to the horizontal axis.
- **Y axis:** It is used to specify the label to the vertical axis.
- **Display Grids:** It displays grid for the X axis and Y axis.
- **Display legend:** It displays the legends (Colour code of data value) on the Left, Right, Top or Bottom of the chart.

Step 9: Type the **Title** as **Rainfall, X-axis** as **City,** and **Y-axis** as **Rainfall in MM**.

Step 10: Click on the **Finish** button. The chart created will appear as shown below:



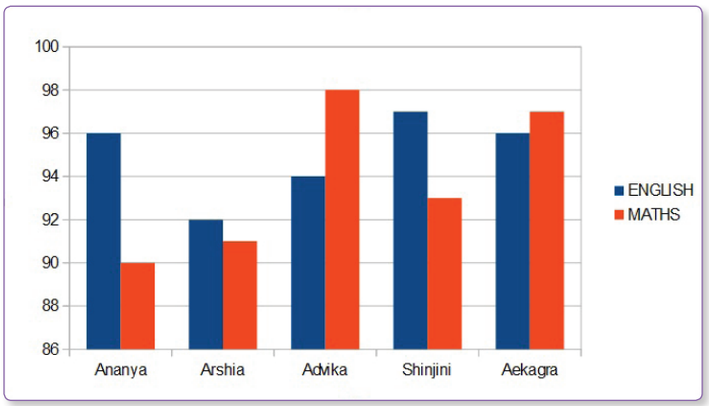
You can format any element quickly by double-clicking on it, such as Title, X-axis, Y-axis, Label, etc. It will open a dialogue box where you can format any element.

Types of Charts

There are various types of charts available in LibreOffice Calc. Some of them are explained below.

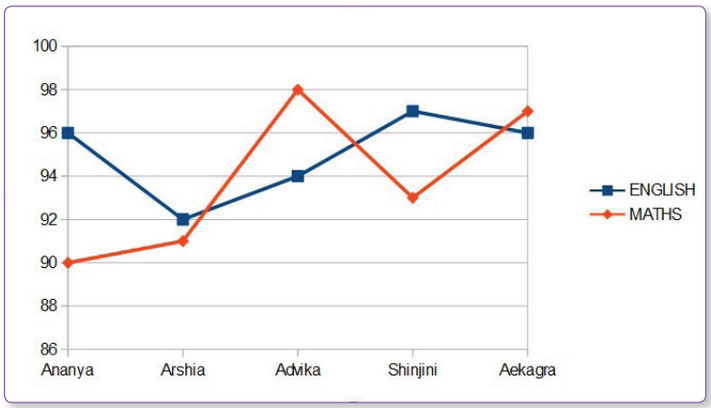
Column Chart

It displays the data with categories represented by a vertical rectangle. It helps in comparing a number of items and trend analysis. It is the default chart type.



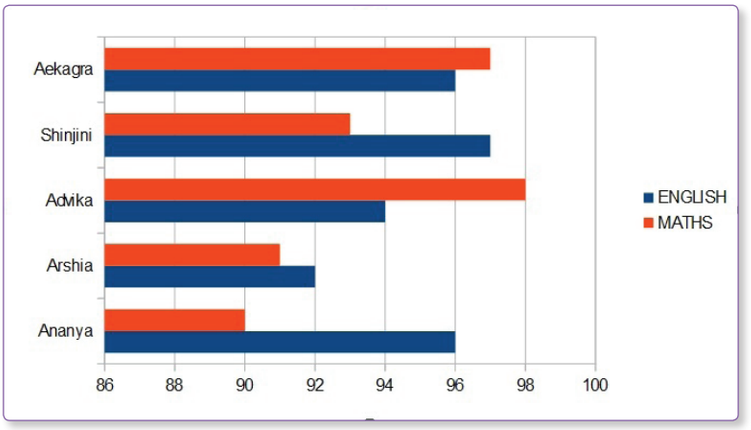
Line Chart

It displays the data series plotted as a separate line. It helps to show the changes or trends over time and can handle more categories and data points without becoming cluttered.



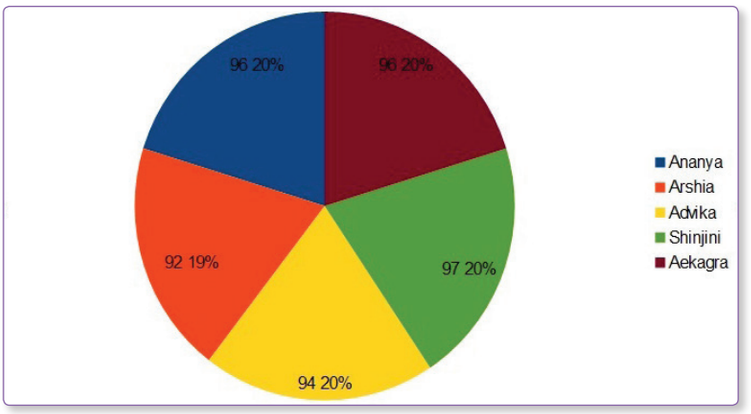
Bar Chart

It displays the horizontal bars with the axis values. It helps to show changes over time or differences in size, volume, or amount.



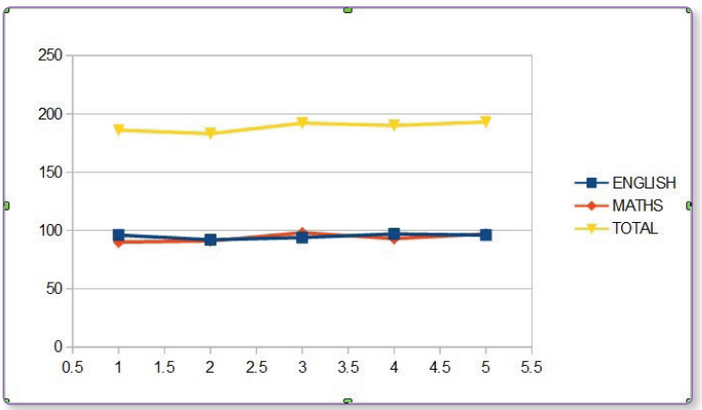
Pie Chart

It displays a circular chart divided by radii into segments, with each slice showing the size or percentage relative to the whole pie. This chart helps to visualise a data series that contains no zero or negative values.



XY Scatter Chart

It displays the chart which has a Horizontal (x) value axis and a Vertical (y) value axis. It helps to show and compare numeric values like scientific, statistical, and engineering data.



REVISIT

- A spreadsheet can be defined as text and numbers that have been organised into rows and columns.
- The electronic spreadsheet program is used for storing numeric data in an organised form so that the calculation and analysis of the data can easily be done.
- LibreOffice is an open source online office suite that includes applications like LibreOffice Writer, LibreOffice Calc, etc., designed to enhance your productivity and creativity with a wide range of tools and features.
- Name Box displays the name or reference of an active cell or a selected cell range.
- Input Line is used to enter a formula that needs to be applied in the current cell or selected cell range.
- The Sheet in Calc is also referred to as spreadsheet.
- In a spreadsheet, the cell is the place where we enter the data. Before entering any data in the cell, it has to be first selected by placing a cursor on it.
- A group of continuous cells selected with a mouse or keyboard is known as a cell range.
- The selection of cells done column-wise vertically will form a column range.
- Any set of characters like letters, numbers or special characters that can be entered in a cell is called a label.
- An expression that begins with an "=" sign is called a formula in a spreadsheet.
- A function is a pre-defined formula in a spreadsheet that has a name followed by parentheses.
- The Sum() function returns the sum of the given values.
- The Min() function returns the minimum value out of the given values.
- The Max() function returns the maximum value out of the given values.
- The Count() function returns the count of the number of cells that contain numeric values.
- The Average() function returns the average of the given values.
- Formatting data enhances the readability and visual appeal of your data, making it easier to interpret and analyse.
- The Autofill feature helps you fill a predictable series automatically in a range of cells using the fill handle.
- We know that a cell address is a combination of a column name and a row number such as A5, B12, H23, etc. Using a cell address in a formula or a function is known as a cell reference.
- Whenever a formula or function is copied to some other cell, the address in the formula or function changes relative to the location where it is copied. This is known as relative referencing.
- Chart represents the data in a pictorial form, which is easy to read and understand.

Exercise

Solved

SECTION A (Objective Type Questions)

A. Choose the correct option.

1. The intersection of a row and a column is called a _____.
   a. Sheet
   b. Cell
   c. Spreadsheet
   d. Cell range
2. _____ in a spreadsheet is used for entering and editing a formula.
   a. Status Bar
   b. Menu Bar
   c. Standard toolbar
   d. Formula Bar

3. Which of the following is used to insert functions through interactive step-by-step processes?
   a. Function Wizard
   b. Formula bar
   c. Name box
   d. Function button
4. The absolute referencing is used to.
   a. Fix the address of a row
   b. Fix the address of a column
   c. Fix the address of both row and column
   d. None of the above
5. The _____ symbol is used for representing the absolute referencing.
   a. &
   b. $
   c. #
   d. @
6. Which of the following is not available on the Formatting toolbar?
   a. Bold
   b. Font Name
   c. Font Color
   d. Print
7. The formatting of a cell can be changed by using _____ dialog box.
   a. Format Pages
   b. Format Cells
   c. Format Sheets
   d. Format Files
8. What will be the output of =6*4-(11-3)/2^3?
   a. 26
   b. 35
   c. 15
   d. 23
9. Which of the following types of package does Calc refer to?
   a. Spreadsheet
   b. Double sheet
   c. Multi-sheet
   d. Cannot determine
10. Which of the following is an extension of a spreadsheet created in Calc?
    a. .ods
    b. .odd
    c. .xls
    d. .obj
11. If we move a cell containing a formula having reference to another cell in the sheet what will happen to the cell numbers used in the formula?
    a. The cell references will update to reflect the new location.
    b. Only the row references will update to reflect the new location.
    c. Only the column references will update to reflect the new location.
    d. The cell references will not change.
12. A function should start with _____.
    a. '=' sign
    b. letter
    c. number
    d. All of the these
13. Which of the following options is used to print a chart?
    a. Insert → Char
    b. File → View
    c. File → Print
    d. View → Chart
14. How many axes do charts in Calc typically have?
    a. Two
    b. Three
    c. Two or three
    d. Four

Ans. 1. b 2. d 3. a 4. c 5. b 6. d 7. b 8. d 9. a 10. a 11. a 12. a 13. c 14. a

B. Fill in the blanks.

1. A group of continuous cells selected with a mouse or a keyboard is known as a _____.
2. _____ consists of tools used for the formatting of the spreadsheet, such as change of text colour, size, style etc.
3. _____ represent the data in a pictorial form which is easy to read and understand.
4. / and ^ are examples of _____ operators.
5. _____ is the default chart type in the spreadsheet.

6. The column immediately next to column “Z” is _____.
7. The shortcut key to create a new spreadsheet is _____.
8. The spreadsheet's feature used to fill the series is called _____.
9. The formula “=MIN(C1:C5)” stored in cell C6 when copied to cell D6 changes to _____.
10. The formula in cell A2 is =B2+C3. On copying this formula to cell C2, the formula will change to _____.
11. The cell address of the cell formed by the intersection of the tenth column and the eighth row will be _____.
12. $A1$B2 is an example of _____ referencing in spreadsheet software.
13. Numbers entered into a cell are automatically _____ aligned.
14. If A1:A5 contains the numbers 16, 10, 3, 25 and 6 then =Average(A1:A5,60) will display _____.
15. In _____ referencing, the reference changes rows and columns automatically when it is copied to a new cell.

Ans.

1. cell range	2. Formatting Toolbar	3. Charts	4. mathematical	5. Column chart
6. AA	7. Ctrl + N	8. Autofill	9. =min(D1:D5)	10. =D2+E3
11. J8	12. mixed	13. right	14. 20	15. relative

C. Match the following

1. Ctrl + Shift + S	a. Right aligned
2. Numbers	b. File, Edit
3. A45	c. Sheet
4. Rows and Columns	d. Save As
5. Menu Bar	e. Cell address

Ans. 1. d 2. a 3. e 4. c 5. b

D. State whether the following statements are true or false:

1. The F3 key is used to edit the current cell's data.
2. =B4+B5 is an example of a function in a spreadsheet.
3. SUM() returns the count of the number of cells that contain number values.
4. New column can be inserted from the Insert menu.
5. Semicolon (;) is used to separate the arguments in a function.
6. A cell address is made up of a row and a column.
7. Align Right option aligns the selected text to the right within a cell.
8. There are a fixed number of sheets in a spreadsheet and you cannot add more.
9. In a spreadsheet, we can change the column width and row height.
10. To show the preceding ‘0’, the data type has to be specified as ‘Text’.

Ans. 1. False 2. False 3. False 4. True 5. True 6. True 7. True 8. False 9. True 10. True

E. Solve the following in a spreadsheet:

1. If cell A1 contains the number 10 and B1 contains 5, what will be the contents of cell C1, if the formula =A1+B1*2^3 is entered in cell C1?
2. The contents of cell A1, B1, C1 and D1 are 5, –25, 30 and –35, respectively. What will be the value displayed in cell E1, which contains the formula =MIN(A1:D1)?
3. If cell D5 contains the formula =$B$5+C5 and this formula is copied to cell E5, what will be the copied formula in cell E5?
4. If cell D5 contains the formula =$B5 + C5 and this formula is copied to cell E5, what will be the copied formula in cell E5?

5. If cell D5 contains the formula =$B5 + C$5 and this formula is copied to cell E6, what will be the copied formula in cell E6?

Ans. 1. 50 2. –35 3. =$B$5+D5 4. $B5+D5 5. =$B6 + D$5

SECTION B (Subjective Type Questions)

A. Short answer type questions:

1. What is cell referencing?

Ans. Using a cell address in a formula or a function is known as a cell reference.

2. How can a chart be inserted in a spreadsheet? Give steps.

Ans. We can insert charts in two different ways, which are as follows:

Select Insert → Chart option from the menu bar.

OR

Click the Insert Chart icon on the Standard toolbar.

The steps to create a chart are as follows:

i. Select the cell range for which a chart is to be inserted.
ii. Select Insert → Chart from the menu bar. It will open a Chart Wizard.
iii. Select the desired chart type. It will insert a chart and then you have a choice whether you want to finish the steps or format it by following the next three tabs- Data Range, Data Series, Chart Elements.
iv. Click on the Finish button to close the Chart Wizard. A chart will be inserted.

3. In a spreadsheet software, the formula =A1+ $A$2 was entered in cell A3 and then copied into cell B3. What is the formula copied into B3?

Ans. =B1+ $A$2

4. Name the cells included in the range reference A1:B2?

Ans. A1, A2, B1, B2

5. Identify the type of cell reference of the following cell address:
   a. A$1
   b. B10
   c. $G$12
   d. $H5

Ans. a. Mixed reference (Row number is absolute)
b. Relative reference
c. Absolute reference
d. Mixed reference (column name is absolute)

6. Can you include more than one mathematical operator in a single formula?

Ans. Yes, we can use many operators as we want in a single expression. For example =A1+B2-(10/C2)

7. How do formulas work in a spreadsheet?

Ans. Formulas in a spreadsheet use cell references, operators, and functions to perform calculations. For example: =A1+B1

8. What is an active cell? How do you delete the content of an active cell?

Ans. The currently selected cell in a spreadsheet is known as an active cell.

To delete the content, press the Delete key.

9. How can you edit the content of an active cell?

Ans. The steps to edit the content of the active cell are as follows:

i. Double-click on the active cell or press the F2 key.
ii. Change the content.

B. Long answer type questions:

1. Consider the given sheet and answer the following questions:
   a. Write the formula to calculate the number of absentees in all the sections.

b. Write the formulas to Calculate the total number of students in cell C9, the total number of students present in cell D9 and the total number of absentees in cell E9.

c. Write the formulas to calculate the percentage of students present in cell D10 and the percentage of students absent in cell E10.

Ans. a. E3= C3-D3

Use the Auto Fill feature to copy this formula in the cells E4 to E8.

b. C9=sum(C3:C8)

D9=sum(D3:D8)

E9=sum(E3:E8)

c. D10=(D9/C9)*100

E10=(E9/C9)*100

2. Identify the output while doing the following calculations in a LibreOffice Calc.

	A	B	C	D	E
1					
2		SECTIONS	TOTAL	PRESENT	ABSENT
3		A	34	30	4
4		B	33	32	
5		C	35	31	
6		D	36	34	
7		E	34	31	
8		F	35	35	
9		TOTAL			
10		TOTAL %			

a. If C2=200, C3=300, C4=150, C5=150 what will be the result of =average (C2: C5)?

b. If A2=35 what will be the result of A2 * 2?

c. If C4=200 and D4=2 then what will be the output of =C4 / D4 + 22?

Ans. a. 200 b. 70 c. 122

3. Consider the following spreadsheet and write functions/formulas to answer the following queries:

	A	B	C	D	E	F	G	H	I	J	K
1	**Result Calculation**										
2	**Name**	**Term 1**			**Term 2**			**Term 1 Weightage**	**Term 2 Weightage**	**Final Result**	
3		**Theory (70)**	**Practical (30)**	**Total (100)**	**Theory (70)**	**Practical (30)**	**Total (100)**	**40%**	**60.00%**	**100**	
4	Arvind	65	29	94	64	29	93	37.6	55.8	93.4	
5	Birender	62	29	91	62	28	90	36.4	54	90.4	
6	Dev	56	28	84	59	29	88	33.6	52.8	86.4	
7	Eshaan	65	29	94	62	28	90	37.6	54	91.6	
8	Farhad	68	28	96	68	29	97	38.4	58.2	96.6	
9	Gauri	63	28	91	66	28	94	36.4	56.4	92.8	
10	Harsh	59	28	87	63	27	90	34.8	54	88.8	
11	Karuna	56	27	83	64	28	92	33.2	55.2	88.4	
12	**Highest**	**68**	**29**	**96**	**68**	**29**	**97**	**38.4**	**58.2**	**96.6**	
13	**Lowest**	**56**	**27**	**83**	**59**	**27**	**88**	**33.2**	**52.8**	**86.4**	
14											

a. Cell D4 to display the total marks of theory and practical of Term 1.

b. Cell G4 to display the total marks of theory and practical of Term 2.

c. Cell H4 to display 40% of the total of Term 1.

d. Cell I4 to display 60% of the total of Term 2.

e. Cell J4 to display the sum of weightage of Term 1 and Term 2.

f. Cell B12 to display the highest scorer of Term 1 Theory.

g. Cell B13 to display the lowest scorer of Term 1 Theory.

Ans. a. D4 = B4 + C4, copy the formula for the rest of the students.

b. G4 = E4 + F4, copy the formula for the rest of the students.

c. H4 = D4 * H$3, copy the formula for the rest of the students.

d. I4 = G4 * I$3, copy the formula for the rest of the students.

e. J4 = H4 + I4, copy the formula for the rest of the students.

f. B12 = MAX(B4:B11) copy the formula for the rest of the exams.

g. B13 = MIN(B4:B11) copy the formula for the rest of the exams.

4. Differentiate between absolute and relative referencing.

Ans.

- Absolute Referencing: Sometimes, we do not want the address in the formula to change with respect to the location, and we need to fix a cell. Thus, if we copy the formula anywhere across a sheet, the cell address in the formula does not change. This fixing of a cell in a formula/function so that its location does not change with respect to the location where it is copied, then this type of referencing is known as absolute referencing. The dollar sign ($) is used in front of a column name and a row number to make it an absolute cell reference.
- Relative Referencing: Whenever a formula or function is copied to some other cell, the addresses of the cells used in the formula or function changes relative to the location where it is copied. This is known as relative referencing. In a spreadsheet, cell referencing by default is relative cell referencing. For example, when a formula is copied downwards or upwards in the cell, then the change in the row number relative to the location will occur. Similarly, if a formula is copied horizontally either to the left side or right side, then the change in the column name with respect to the position will occur.

5. Define the following:

a. Cell range

b. Functions

c. Cell address

d. Sheet

Ans.

a. A group of continuous cells selected with a mouse or a keyboard is known as a cell range.

b. Functions are already created formulas in a spreadsheet that has a name followed by circular brackets. We write arguments inside the brackets in the form of values, cell addresses or cell ranges, so that the output of the function will be generated based on the given arguments. Some examples of functions are MAX(), MIN(), SUM() etc.

c. Each cell in a spreadsheet has an address, which is a combination of a column name and a row number. For example, D5 refers to a cell formed at the intersection of the D column and the 5th row.

d. A sheet is a single page within a LibreOffice Calc spreadsheet where you can enter, organise, and analyse data.

6. List the components of a chart in a spreadsheet.

Ans. Some components of a chart are as follows:

- Row or Column Label
- Chart Title
- X axis
- Y axis
- Gridlines
- Data Labels
- Data Series

7. What do you mean by a spreadsheet program? Why do we need it?

Ans. An electronic spreadsheet program is used for storing numeric data in an organised form so that the calculation and analysis of the data can easily be done.

The basic reasons for using a spreadsheet are as follows:

- Data can easily be organised in tabular form using rows and columns.
- Mathematical calculations like sum, average, minimum, etc. can easily be done either by using user-defined formulae or by using built-in functions.
- Data once created can be rearranged in ascending or descending order, filtered based on a criterion and so on.
- Graphical representation of data can be done using charts.

8. Explain any four types of charts.

Ans.

i. **Column Chart:** It displays data with categories represented by a vertical rectangle. It helps in comparing a number of items and trends analysis. This is the default chart.

ii. **Line Chart:** It displays data series plotted as a separate line. It helps to show change or trends over time and can handle more categories and data points without becoming cluttered.

iii. **Bar Chart:** It displays horizontal bars with the axis values. It helps to show changes over time or differences in size, volume, or amount.

iv. **Pie Chart:** It displays a circular chart cut by radii into segments, with each slice of pie showing the size is series, which has no zero or less than zero value.

C. Competency-based/Application-based questions:

21st Century Skills #Productivity & Accountability #Technology Literacy

1. Kartik's father has recently been selected as the president of the society and was told to make a list of the neighbours with details like name, number of members, phone number, address, date of shifting to their locality, and other details so that he can share them with all the residents.
   a. Help him by suggesting the most suitable application software needed for this task.
   b. Which feature of the software will help him generate the serial number?
   c. Give the steps to change the font size and style.
   d. Give the steps to save the file.

Ans. a. LibreOffice Calc

b. AutoFill feature helps you fill the predictable series automatically in a range of cells using the fill handle (plus sign (+)). This fill handle appears when the mouse pointer moves over the bottom right corner of an active cell. Drag this handle down to the point till the series needs to be generated.

c. Select Font and Style icons present on the Formatting toolbar.

d. Click on the File → Save.

2. Kabir has maintained his marks of five subjects in all 3 unit tests in three sheets. Help him do the given tasks:
   a. Write the steps to rename the sheets as Unit1, Unit2, Unit3.
   b. Feature to copy formula to rest of the cells.

Ans. a. The steps to rename a Sheet are:

i. Double-click the sheet in the Sheet tab. A Rename Sheet dialog box opens.

ii. Type the name in the Name text box.

iii. Click on the OK button.

b. AutoFill feature or Copy and Paste options.

3. Naina wants to store data of her monthly expenditures for a period of one year and also wants to perform some calculations and analysis. Which LibreOffice application will you suggest Naina to use for this purpose?

Ans. LibreOffice Calc

Assertion and Reasoning Questions:

Direction: Questions 3-4, consist of two statements – Assertion (A) and Reasoning (R). Answer these questions by selecting the appropriate option given below:

a. Both A and R are true and R is the correct explanation of A.

b. Both A and R are true but R is not the correct explanation of A.

c. A is true but R is false.

d. A is false but R is true.

4. **Assertion (A):** Charts in LibreOffice Calc are used to visually represent data.
   Reason (R): Charts help in understanding data trends and comparisons more easily than raw numbers.
5. **Assertion (A):** Bar charts in LibreOffice Calc are suitable for comparing data across different categories.
   Reason (R): Bar charts can only display one dataset at a time and cannot be combined with other chart types.

Statement Based Questions:

Two statements are given. Statement 1 and Statement 2. Examine the statements and answer the question according to the instructions given below.

a. Statement 1 is True, Statement 2 is True

b. Statement 1 is False, Statement 2 is False

c. Statement 1 is False, Statement 2 is False

d. Statement 1 is False, Statement 2 is True

6. **Statement 1:** Functions in LibreOffice Calc are predefined formulas that perform calculations using specific values, cell references, or ranges.

   Statement 2: The COUNT function in LibreOffice Calc counts the number of cells that contain numbers within a specified range.

Ans. 4. a 5. b 6. a

Unsolved

SECTION A (Objective Type Questions)

A. Choose the correct option.

1. Cut, Copy and Paste commands are part of the _____ in a spreadsheet.
   a. Status Bar
   b. Formatting toolbar
   c. Standard toolbar
   d. Formula Bar
2. Which is not a valid cell range?
   a. A1:C1
   b. A1:B1:D1
   c. C1:C10
   d. C2:G15
3. In LibreOffice Calc, how many default sheets are there in a spreadsheet?
   a. 3
   b. 4
   c. 1
   d. 2
4. The function used to calculate the maximum marks in computers is:
   a. MAX(A1:A10)
   b. MAXIMUM(A1:A10)
   c. HIGH(A1:A10)
   d. HIGHEST(A1:A10)
5. A formula can have
   a. A constant value
   b. A cell address
   c. A cell range
   d. All of the above
6. The chart that shows the percentage is _____ .
   a. Column chart
   b. Line chart
   c. Scattered chart
   d. Pie chart
7. Which of the following is not a type of data?
   a. Numbers
   b. Formula
   c. Text
   d. Operator
8. Which of the following formula is correct?
   a. =MIN(C5:C10)
   b. =MINIMUM(C5:C10)
   c. =MINI(C5:C10)
   d. =MIN(C5+C10)
9. Absolute cell referencing occurs when _____ .
   a. the formula is dragged and the cell reference adjusts automatically.
   b. the formula is dragged but the cell references do not adjust.
   c. $ symbol is automatically added with each cell value
   d. the spreadsheet is saved with “absolute” as file name
10. You have used a spreadsheet to calculate the average marks of a class in Mathematics. Which input is essential to find the average marks?
    a. Marks of each student in Mathematics class.
    b. Marks of each student in Science class.
    c. Average marks in Mathematics for each student in the class.
    d. Names and roll numbers of each student in the class.

B. Fill in the blanks.

1. _____ displays the name or a reference of an active cell or a selected cell range.
2. _____ is used to enter a formula that needs to be applied in the current cell or selected cell range.
3. _____ is a combination of a column name and a row number.
4. The _____ option reduces the font size of the contents to accommodate it within the column width.
5. _____ gives the status of the spreadsheet in terms of insert or overwrite mode, sheet sequence number, page style and many more.

C. State whether the following statements are true or false:

1. A horizontal scrollbar is used to move up or down in a spreadsheet. _____
2. Ctrl + Home takes the cursor to the first sheet. _____
3. An expression with an equal "=" sign is treated as text and no calculations will be done. _____
4. =min(100:200;3452) is an example of functions in spreadsheet. _____
5. The size of the font by default is 10 which can be increased or decreased. _____

SECTION B (Subjective Type Questions)

A. Short answer type questions:

1. Make a list of the tools present in the formula toolbar.
2. Name the three types of referencing methods in the spreadsheet.
3. What is the role of Autofill feature in spreadsheet?
4. The value in cell C10 is 100 and cell D10 is 60. The formula entered in cell E10 is =C10 – D10. If the formula is copied to E20 then what will be displayed in cell E20:
   a. Cell
   b. Formula Bar
   Explain your answer with reason.
5. Assume the values in some cells as A3=2, B3=3, C3=1 and D3=A3+B3/C3.
   What will be displayed in D3 if:
   a. A3 is changed to 5
   b. B3 is deleted

B. Long answer type questions:

1. Consider the following spreadsheet

	A	B	C	D
1			MY SHOPPING LIST	
2				
3	ITEMS	QUANTITY	PRICE	AMOUNT
4	JEANS	2	1500	
5	T-SHIRTS	5	1000	
6	TROUSERS	1	2100	
7	BLAZERS	1	4000	
8	CAPRI	3	1700	
9				
10				

Answer the following queries by writing functions/formulas to:

a. find the amount paid for Jeans in the cell D4. (calculated as the product of QUANTITY and PRICE)
b. copy the formula used in D4 from D5 to D8.
c. find the total amount of all the items in the cell D9.
d. find the most expensive item in cell C9.
e. find the most inexpensive item in cell C10.
f. calculate the average price of all the items in cell C11.
g. find the number (count) of the items in cell A9.
h. represent the above data using the suitable chart.

2. Answer the following:
   a. Cell A1 contains the number 20 and B1 contains 3. What will be the value in cell C1, if the formula =A1+B1*2^3 is entered in cell C1?
   b. The contents of Cell A1, B1, C1 and D1 are 10, -20, 30 & -40 respectively. What will be the value in cell E1 which contains the formula =MIN(A1:D1)
   c. Cell D3 contains the formula =$B3 + C3 and this formula is copied to cell E3. What will be the formula in cell E3?
3. A Biology teacher used the spreadsheet software to form the tabular format of population growth in various countries in the last 10 years. She now wants to depict a comparison of the same diagrammatically. Which option of the spreadsheet she would use? Explain any two types of it.
4. A maths teacher wanted to generate a series of multiples of 11. Which feature of Spreadsheet should he be advised to use to make his work easier? Explain with steps.
5. What is cell referencing? What is the significance of $ sign in cell referencing? Explain with examples.

C. Competency-based/Application-based questions:

21st Century Skills #Computational Thinking #Productivity & Accountability

1. The HR Department of M/s Visilac LLC asked the Accounts Department to share the Salary Breakup of the employees for further deliberation on revising the salaries in the future. The Accounts Department shared the following data, which now needs to be analysed for Management's decision-making process. Review the data below and answer the following questions:

	A	B	C	D	E	F
1	NAME	BASIC	HRA	DA	PF	NET SALARY
2	Surinder	50000	20000	---	600	---
3	Kanika	56000	20000	---	600	---
4	Aashish	35000	15000	---	400	---
5	Harjit	45000	15000	---	500	---
6	Abhijit	60000	25000	---	700	---
7	Jyoti	75000	30000	---	700	---
8	Amita	25000	10000	---	300	---
9	Maximum Net Salary					---

   a. Calculate the DA as 25% of BASIC+HRA for each employee and display it in column D.
   b. Calculate the NET SALARY as BASIC+HRA+DA–PF for each employee and display it in column F.
   c. Find the maximum NET SALARY and display it in cell F9.
   d. Represent the above data in the form of a suitable chart.
2. The figure given below shows marks scored by students in three different subjects:

	A	B	C	D	E	F
1	Student Name	Hindi	English	Maths		
2	Arshia	77	76	85		
3	Abhishek	78	75	80		
4	Rajesh	75	87	74		
5	Lucky	87	68	76		
6	Kunal	80	74	71		
7						
8						
9						

   Perform the given tasks based on the above spreadsheet:
   a. Write the formula in E2 to find the total marks scored by Arshia.
   b. Copy the formula entered in E2 for other students.

c. Write the formula in F2 to find the average marks scored by Arshia.
d. Copy the formula entered in F2 for other students.
e. Write the formula in cell B7 to find the highest score in Hindi.
f. Write the formula to find the highest score in English and Maths in C7 and D7 respectively.
g. Write the formula in cell B8 to find the total number of students who appeared in Hindi.
h. Write the formula in cell B9 to find the lowest score in Hindi.
i. Write the formula to find the lowest score in English and Maths in C9 and D9 respectively.

3. Consider a mathematical function, such as Y=3*X+1. Calculate the value of Y for each value of X, as given in the table below.

Value of X	2	4	6	8	10
Value of Y	?	?	?	?	?

Perform the given tasks:
a. Enter these values in Calc spreadsheet.
b. Use formula to find out the values of Y for each value of X.
c. Plot a line chart of X and Y values together.

4. Collect the electricity bill of your home for each month from January to May. Create a spreadsheet with the data of Month Name and Bill Amount as below.

MONTH	BILL AMOUNT
JANUARY	?
FEBRUARY	
MARCH	
APRIL	
MAY	

Enter the data in a spreadsheet and plot any three charts. Also find out that which type of chart will be more appropriate for such type of data.

Assertion and Reasoning Questions:

Direction: Questions 5-6, consist of two statements – Assertion (A) and Reasoning (R). Answer these questions by selecting the appropriate option given below:
a. Both A and R are true and R is the correct explanation of A.
b. Both A and R are true but R is not the correct explanation of A.
c. A is true but R is false.
d. A is false but R is true.

5. **Assertion (A):** Absolute cell references in LibreOffice Calc are useful when you want a formula to always refer to a specific cell, regardless of where the formula is copied.

Reason (R): Absolute cell references are indicated by adding a dollar sign ($) before the column letter and row number (e.g., $A$1).

6. **Assertion (A):** Line charts in LibreOffice Calc are used to show trends over time or for continuous data.
Reason (R): Line charts and pie charts serve different purposes; one is more effective than the other for displaying proportions of a whole.
Statement Based Questions:
Two statements are given. Statement 1 and Statement 2. Examine the statements and answer the question according to the instructions given below.
a. Statement 1 is True, Statement 2 is True
b. Statement 1 is False, Statement 2 is False
c. Statement 1 is True, Statement 2 is False
d. Statement 1 is False, Statement 2 is True

7. **Statement 1:** Autofill in LibreOffice Calc allows you to quickly fill cells with data based on a pattern or series.
Statement 2: Autofill in LibreOffice Calc can be used to extend a series of dates or numbers automatically.

LAB ACTIVITY

21st Century Skills #Creativity #Flexibility

1. Vedika went to buy some stationery for herself. Her billing amount is calculated after a discount of 5% as shown below:

	A	B	C	D	E	F	G
1			**My Stationary List**				
2							
3		**LIST**	**PRICE**	**QUANTITY**	**AMOUNT**		
4		Notebook	200	10	2000		
5		Pens	80	5	400		
6		Pencils	20	2	40		
7		Sketch Pen	50	1	50		
8			TOTAL AMOUNT		2490		
9			DISCOUNT(5%)		124.5		
10			BILL AMOUNT		2365.5		
11			(AMOUNT-DISCOUNT)				
12							
13							

Write a formula for calculating the values in given cells:

a. E4

b. E5

c. E6

d. E7

e. E8

f. E9 (calculated as the discount of 5% on the total bill amount calculated in E8)

g. E10

Video based question

Scan the QR code or watch the video at the given link and answer the question followed:

https://www.youtube.com/watch?v=vX2NW6r2Xfg

Scan the QR Code

What is the difference between sorting and filtering data?

CAREER HERE

After learning spreadsheet you may go for:

- Data Analyst
- Data Operator
- Market Research Analyst
- Retail Store Manager
- Business Analyst

UNIT

5

Digital Presentation

TOPICS COVERED

95%

- Characteristics of a Good Quality Presentation
- Creating a New Presentation
- Working with Slides
- Viewing a Presentation
- Running a Slide Show
- Images
- Grouping and Ungrouping Objects
- Applying Animation
- Closing LibreOffice Impress
- Introducing LibreOffice Impress
- Using Help
- Using Undo and Redo Options
- Workspace Views
- Using Tables in a Presentation
- Drawing Graphics Objects
- Working with Slide Masters
- Slide Transition

A presentation is a method of communication designed to share ideas and information both visually and orally. It may be like a teacher explaining a topic in the class, an employee presenting some important points in a meeting, or a person addressing an audience in a big hall. Good presentation skills will help you create presentations with innovative ideas and make them interesting for the audience. Application software that helps you design presentations using text, images, audio, or video are known as presentation software. It provides you with different tools that help you make your presentation more interesting and interactive. A few of the presentation software used these days are:


MS PowerPoint

Emaze


OpenOffice Impress


Keynote Presentation


LibreOffice Impress


Google Slides

A presentation can have the given elements:

- Title, Subtitle
- Text box to write text with bullets and numbering
- Audio
- Charts/Graphs
- Video and animations
- Shapes, diagrams and 3D Objects
- Tables

CHARACTERISTICS OF A GOOD QUALITY PRESENTATION

A good presentation should be clear in terms of content and the message that needs to be conveyed. Some of the characteristics of a good-quality presentation are as follows:

- **Number of lines:** On one slide, a maximum of 4–5 lines with fewer words and an appropriate font size should be written. Avoid using descriptive sentences, as it will divert the attention of the audience and make the presentation less interesting.
- **Font size:** The font size of the content should be big enough for the audience to read. Depending on the room size the font should vary from size 24 to 32.
- **Correct use of grammar and language:** The content of the slides should not have grammatical errors and the language used should also be appropriate to avoid any negative impact on the audience.
- **Inserting images, drawings, tables, or graphs:** Tools like images, drawings, callouts, tables, and graphs should be used to enhance the visual effects of the presentation.
- **Use of colours:** Avoid using dark colours throughout and a lot of colour variants in a presentation. Light and simple backgrounds with bold colour patterns for the title and content should be used. Some words may be highlighted with a different colour to draw the attention of the audience. Avoid using the same colour throughout the presentation.
- **Animations and videos:** Too many videos and animations will reduce the impact of the presentation. Ideally, one video per slide, if needed, should be used. Light animations for the objects and the images to be done.
- **Pay attention to the target group:** In order to get the attention of the audience on specific words and text than some effects like bold, font size difference, colour change or little animation should be done.
- **Well-designed presentation:** A well-designed presentation should have the correct colour combination, minimum content, and short videos with mild animation. These effects will have a good impact on the audience and will surely solve the purpose of providing a presentation using presentation software.

INTRODUCING LIBREOFFICE IMPRESS

LibreOffice Impress is a free and open-source software application for designing digital presentations. As part of the LibreOffice Suite from **The Document Foundation**, allows users to create presentations with text, graphics, and animations for purposes such as class lectures, corporate training, and invited talks.

Presentations made in LibreOffice Impress can be opened in other software, like MS PowerPoint. Additionally, Impress can read MS PowerPoint presentations, and templates. It is compatible with Windows, Linux, and Mac, though the interface may vary slightly across operating systems. LibreOffice Impress enables the creation of effective presentations by incorporating various multimedia elements. The text editing and formatting features, such as bold, colours, text alignment, borders, and drawing are similar to those found in Writer and Calc.

A file in LibreOffice Impress is known as a presentation and is saved with the extension .odp (Open Document Presentation). Each page within a presentation is called a slide. During a SlideShow, the slides are displayed one at a time on the screen.

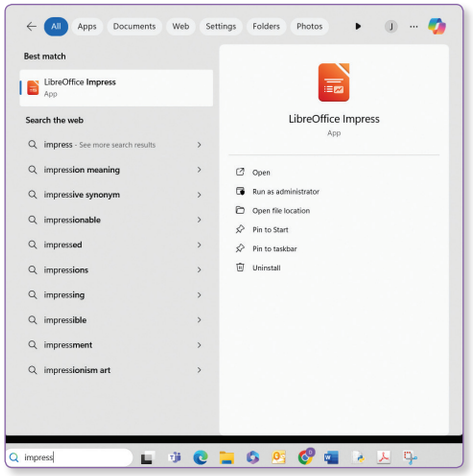
Getting Started with LibreOffice Impress

The process of starting Impress may slightly differ according to the operating system (Windows or Linux) that you are using.

To start LibreOffice Impress on Windows 11, follow the given steps:

Step 1: Type **Impress** in the search bar when the start menu is open.

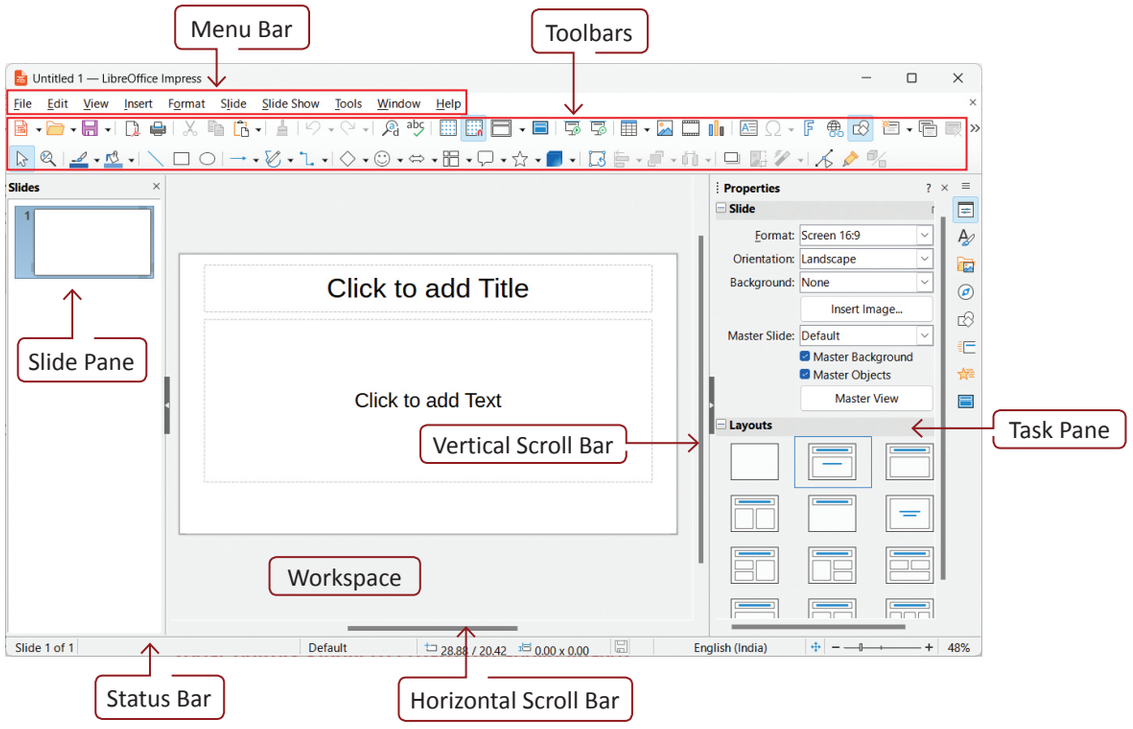
Step 2: Click on the **LibreOffice Impress** app.



A new presentation with the name **Untitled 1** opens in the **Impress** window.

Components of LibreOffice Impress Window

The components of the LibreOffice Impress window are as follows:



- **Title Bar:** It is the topmost bar of an application window that contains the name of the presentation Untitled 1 (default), followed by the name of the software LibreOffice Impress. It also contains window control buttons named Minimise, Maximise/Restore, and Close. These buttons control the window size and display on the screen.
- **Menu Bar:** It is a bar of menus that contains different options grouped together. The menus are as follows:
  - **File:** It is used to perform basic operations on the presentation like saving, opening, creating, etc.
  - **Edit:** It contains options for copying, cutting, and pasting text segments.
  - **View:** It is used for window view adjustment (different view types are selected, zooming, etc.) and for adding toolbars.
  - **Insert:** It is used to insert various objects like tables, shapes, textboxes, and charts into a presentation.
  - **Format:** It contains options for text formatting.

- **Slide:** It is used to insert a new slide, duplicate a slide or delete a slide.
- **Slide Show:** It is used for viewing presentations.
- **Tools:** It contains options that are used to control spelling in a presentation.
- **Window:** It is used for viewing already opened presentations.
- **Help:** It is used to see the help for any topic on Impress.

- **Toolbars:** Just below the Menu bar, there is a set of toolbars present. These toolbars can be switched on and off by using the **View → Toolbars** option. A few of them are as follows:
  - **Standard Toolbar:** It consists of some standard operations that are common across all the applications of LibreOffice software. It contains icons for the options present in the File menu. Some of these are new, open, save, etc.
  - **Text Formatting Toolbar:** It consists of tools used for the formatting of the slides in a presentation like changes in text colour, size, style, etc.
  - **Drawing Toolbar:** Using this, you can make various artistic works in the presentation to make your presentation effective.
- **Slide Pane:** It displays the miniature view of the slides present in a presentation. If you select a slide in a slide pane, it appears in the workplace. It allows you to:
  - Change the order of the slides
  - Add or delete a slide
  - Hide a slide
  - Copy or move the content of one slide into another
  - Change and apply slide transition or slide design
- **Task Pane/Sidebar:** It allows quick access to commonly used tasks in LibreOffice Impress:
  - **Properties:** It allows you to change slide layout and the format of any objects on a slide.
  - **Styles:** It opens Styles deck where you can quickly apply drawing and presentation styles to a selected object, create new styles for drawing and presentation, and modify both types of styles.
  - **Gallery:** It opens the Gallery deck where you can insert an object into your presentation.
  - **Navigator:** It opens the Navigator deck where you can quickly move between slides in your presentation or select an object on a slide.
  - **Slide Transition:** Using this, you can set the way how the slide will appear during presentation. There are too many ready-made alternatives available. You can also modify features like speed of transition, sound effects, automated transition, etc.
  - **Animation:** There are many animation features for the texts, drawings, etc. in a slide. Using this feature you can add, change or remove animation features.
  - **Master Slides:** You can modify the base architecture of the slide. You can make the presentation base and the common style for all slides using this. Impress offers several default slide master templates to choose from.
- **Workspace:** It is the actual work area of the LibreOffice Impress, where one slide at a time is created using different elements like text, charts, tables, audio, video, etc.
- **Insertion Point:** It is the location of the cursor where your text will appear as you type anything (means location where the cursor is blinking).
- **Status Bar:** It displays information about the active presentation, the current position of the cursor and the zoom slider. It can be adjusted according to user preferences. The Status bar can be turned off in the View menu by selecting the status bar option.
- **Zoom Control:** This tool is used to zoom in or zoom out the slide.

CREATING A NEW PRESENTATION

Whenever you wish to create a new presentation, follow the steps given below:

Step 1: Click on the **File** → **New** option from the **Menu** bar.

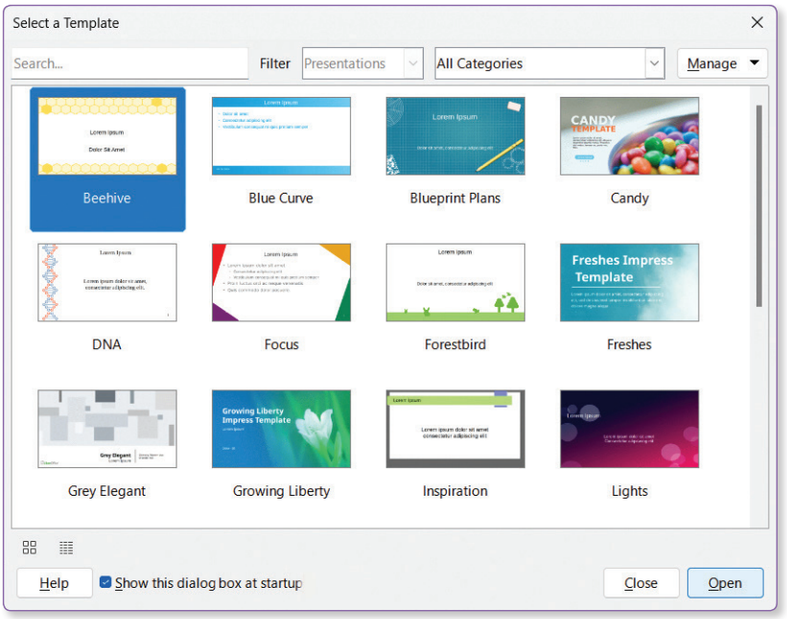
OR

Shortcut Key **Ctrl + N**.

OR

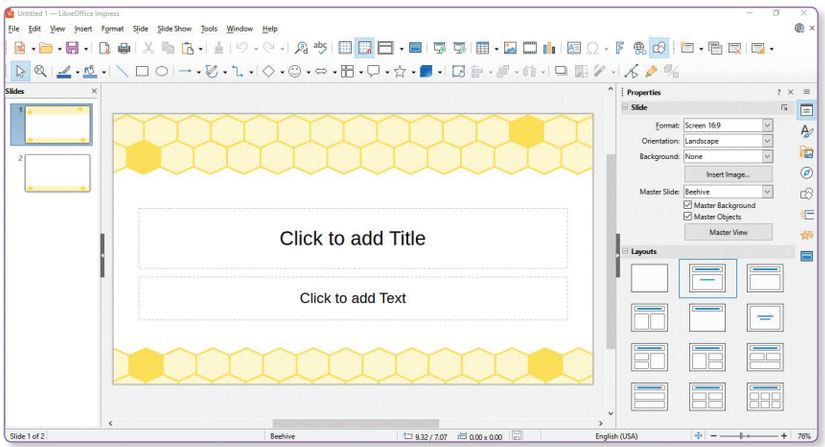
Click on the New icon present on the **Standard** toolbar.

The **Select a Template** will appear.



Step 2: Choose a template as per your choice by clicking on it.

Step 3: Click on the **Open** button. The selected template appears in the form of a title slide layout as shown below:



You can also click on the **Close** button in the **Select a Template** dialog box if you don't want to use the template. If you don't want to see the **Select a Template** dialog box again on startup, uncheck the **Show this dialog at startup** check box.

When creating a presentation, the first slide is normally the title slide. You can use either a blank layout or one of the title layouts as per your title slide.

Choosing a Slide Layout

Slide layout is a predefined format and position of text, images, charts, and tables on the slide. When a new slide is created then at that time you can decide the layout of different elements on the slide either by designing your own layout or by choosing from predefined layouts. The default layout is Title Slide. The layouts included in LibreOffice Impress ranges from a blank slide to a slide with six content boxes and a title as shown below:

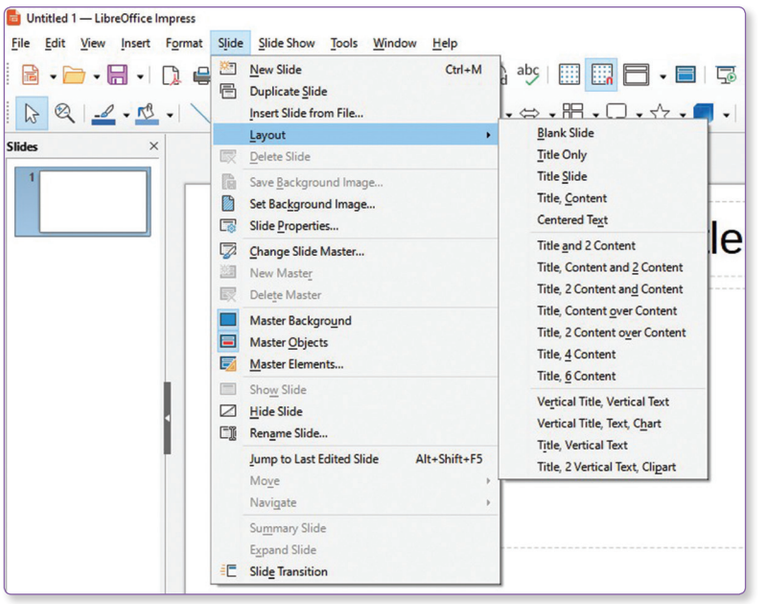
Step 1: For choosing a layout, click on the **Slide** → **Layout** a context menu appears.

Step 2: Select the desired layout from the list.

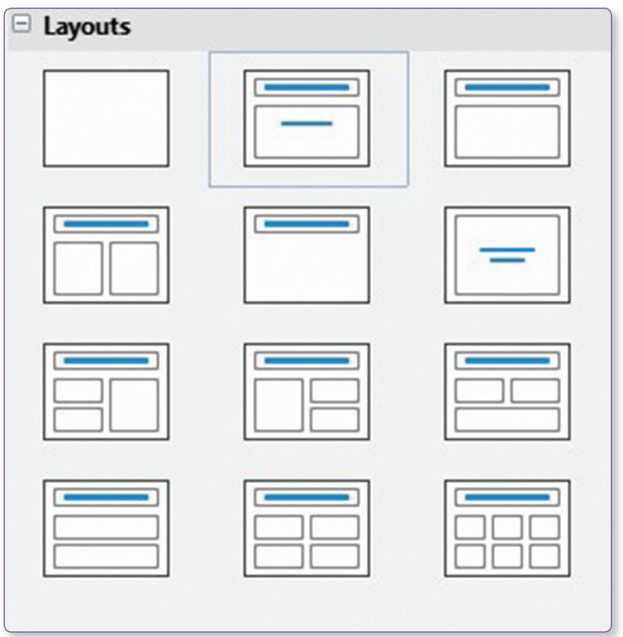
OR

Step 1: Right-click on the **slide** and select **Layout** a context menu appears.

Step 2: Choose the desired layout from the drop-down menu.



You can also select the slide layout from the **Layouts** deck where you have twelve layouts.



Adding Text

To add text to a slide that contains a text frame, click on **Click to add Text** in the text frame and then type your text. The outline styles are automatically applied to the text as you insert it.

Saving a Presentation

After a presentation is created, you need to save it on the computer for future reference. The steps to save a presentation are as follows:

Step 1: Click on the **File** menu from the **Menu** bar.

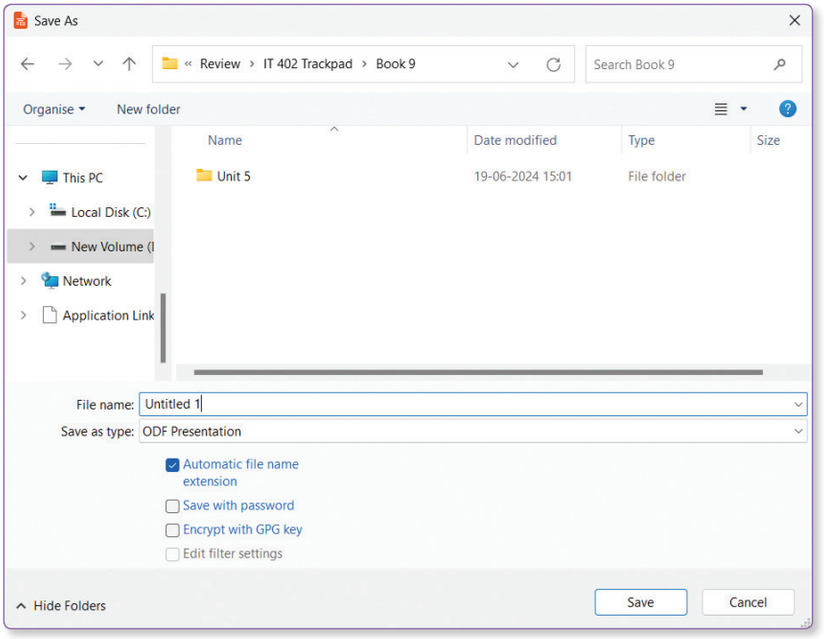
Step 2: Select the **Save** option.

OR

Click on the **Save** button on the **Standard** Toolbar. This will open the **Save As** dialog box.

Step 3: Type the name of your file in the **File name** text box.

Step 4: Click on the **Save** button.



Saving a Presentation with Different Name

You can save an existing presentation file with another name. This action will create another copy of the same presentation. To do so, follow the given steps:

Step 1: Click on the **File** menu.

Step 2: Select the **Save As** option. This will open the **Save As** dialog box.

Step 3: Type a new name in the **File name** field.

Step 4: Click on the **Save** button.

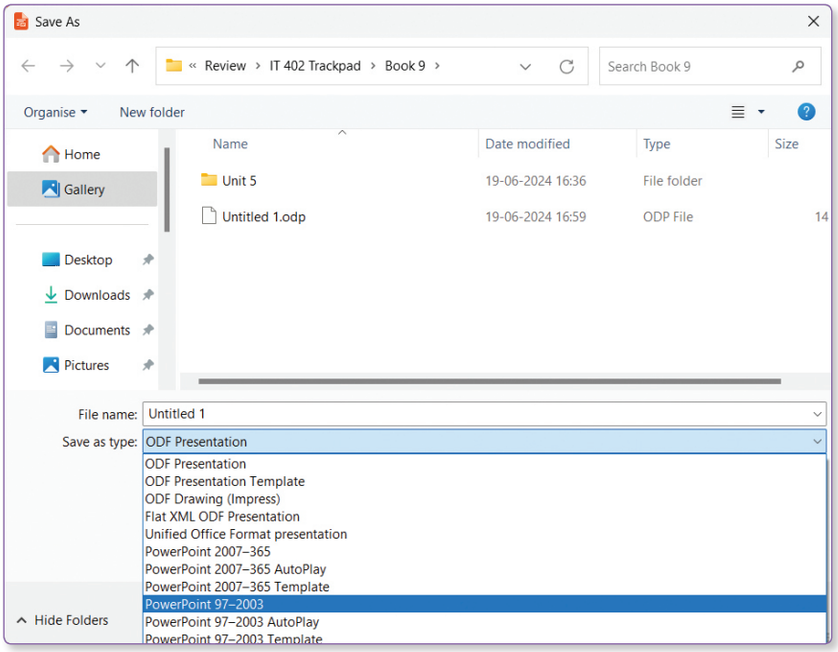
Saving with a Different Format

If you want to save a presentation as a PowerPoint file (PPT), then follow the given steps:

Step 1: Select the **File** → **Save As** option.

Step 2: Choose the **PowerPoint 97-2003** option from the **Save as type** drop-down list.

Step 3: Click on the **Save** button.



Exporting a Presentation as HTML

Sometimes the presentation is required to be published on the web or to open in a web browser, then it has to be saved in HTML (HyperText Markup Language) format. Follow the given steps to do so:

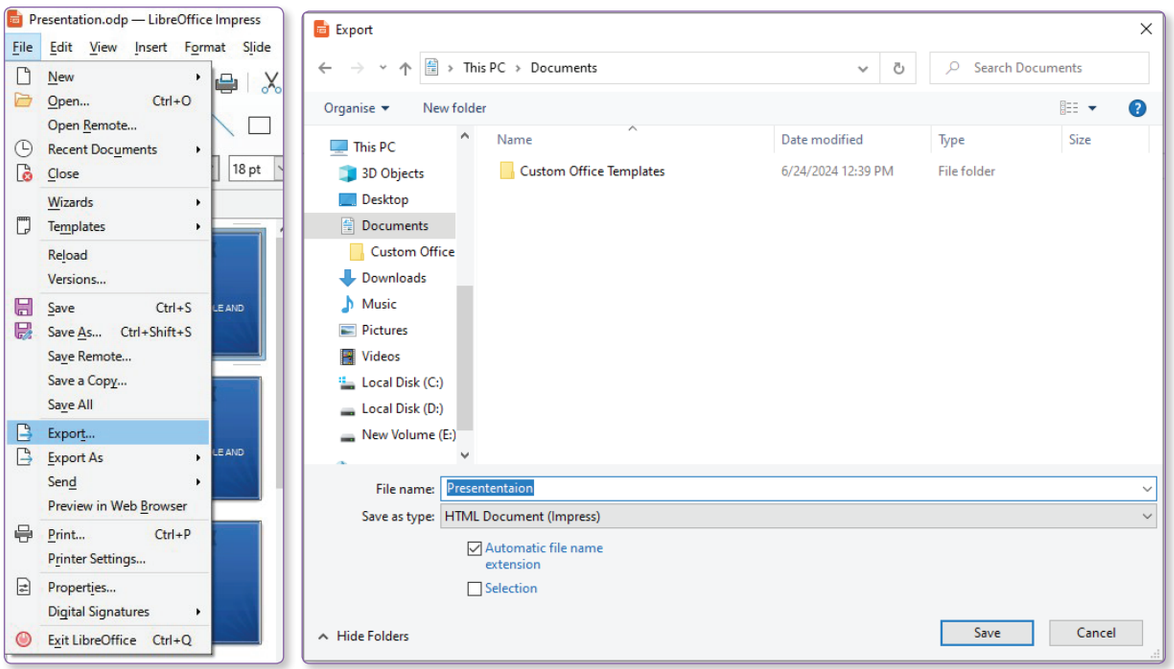
Step 1: Click on the **File** → **Export** option from the **Menu** bar. The **Export** dialog box appears.

Step 2: Select the folder or subfolder where you wish to save your presentation.

Step 3: Type a name for the file in the **File name** text box.

Step 4: Select the **HTML Document (Impress)** option from the **Save as type** drop-down list.

Step 5: Click on **Save** button.



Exporting a Presentation as PDF

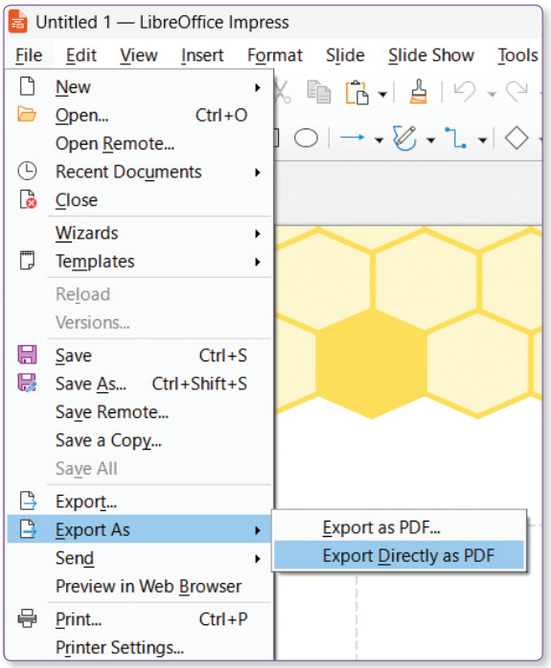
A presentation can be converted into a PDF (Portable Document Format) so that it can be viewed in Adobe Acrobat Reader. However, it cannot be edited. This format is supported in most applications and platforms and helps you view the presentation even in the absence of LibreOffice Impress. To save a file in PDF format, follow the given steps:

Step 1: Click on the **File** → **Export As** → **Export Directly as PDF** option from the **Menu** bar. The **Export** dialog box appears.

Step 2: Navigate to the location where you want to save the file.

Step 3: Type an appropriate name in the **File name** text box.

Step 4: Click on the **Save** button.



Closing a Presentation

Whenever you wish to close your presentation, you can click on **File** → **Close** option from the **Menu** bar.

SHORT KEY

To close a presentation, press

Ctrl + W

Closing LibreOffice Impress

To close LibreOffice Impress, you can click on the **Close** (×) button present on the right corner of the Title bar.

OR

Click on the **File** → **Exit LibreOffice** option from the **Menu** bar.

SHORT KEY

To close the LibreOffice Impress, press

Ctrl + Q

Opening an Existing Presentation

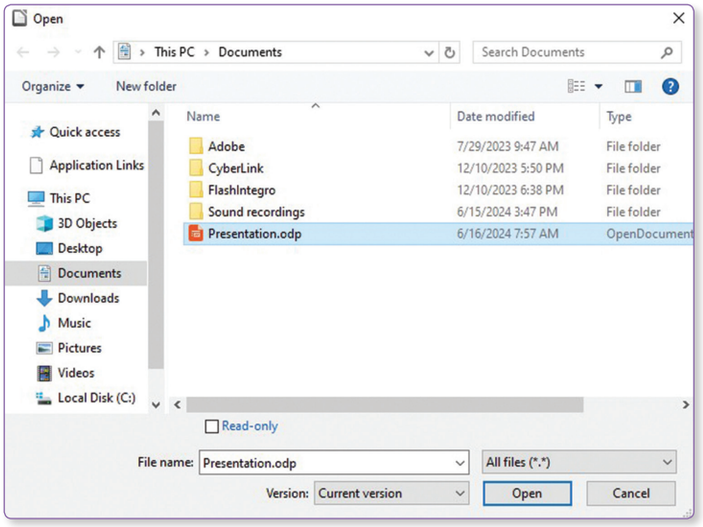
The previously created presentation can be opened in Impress. Follow the given steps to do so:

Step 1: Click on the **File** → **Open** option from the **Menu** bar. The **Open** dialog box opens.

Step 2: Select the location of the file.

Step 3: Select the desired presentation file to be opened.

Step 4: Click on the **Open** button. The file will be displayed on the screen.



SHORT KEY

To open an existing presentation, press

Ctrl + O

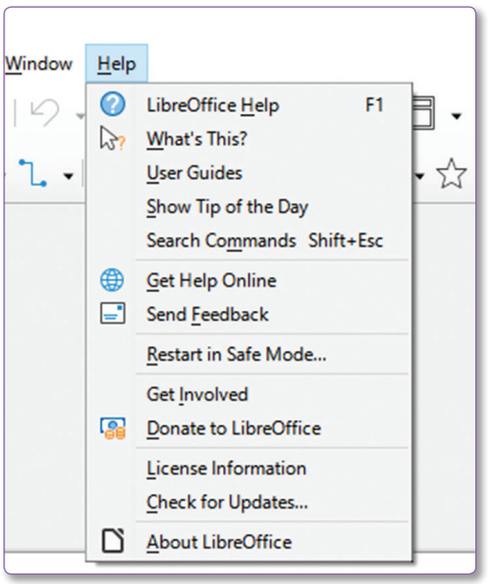
If you want to open your PPT (Microsoft PowerPoint) file in LibreOffice Impress, then just select the file in the **Open** dialog box and it opens with minimum changes in the format.

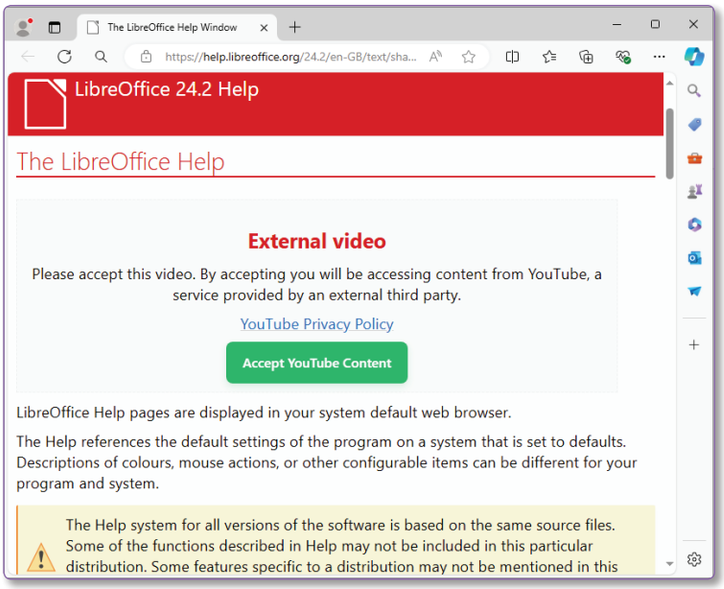
USING HELP

The **Help** menu provides a **LibreOffice Help** option that allows you to open the help document, which contains information related to all features in LibreOffice Impress. You can also open the **LibreOffice Help** window by pressing the **F1** key. In the Search box type the topic you wish to look for help.

"**What's This?**" is a context help. To use this option first click on it and the cursor changes to a "**?**".

Go to a specific menu or submenu or any feature in LibreOffice Impress. As soon as you hover your mouse over a topic, it will display the context sensitive help.





The first slide created in a presentation is always a Title slide. This helps you give title and subtitle to your presentation. After the first slide, any other layout of the slide can be selected from the **Layouts** deck.

Inserting a New Slide

To insert a new slide into the presentation, you can click on the **Slide** → **New Slide** option from the **Menu** bar.

OR

Right-click on the slide in the **Slides** pane and then select the **New Slide** option.

OR

Right-click in a space on the slide and select the New Slide option.

OR

Click on the **New Slide** icon in the **Presentation** toolbar.

SHORT KEY

To add a new slide, press the

Ctrl + M

Duplicating a Slide

Sometimes you may want a copy of an existing slide then you can go for a duplicate slide option. To do so:

Select the **Slide** → **Duplicate Slide** option from the **Menu** bar.

OR

Right-click on the slide in the **Slides** pane and select the **Duplicate Slide** option.

OR

Click on the **Duplicate Slide** icon in the **Presentation** toolbar.

Renaming a Slide

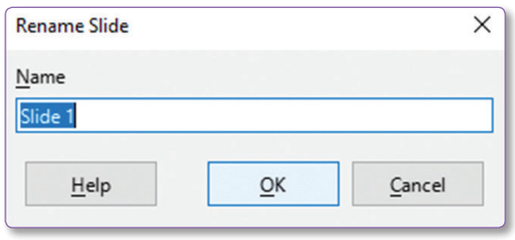
The default names of the slides are Slide 1, Slide 2, and so on. These names can be changed by using the given steps:

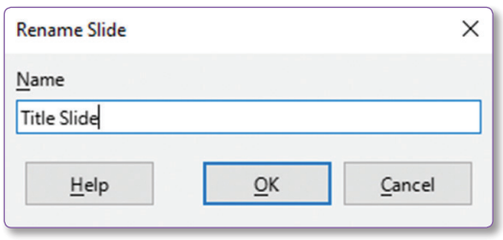
Step 1: Right-click on the slide in the **Slides** pane. A context menu appears.

Step 2: Select the **Rename Slide** option. The **Rename Slide** dialog box appears.

Step 3: Type new name in the **Name** text box.

Step 4: Click on the **OK** button.





The slide name will be changed.

Deleting a Slide

Any slide that is not required in a presentation can be deleted permanently by using the given steps:

Step 1: Select the slide in the **Slides** pane.

Step 2: Right-click on the selected slide and then select the **Delete Slide** option.

OR

Click on the **Delete Slide** icon in the **Standard** toolbar.

SHORT KEY

To delete a slide, press the

Delete

Copying and Moving Slides

A slide can be copied or moved either within the same presentation or to another presentation. Copying a slide means creating a duplicate of an existing slide within the same presentation or in a different presentation. On the other hand, moving a slide means changing the order of slides within the presentation. There are two methods to do both the operations:

Method 1: Using Copy and Paste Option

To copy a slide, perform the following steps:

Step 1: Select the slide you wish to copy.

Step 2: Right-click on the selected slide. A context menu appears.

Step 3: Select the **Copy** option.

Step 4: Go to the position where you want to paste the slide.

Step 5: Right-click on that position and select the **Paste** option.

Using Drag and Drop Method

You can also copy a slide by performing the following steps:

Step 1: Select the slide you wish to copy.

Step 2: Press and hold the Ctrl key.

Step 3: Drag the slide to the position where you want to drop it.

Method 2: Using Cut and Paste Option

To move a slide, perform the following steps:

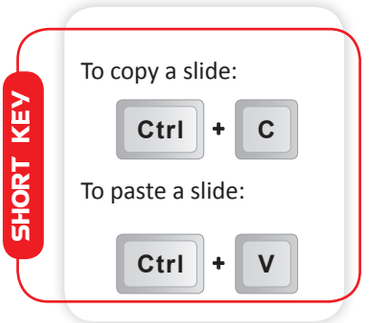
Step 1: Select the slide you wish to move.

Step 2: Right-click on the selected slide. A context menu appears.

Step 3: Select the **Cut** option.

Step 4: Go to the position where you want to paste the slide.

Step 5: Right-click on that position and select the **Paste** option.



Using Drag and Drop Method

You can also move a slide by performing the following steps:

Step 1: Select the slide you wish to move.

Step 2: Drag the slide on the position where you want to move it and drop.

Copying and Moving Content

Impress saves the time of the user by enabling the user to copy the text present on a slide and paste it at the desired location of the slide. To copy content, use the Copy and Paste options. To move the content, the Cut and Paste options can be used.

To Copy and Paste Content

Follow the given steps to copy content:

Step 1: Select the content to be copied.

Step 2: Click on the **Copy** icon on the **Standard** toolbar or press Ctrl + C.

Step 3: Place the cursor in the desired position where the content is required to appear.

Step 4: Click on the **Paste** icon on the **Standard** toolbar or press Ctrl + V.

To Cut and Paste Content

To cut and paste the content of the slide, follow the given steps:

Step 1: Select the content to be moved.

Step 2: Click on the **Cut** icon on the **Standard** toolbar or press Ctrl + X.

Step 3: Place the cursor in the desired position where the content is required to appear.

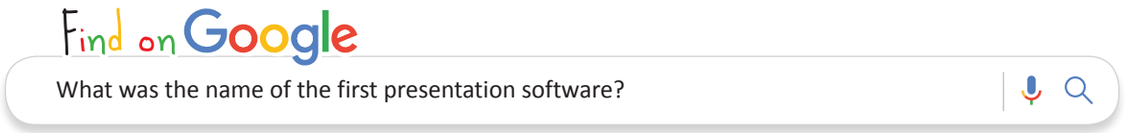
Step 4: Click on the **Paste** icon on the **Standard** toolbar or press Ctrl + V.

To Delete Content

It is easy to delete the text on the slides. The **Delete** and **Backspace** keys on the keyboard are used to delete the text.

- The Delete key deletes the character on the right of the cursor.
- The Backspace key deletes the character on the left of the cursor.

Pressing Delete or Backspace keys deletes one character at a time. To delete a line or paragraph of text, first select the text and then press the Delete key. You can also use the Cut option to delete the text.



USING UNDO AND REDO OPTIONS

The set of activities done in a LibreOffice Impress are saved and can be repeated or cancelled by using Undo and Redo options. These options are also helpful in case we wish to revert our actions due to the errors made in the presentation.

- **Undo:** It undoes the previous action i.e. When we execute a command on some text, for example delete the text, we are able to reverse what we have done. This is known as the undo function.
- **Redo:** If you want to rollback your Undo option, you can use redo i.e. It is also possible after having undone the change, to get it back. This is called the redo function.

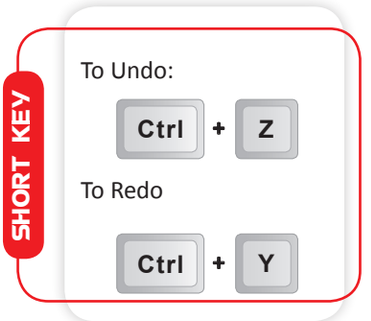
Perform the following steps to use the Undo and Redo options:

Step 1: Click on the **Edit** menu from the **Menu** bar.

Step 2: Select the **Undo** option to undone the previous action or the **Redo** option for repeating the previous action.

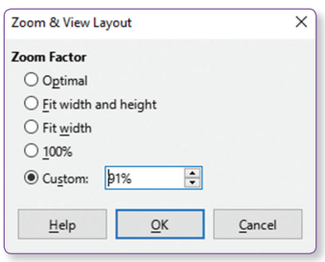
OR

Click on the **Undo** and **Redo** icons present on the **Standard** toolbar.



VIEWING A PRESENTATION

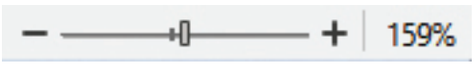
The presentation created can be displayed in Zoom in or Zoom out mode by using **View** → **Zoom** option. This will open **Zoom & View Layout** dialog box as shown below:



Change the values of the variable either by increasing the number or by decreasing the number.

OR

You can also increase or decrease the size by using the **Zoom slider** present on the **Status** bar.



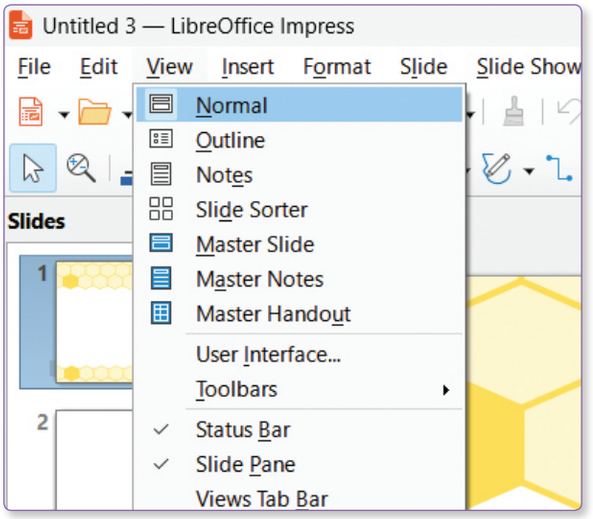
It has two marked sections. If you are positioned in the first highlighted section, the entire slide will display within the workspace. If you position yourself to the second one, the increase of 100% of the slide will be displayed.

OR

Use the **Zoom** button  on the **Standard** toolbar.

WORKSPACE VIEWS

The various workspace views are in the drop-down list of the **View** menu. You can see your presentation in different views. These views help you focus on the content of the slide through different aspects. You can shift to different views by clicking on the **View** menu from the **Menu** bar.



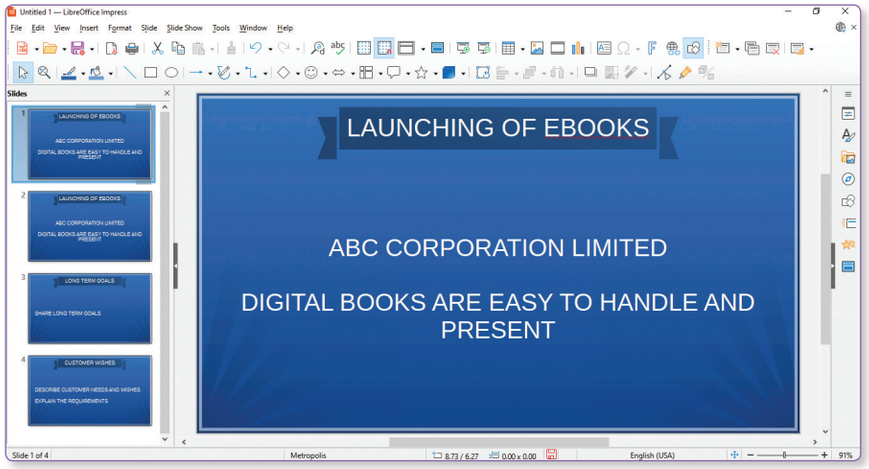
OR

Click on the **Display Views**  icon on the **Standard** toolbar.

The views available in LibreOffice Impress are Normal, Outline, Notes, and Slide Sorter. Let us discuss these one by one.

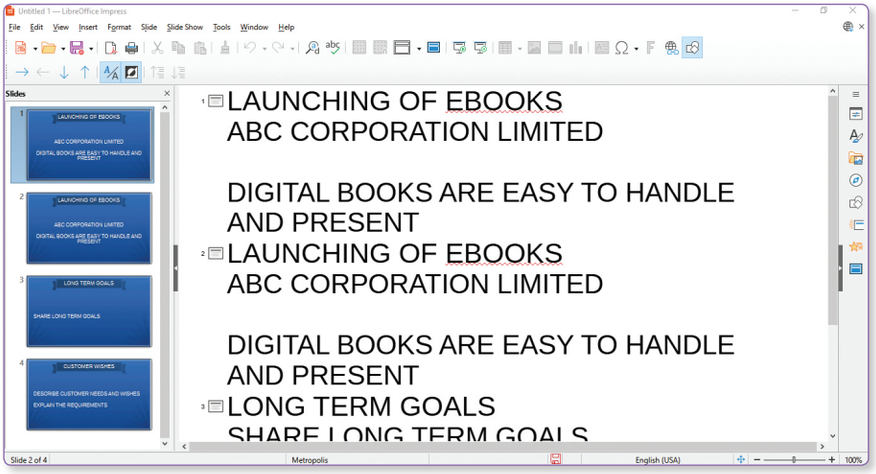
Normal View

A slide opens in the Normal view by default. It is the actual view of the slide, where you can create and edit your slides in terms of content, pictures, formatting, and do all possible work you wish to do in a presentation. In this view, the slide is displayed in the middle of the window with a Slides pane on the left side where the miniatures of the slides are displayed.



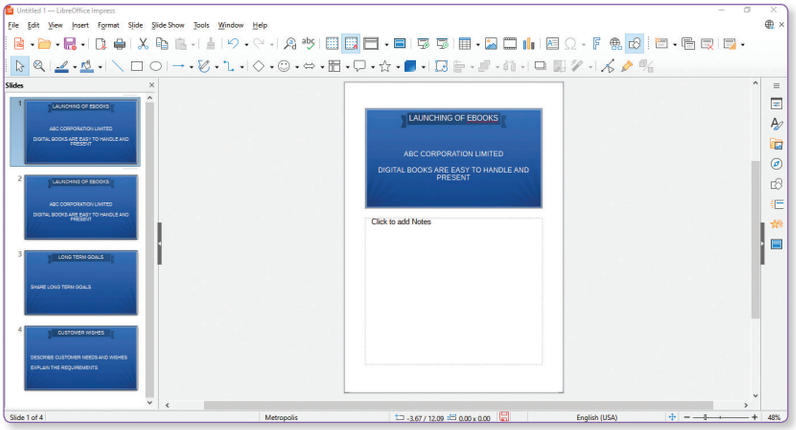
Outline View

In this view, you can see the Title and only the outline of the text (no images) added to your slide. It displays slide text in the form of a structure. It helps you to easily focus on the arrangement of the topics and subtopics in terms of indentations and content.



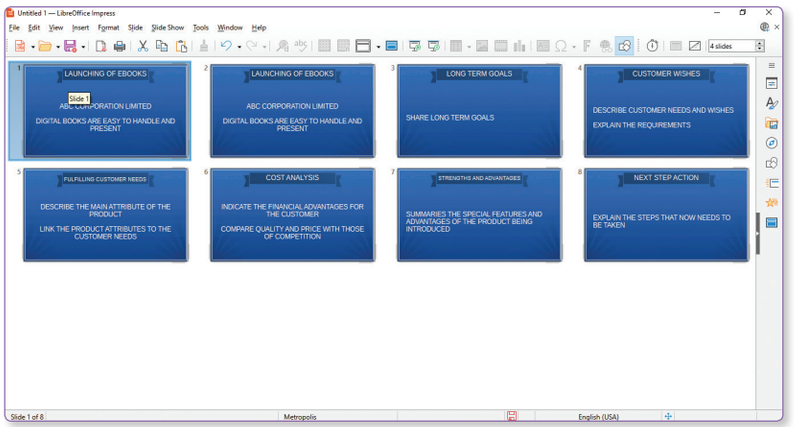
Notes View

Each slide created in a presentation has notes. Select the slide on which you wish to add notes. The Notes view displays two sections—the upper section has a miniature of the slide, and the lower section has an area for writing notes on the slide. These notes are not visible during the slide show presentation but can be used as a reference by the presenter during the presentation or taken as a printout for the audience to have a look at important points when the presentation is going on the screen. There is a text box just below the slide. Click on '**Click to add Notes**' and type the notes here.



Slide Sorter View

In this view all the slides of the presentation are displayed in a miniature form. It helps you check the order of the slides. In case needed the slides can be rearranged, added, deleted or hidden. It is used to sort slides with the 'drag and drop' method. The user can use this view to work with a group of slides or with only one slide.



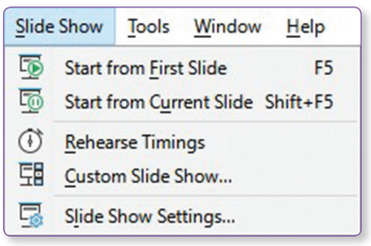
RUNNING A SLIDE SHOW

A slide show is a digital presentation displayed on the screen slide by slide. To run the slide show:

Click on the **Start from First Slide** or **Start from Current Slide** option from the **Slide Show** menu.

OR

Click on the **Start from First Slide** or **Start from Current Slide** icon on the **Standard** toolbar.



SHORT KEY

To run the slide show from first slide:

F5

To run the slide show from current slide:

Shift + F5

If you reach last slide in the slide show, you will get a message **Click to exit presentation**. Click or press any key on the keyboard to exit the presentation.

Use one of the following methods to move to the next slide:

- Click the mouse button to advance to the next slide.
- Use the **Spacebar** or **Arrow keys** on the keyboard to go to the next slide or back arrow key to the previous slide.

You can exit the slide show before it has finished by pressing the **Esc** key.

Formatting the Text

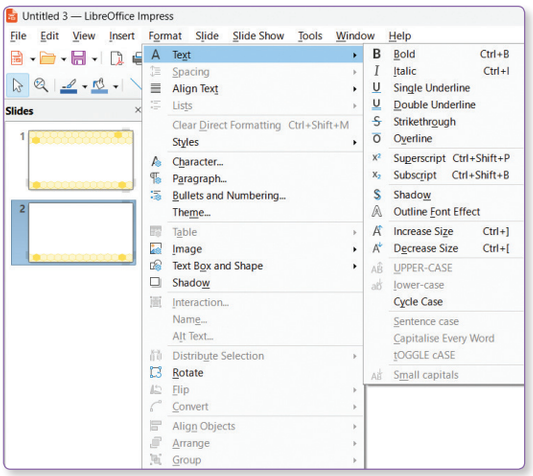
The text on the slides is formatted in a number of ways in LibreOffice Impress. It can be done by using the tools on the **Text Formatting** toolbar, by using **Format** menu, or by using the keyboard. Impress allows you to apply different types of text formatting like font style, font colour, font effect, indentation, and alignment.

Using Format Menu

To format text by using the **Format** menu, follow the given steps:

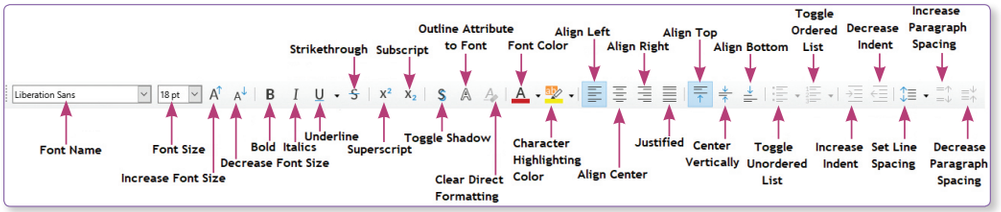
Step 1: Click on the **Format** menu.

Step 2: Click on the **Text** option. A submenu appears with different formatting options.



Using Text Formatting Toolbar

You can access all these options from the **Text Formatting** toolbar. The Text Formatting toolbar has the following options:



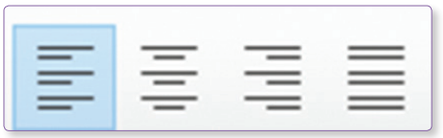
- **Font Name:** It allows you to change the shape of the characters. Click on the **Font Name** drop-down list display to see the list of fonts and select a font.
- **Font Size:** It allows you to change the size of the text. Click on the **Font Size** drop-down list to see the list of font sizes from where you can select the font size.
- **Increase Font Size:** Clicking once will increase by one point size of the text. Repeat the clicks to increase to the desired size. **(Ctrl +])**
- **Decrease Font Size:** Clicking once will decrease by one point size of the text. Repeat the clicks to decrease to the desired size. **(Ctrl + [)**

- **Bold:** Makes the text bold in appearance. **(Ctrl + B)**
- **Italic:** Makes the text italic in appearance. **(Ctrl + I)**
- **Underline:** Draws a line underneath the text. **(Ctrl + U)**
- **Strikethrough:** Draws a line through the selected text.
- **Superscript:** Raises the selected text above the baseline. **(Ctrl + Shift + P)**
- **Subscript:** Lowers the selected text below the baseline. **(Ctrl + Shift + B)**
- **Font Colour:** Select the desired colour from the colour palette displayed to colour the text.
- **Character Highlighting Colour:** Select the desired colour from the colour palette displayed to highlight the text.

Some other formatting options are also their which you can use to align text, apply bullets and numbering, adjust line and paragraph spacing.

Aligning Text

The text content can be aligned with respect to the page margins by any of the given four alignments options:

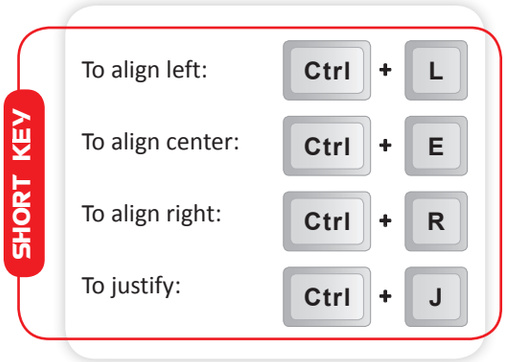


- **Align Left:** The text is aligned on the left with an uneven right edge. It is the default alignment.
- **Align Right:** The text is aligned on the right with an uneven left edge.
- **Align Centre:** The text is aligned in the center with uneven left and right edges.
- **Justified:** The text is aligned on both left and right equally.

To do the alignment, select the text and click on any of the alignment options present on the **Text Formatting** toolbar.

OR

Select **Format** → **Paragraph** → **Alignment** option from the **Menu** bar.



Some other alignment options like **Align Top**, **Align Center**, **Align Bottom** are used to align the selected text to the top, center or bottom of the text box.

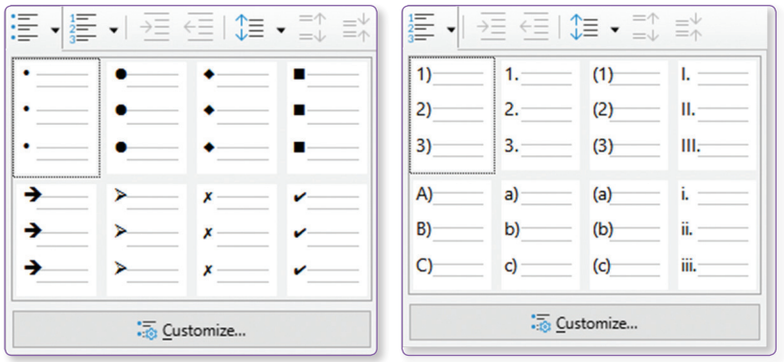
Bullets and Numbering

Sometimes we need to write points in our slides. If the sequence of the points is important, then use numbering otherwise use bullets.

To apply bullets and numbering, click on the **Format** → **Bullets and Numbering** option from the **Menu** bar.

OR

Click on the Bullets on/off icon present on the **Text Formatting** toolbar.



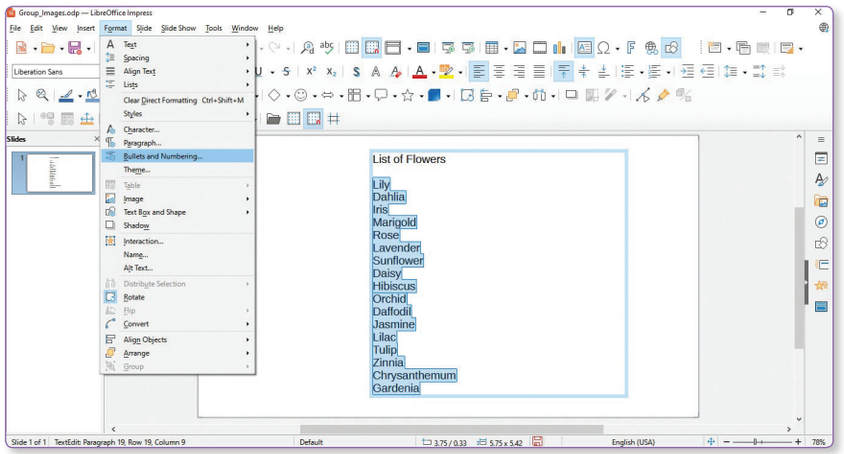
Let us add a list of flowers and apply bullet style to it. Perform the following steps to do so:

Step 1: Write the names of flowers on a slide.

Step 2: Select all the names.

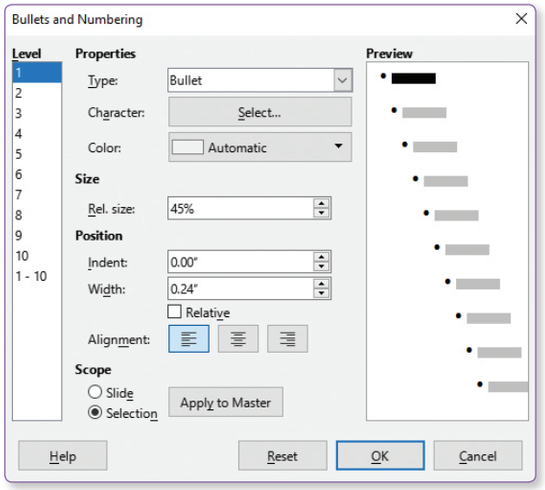
Step 3: Click on the **Format** menu.

Step 4: Select the **Bullets and Numbering** option. The **Bullets and Numbering** dialog box appears with **Bullets** tab selected.

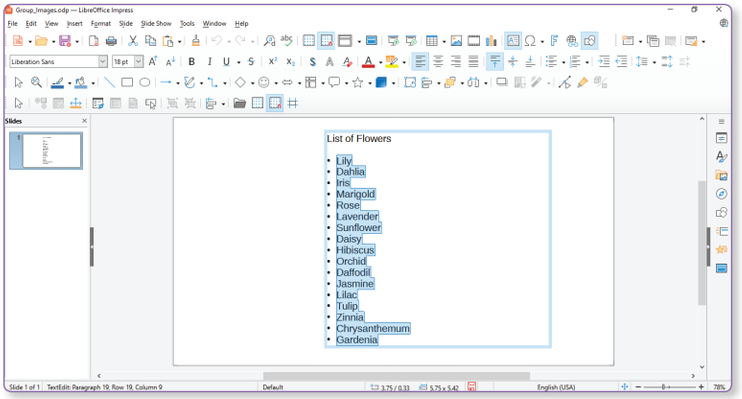


Step 5: Select the desired bullet style.

Step 6: Click on the **OK** button.



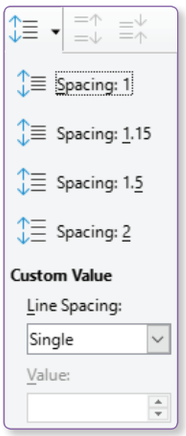
The selected bullet style is applied to the names of flowers.



You can click on the **Type** drop-down list to apply numbered style. Select the numbering type and click on the **OK** button.

Line Spacing

The Set Line Spacing option does the adjustment of the spacing between the lines of a selected paragraph. Click on the small triangle to the right of the Set Line Spacing icon and select the type of Line Spacing from the drop-down list.



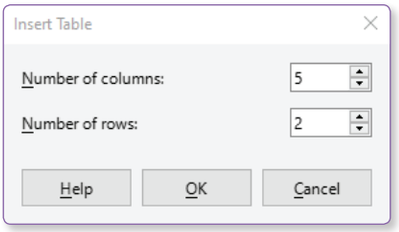
Adjusting Paragraph Spacing

The **Increase Paragraph Spacing** and **Decrease Paragraph Spacing** options are used to increase or decrease the spacing above and below the selected paragraphs.

USING TABLES IN A PRESENTATION

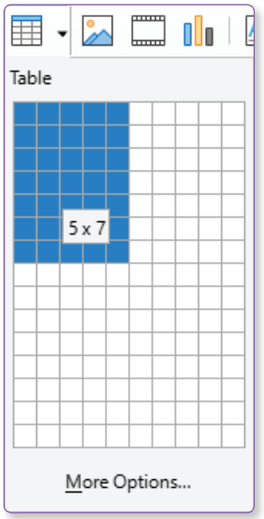
Creating tables makes it easier to add your data in a tabular form. If you need to display your friends' list, your class timetable or list of cities visited. All these can easily be managed using tables on slides. To add a table:

Click on the **Insert** → **Table** option from the **Menu** bar. The **Insert Table** dialog box will be displayed, where you give the number of rows and columns you wish to insert in a table.

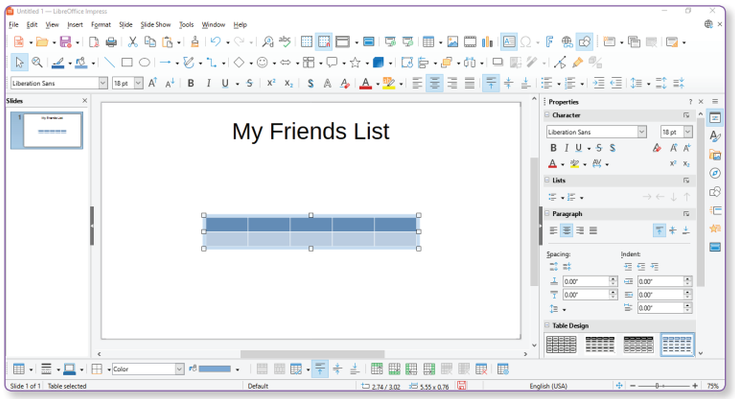


OR

Click on the **Table** icon on the **Standard** toolbar and drag over the required number of rows and columns you want to insert into the table.



The table will be inserted into the presentation.



After the table is inserted into the slide, you can control its appearance, size, position, etc. by using by using **Properties** pane on the right side of the window or **Table Properties** button that appears on Table toolbar at the bottom of the screen, it has a set of **Table Designs** that you can use at any time on the inserted table. You can also change the **Table Design** toolbar.

Entering and Editing Data in a Table

After a table is inserted then click on the first cell and start typing by specifying the values. Press either the **Tab** key or mouse click to move to the next cell. Moving the insertion point (cursor) in a table can be done in three ways:

- Click in the cell in which you want to move.
- Press the **Tab** key on the keyboard to move to the next cell.
- Press the **Shift + Tab** key to move back to the previous cell.
- Use arrow keys on the keyboard to move left, right, up, and down in the table.

To edit any data in a cell, just move to that cell and start adding and deleting the data.

Let us create a list of friends with the columns—S.No., Name, Phone Number, Address, City:

S.No.	Name	Phone Number	Address	City
1.	Arshia	4567891221	Saket	Delhi
2.	Advika	2345612211	Rajpur Road	Dehra Dun

Select a Cell

To select a cell within a table, position the mouse cursor over the cell until the cursor changes to a white arrow pointing down and to the right, then double-click.

Select Row, Column, and Table

Selecting a row or a column is needed for different purposes. To select a row or column, click in the first cell of the row or column that you want to select and then drag to the end of the row or column.

Select a Table

A table is selected by clicking on its edges. To move the table to a new position just drag the edges, when the cursor changes to a four headed white arrows.

Adjusting Column Width and Row Height

To change the column width or row height, just place your mouse pointer on the borderline until it changes to a (↔) sign. After that drag it to the desired width for a column or height for a row.

Table Borders and Background

The border and background can also be changed. You can use table designs and properties present in the Table toolbar to change table design and background. You can also use the given tools from the Table toolbar to change the border line style, colour, and thickness along with background colour fill.

Follow the given steps to change the border and background of a table:

Step 1: Select the table you wish to modify the border and background.

Step 2: Click on the **Format** → **Table** → **Properties** option from the **menu** bar.

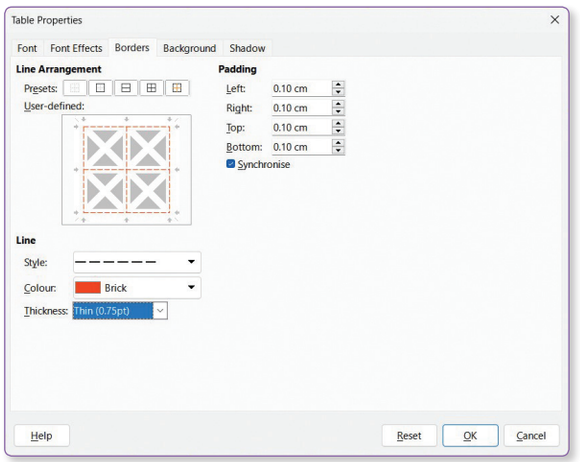
OR

Right-click on the selected table and select the **Table Properties** option. The **Table Properties** dialog box appears.

Step 3: Click on the **Borders** tab.

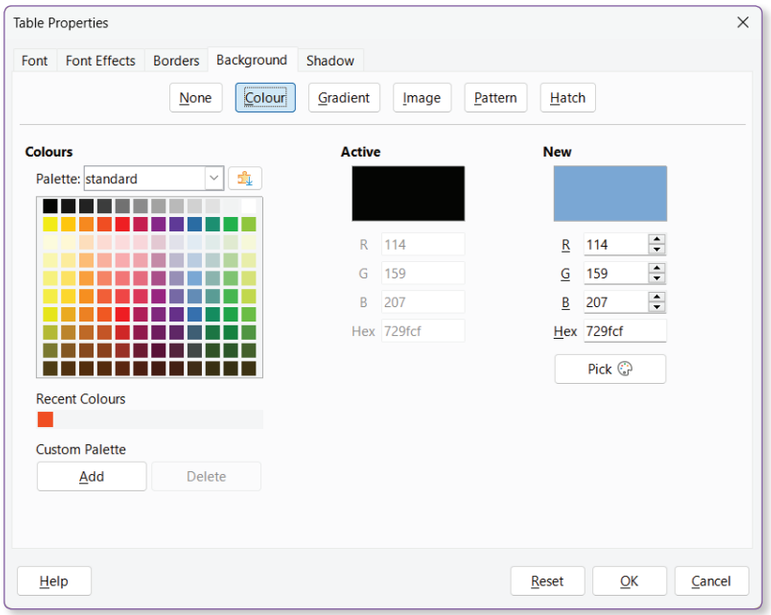
Step 4: Select the desired border style, colour, and thickness.

Step 5: Click on the **OK** button.



The selected border will be applied to the table. Similarly, you can click on the **Background** tab of **Table Properties** dialog box to change the background of the table. The Background tab has the following buttons for background:

- **None:** Removes the background if applied.
- **Colour:** Applies a solid colour background to the table.
- **Gradient:** Applies a gradient as background to the table.
- **Image:** Applies an image to the background of the table.
- **Pattern:** Applies a pattern to the background of the table.
- **Hatch:** Applies a design to the background of the table.



Deleting a Table

If a table is no longer needed, then it can be deleted by selecting the whole table and press the **Delete** key on the keyboard.

Deleting a Row

Right-click anywhere on the selected rows and select the **Row** → **Delete** option from the context menu.

Deleting a Column

Right-click anywhere on the selected columns and select the **Column** → **Delete** option from the context menu.

IMAGES

Graphics have more impact than text in a presentation. A balance of both text and graphics needs to be maintained for a meaningful impact on the audience. Impress allows you to insert pictures from a file or the Gallery. A Gallery is a set of predefined images available in Impress.

PURE FACT

Anything that can be placed onto a slide is an object. For example, an object can be an image, text, and so on.

Adding an Image From the Computer

Sometimes we may need to insert an image, where there is no fixed placeholder for a picture. In such cases the steps will be:

Step 1: Select the **Insert** → **Image** option.

OR

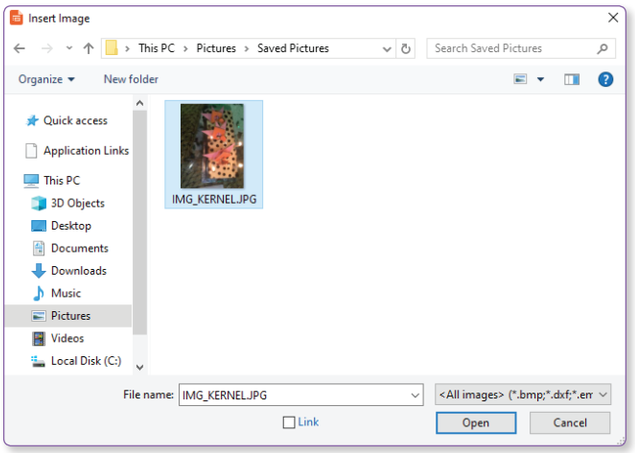
Click on the **Insert Image** icon located on the **Standard** toolbar.

This will open the **Insert Image** dialog box.

Step 2: Select the image file from the desired directory.

Step 3: Select the **Preview** option to check the preview of the image before inserting.

Step 4: Click on the **Open** button to place the image on the current (selected) slide.



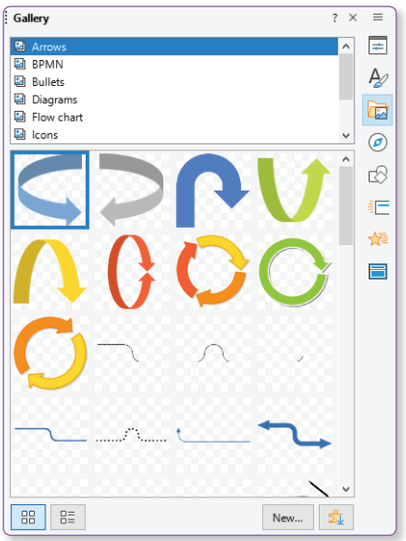
The picture is now displayed on the slide with green resizing handles around it.

Adding an Image From the Gallery

The Gallery contains pre-designed images that can be used in a presentation. To insert an image from the gallery:

Step 1: Select **Insert** → **Media** → **Gallery** from the **Menu** bar. The Gallery displays the available themes with images.

Step 2: Select a **theme** and scroll to find a suitable image.



Step 3: Click on the image and drag it onto the workspace.

Step 4: Release the mouse button and the image will be placed into your slide.

Formatting Images

After an image is added it can be formatted by moving, resizing and rotating in different angles. Let us perform all these tasks one by one.

Moving Images

Moving an image means to change the position of the image. Perform the following steps to move an image:

Step 1: Click on the image to select it. You will see that the handles appear around the image.

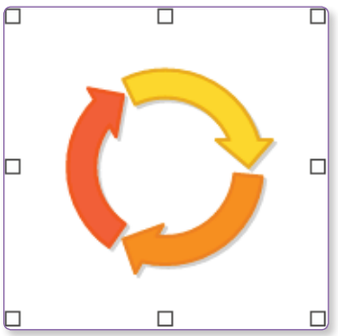
Step 2: Press and hold the left mouse button and drag the image to the desired position and release the mouse button. The image will be positioned in a new place on the slide.

Resizing Images

Resizing an image means to change the size of the image. Perform the following steps to resize an image:

Step 1: Position the cursor over one of the selection handles. The cursor changes to a double-headed arrow. Drag it in the direction of the arrow to increase or decrease the size.

Step 2: Release the mouse button and see the image with the new size implemented.

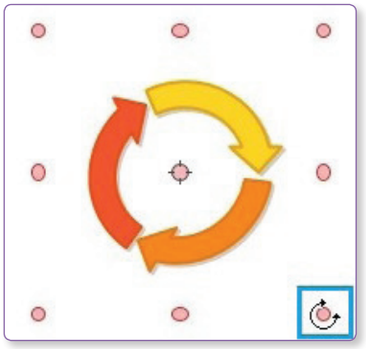


Rotating Images

The direction of the image can be rotated in any direction using the Rotate icon. The steps to rotate an image are:

Step 1: Select an image on the slide. You will see that the green handles appear around the image.

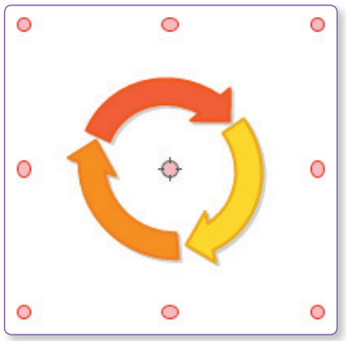
Step 2: Click on **Rotate icon**  on the **Line and Filling** toolbar.



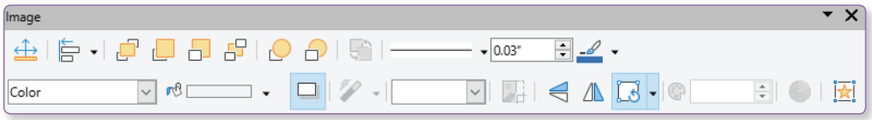
Step 3: Click again on the selected image and the selection handles change shape and colour.

Step 4: Drag the mouse in the direction in which you want to rotate the image.

Step 5: Release the mouse button and see the change in the direction of the image.



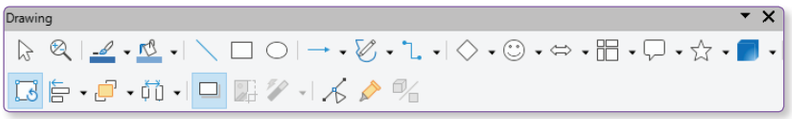
The Image toolbar can also be used to format an image. Image toolbar becomes active and available under the Properties pane for use whenever an image on the slide is selected.



The Image toolbar if in case not visible then you can select by choosing **View** → **Toolbars** → **Image** toolbar option.

DRAWING GRAPHICS OBJECTS

The Drawing toolbar has tools related to drawing, and editing the drawing objects. This toolbar can be displayed by selecting the **View** → **Toolbars** → **Drawing** toolbar option.



Drawing a Line

Perform the following steps to draw a line:

Step 1: Click on the **Line** tool from the **Drawing** toolbar. The mouse pointer changes to a thin plus sign.

Step 2: Place and hold the mouse button and drag it till the point the line needs to be drawn.

Step 3: Release the button and see the line with the default setting visible on the slide. The line drawn will have handles on both edges with properties displayed on the right side of the screen in the **Properties** pane. You can use the **Property** window to change the properties like line thickness, colour, style, etc.

Drawing a Shape

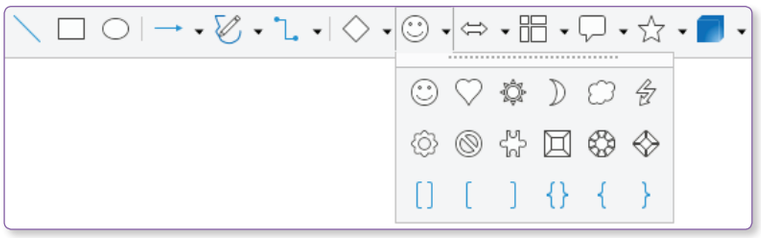
Perform the following steps to draw a shape:

Step 1: Click on the **Symbol Shapes** icon from the **Drawing** toolbar. All the available shape appear.

Step 2: Select any shape, which you want to draw.

Step 3: Click the mouse pointer and drag it on the slide to draw a shape.

Step 4: Release the button and see the selected shape with the default setting visible on the slide. The shape drawn will have handles around with properties displayed on the right side of the screen in the **Properties** pane. You can use the **Properties** window to change the properties.

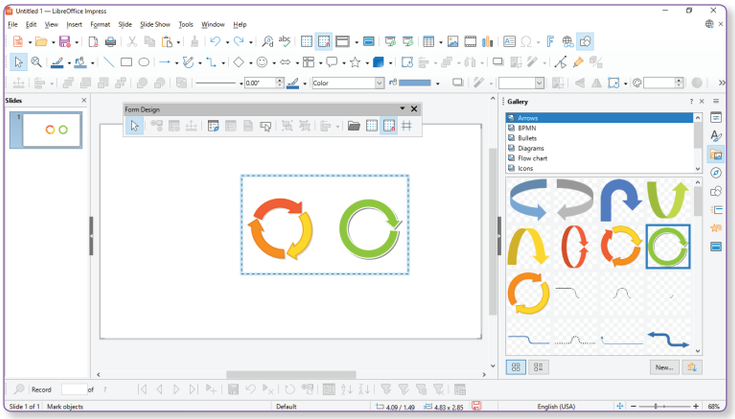


GROUPING AND UNGROUPING OBJECTS

Sometimes multiple shapes and objects inserted need to be grouped together so that it is treated as a single shape and becomes easy to move, copy, rotate, delete, etc. A group can always be undone, and the objects that make up the group can always be manipulated separately.

The steps to group multiple shapes are as follows:

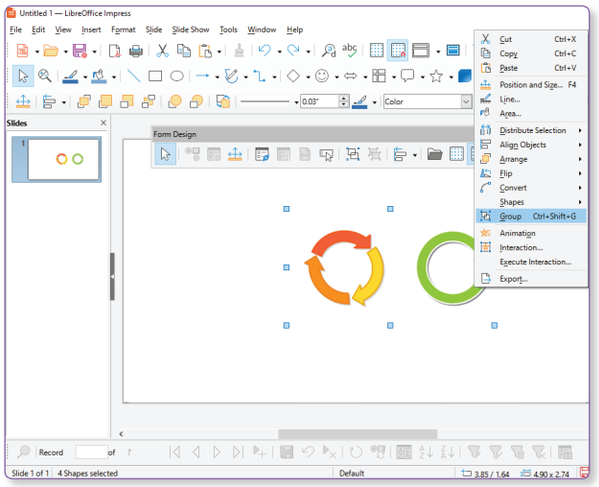
Step 1: Click on the **Selection** tool on the **Drawing** toolbar and draw a rectangle around the multiple shapes to be grouped. You can also select multiple shapes by clicking them all while the **Shift key** is pressed.



Step 2: You will notice blue resizing handles around all the shapes. Now select **Format** → **Group** → **Group** option from the **Menu** bar.

OR

Right-click on the selected shapes and select the **Group** option.



The selected shapes will be grouped.

Ungrouping Objects

The steps to ungroup the objects are as follows:

Step 1: Select the group of shapes.

Step 2: You will notice green resizing handles around the shape. Now select the **Format** → **Group** → **Ungroup** option.

OR

Right-click on the **Group** and select **Ungroup** option. All the shapes will now be ungrouped and work as separate entities on the slide.

SHORT KEY

To group objects:

Ctrl + Shift + G

To ungroup object:

Ctrl + Alt + Shift + G

WORKING WITH SLIDE MASTERS

Slide Master is one of the most powerful tools in LibreOffice Impress. It helps you set the default look of your slides in terms of fonts, backgrounds, images, styles, colours, and many other things. Whatever changes you make in the slide master will be reflected in all the presentation slides. You do not have to worry about its formatting at the time of creation of the slides if the layout is taken care of in slide master. All this saves you a lot of struggle and time in designing your slides for a presentation. For example, if you place your school logo or your name on the slide master then it will be automatically reflected on all slides.

To use Slide Master, follow the given steps:

Step 1: Click on the **View** → **Master Slide** option from the **Menu** bar.

Step 2: Click on any of the text formats visible here. Let us modify the outline text format by changing the font name Arial Black, Size=40, Text Color=Dark Blue, Text highlight=Light Yellow.

Step 3: Then click on the **Slide** → **Set Background Image** option from the **Menu** bar. The **Set Background Image** dialog box opens.

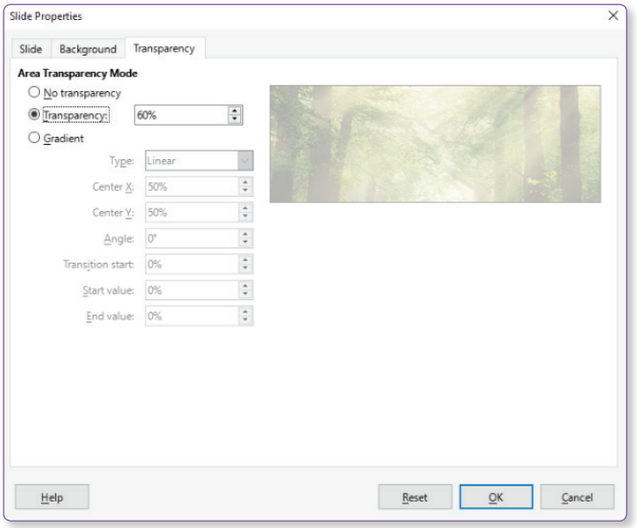
Step 4: Select the desired image to be set as background.

Step 5: Click on the **Slide** → **Slide Properties** option.

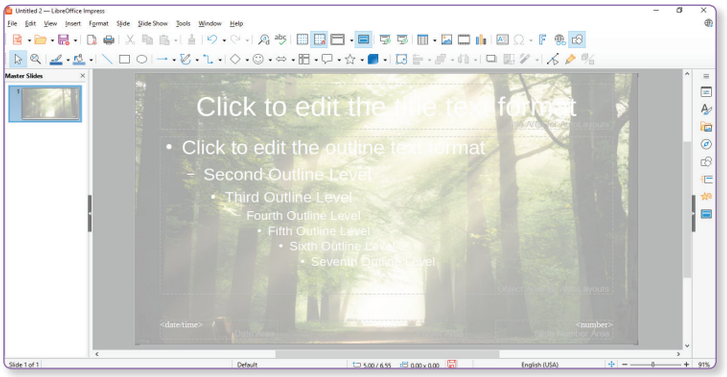
Step 6: Select the **Transparency** tab.

Step 7: Change the transparency to 60%. This will make the picture very transparent and then it can be used as the background in your slides. Doing this step in the slide master will apply to all slides in a presentation.

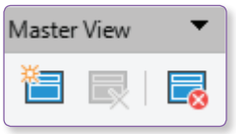
Step 8: Click on the **OK** button.



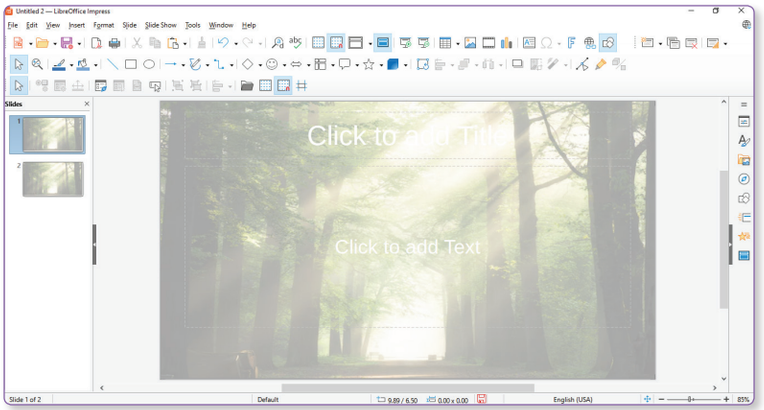
The image set as background.



Step 9: After the required changes are done, click on the **Close Master** View option on the **Master View** toolbar.



This will bring you back to **Normal** view and you will see that the changes you did in **Master Slide** are now reflected in your presentation as shown in the image below:



Step 10: Select the **Slide Sorter** view to see the changes implemented in the current presentation.

APPLYING ANIMATION

An animation consists of a sequence of images or objects called frames, that are displayed in succession when the animation runs. Any object on the slide can be animated. It makes the presentation more interesting and appealing. We use Normal view to apply animation to the objects. The steps to apply an animation effect are as follows:

Step 1: Select the desired slide in the **Normal** view.

Step 2: Select the text or object you wish to apply an animation. Let us choose an image.

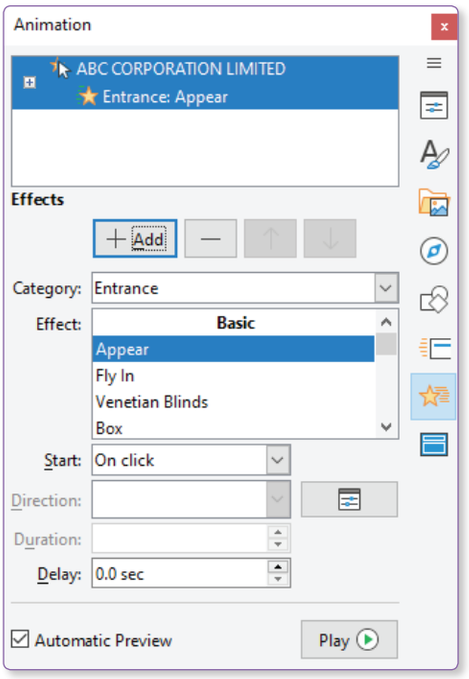
Step 3: Click on the **View** → **Animation** option from the **Menu** bar.

OR

Right-click on the image and select the **Animation** option from the context menu. The **Animation** pane appears on the right-hand side.

Step 4: Click on the **+Add button** under the **Effects** section. The different categories of Animation effects appear in the **Animation** pane, which are as follows:

- **Entrance:** Starting animation for the object. For example, Appear, Checkers, etc.
- **Emphasis:** Effects like different font colour or blinking text. For example, Change Fill Color, Change Font, Change Font Size, etc.
- **Exit:** Animation when leaving the object. For example, Box, Circle, Crawl out, etc.
- **Motion Paths**: Direction of movement of an animation. For example, Curve, Polygon, Free form line, etc.
- **Misc Effects:** Any other miscellaneous effect. For example, End Media, Start Media, Toggle Pause, etc.



Step 5: Select the desired animation. In this case, we have selected **Appear** animation from the **Effect** list box.

Step 6: Click on **OK** button.

Step 7: The properties of the selected animation get active in **Animation** pane, which are as follows:

- **Start:** It contains following options:
  - **On click**: The animation stops at this effect until the next mouse click.
  - **With previous:** The animation runs at the same time as the previous animation.
  - **After previous:** The animation runs as soon as the previous animation ends.

- **Direction:** Choose **From** Right or any other in the drop-down list.
- **Duration:** Enter a time in seconds for how long the animation lasts.
- **Delay:** Enter a timing delay in seconds for when the animated object appears in the presentation in the **Delay** box.
- **Automatic Preview:** To preview the animation effect, click on the **Play** button. If necessary, select **Automatic Preview** checkbox so that each time the animation is changed, there is a preview of the effect.

Step 8: Select **Slide Show** → **Start From the Current Slide** option to check your presentation.

Removing an Animation

To remove an animation effect, follow the given steps:

Step 1: Select the object.

Step 2: Click on the — button under the **Effect** in the **Animation** pane.

SLIDE TRANSITION

Slide transitions are effects with or without sounds that take place between slides when slides appear one after the other in a presentation at the time of the slide show. A single type of transition effect can be applied to all slides, or a different transition effect can be applied to different slides in a presentation. Slide transitions can be added to the slides in the Normal view and Slide Sorter view.

The steps to add a slide transition are as follows:

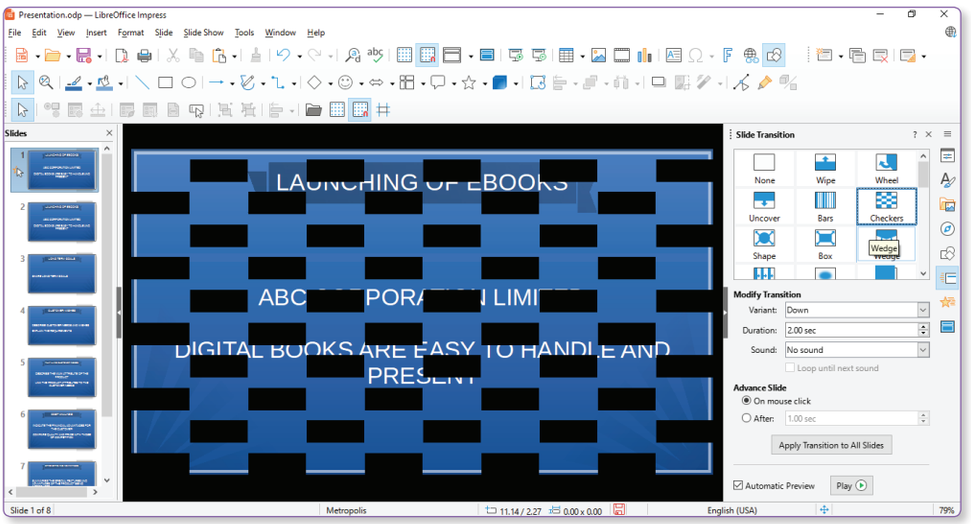
Step 1: Select the slides on which the transition is to be applied. In case you want to apply the transition to all the slides then do not select any slides.

Step 2: Click on the **View** → **Slide Transition** option from the **Menu** bar.

OR

Click on the **Slide Transition** icon in the **Sidebar** of the **Normal** view or **Slide Sorter** view. The **Slide Transition** pane appears.

Step 3: Choose the desired transition effect like Wipe, Bars, Checkers, Wheel, etc. In this case, we have selected the **Checkers** effect. You can see **Checkers** transition is selected in the given window shown below:



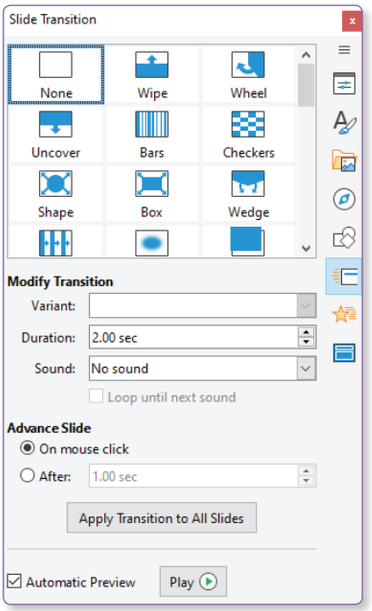
Step 4: When you select any transition effect from the **Slide Transition** pane, some properties get active under the following two sections:

Modify Transition

- **Variant**: Select an option from the drop-down list. The available options change according to the transition that has been selected.
- **Duration**: Enter a time for how long the transition lasts.
- **Sound:** Select the audio file name you wish to play during the slide show. If a sound is selected, the **"Loop until next sound"** option becomes active. Select this option to play the sound repeatedly until another sound starts.

Advance Slide

- **On mouse click:** The action will be done manually.
- **After:** It specifies how long (in seconds) the slide should remain visible before it automatically advances to the next slide. To apply transitions to all slides, click on the **Apply Transition to All Slides** button.
- To preview the transition effect, click on the **Play** button.



Step 5: Click on the **Slide Show** button. The **slide transition** effect appears on the slide.

To remove a transition effect, select the desired slides and choose **None** in the **Slide Transition** pane.

CLOSING LIBREOFFICE IMPRESS

After you are done using LibreOffice Impress you can close it by using the:

- **Close** (×) button present on the right corner of the **Title** bar.

  OR
- Click on the **File** → **Exit** option from the **Menu** bar.

SHORT KEY

To close Impress:

Alt + F4

Ctrl + O

REVISIT

- A presentation is a method of communication designed to share ideas and information visually and orally.
- LibreOffice Impress is a free and open-source software application for designing digital presentations. Presentations made in LibreOffice Impress can be opened in other software, like MS PowerPoint.
- A file in LibreOffice Impress is known as a presentation and is saved with the extension .odp (Open Document Presentation).
- Slide layout is a predefined format and position of text, images, charts and tables on the slide. The default layout is Title Slide.
- A presentation can be converted into a PDF (Portable Document Format) so, that it can be viewed in an Adobe Acrobat Reader.
- The help menu provides a LibreOffice Help option that allows you to open the help document, which contains information related to all features in LibreOffice Impress.
- A slide can be copied or moved either within the same presentation or to another presentation.
- The set of activities done in a LibreOffice Impress are saved and can be repeated or cancelled by using Undo and Redo options.
- The various workspace views are in the drop-down list of the View menu. The views available in LibreOffice impress are Normal, Outline, Notes, and Slide Sorter.
- Normal View is the actual view of the slide where you can create and edit your slides in terms of content, pictures, formatting and do all possible work you wish to do in a presentation.
- A slide show is a digital presentation displayed on the screen slide by slide.
- The text on the slides is formatted in a number of ways in LibreOffice Impress. Impress allows you to apply different types of text formatting like font style, font colour, font effect, indentation, and alignment.
- Impress allows you to insert pictures from a file or the Gallery. It has tools related to drawing and editing the drawing objects.
- Slide master is one of the most powerful tools in LibreOffice Impress. It helps you set the default look of your slides in terms of fonts, background, images, styles, colours and many other things. Whatever changes you make in the slide master will be reflected in all the presentation slides.
- The text content can be aligned with respect to the page margins by any of the given four alignment ways: Left, Center, Right, and Justified.
- An animation consists of a sequence of images or objects called frames that are displayed in succession when the animation runs.
- Slide transitions are effects with or without sounds that take place between slides when slides appear one after the other in a presentation at the time of the slide show.

Exercise

Solved

SECTION A (Objective Type Questions)

A. Choose the correct option.

1. Layouts pane helps you to create slides with _____ .
   a. Different numbers
   b. Different background
   c. Different colors
   d. Different layouts
2. Which of the following is not a view in a presentation?
   a Normal
   b. Outline
   c. Slide time
   d. Slide Sorter
3. Note view helps you to add _____ .
   a. Notes related to your slide
   b. Add images to the slide
   c. Add time to the slide
   d. Add animation to the slide
4. Which of the following will help you exit from a slide show view?
   a. Esc key
   b. Spacebar key
   c. Enter key
   d. Mouse button
5. Which of the following is the shortcut key to create a new presentation?
   a. Ctrl + N
   b. Ctrl + Enter
   c. Ctrl + A
   d. Ctrl + P
6. Which of the following is not a part of the main Impress window?
   a. Slides pane
   b. Workspace
   c. Work pane
   d. Sidebar
7. Which view is generally used for creating, formatting, and designing slides?
   a. Normal view
   b. Outline view
   c. Notes
   d. Slide Sorter view
8. The _____ view is used to apply animation on the content of slide.
   a. Slide Sorter
   b. Normal
   c. Notes
   d. All of these

Ans. 1. d 2. c 3. a 4. a 5. a 6. c 7. a 8. d

B. Fill in the blanks.

1. A page in a presentation is known as a _____.
2. In _____ view, all the slides of the presentation are displayed in a miniature form.
3. Click on the file and then _____ option from the menu bar to save a presentation as HTML.
4. _____ is used to maintain consistency in design and colour in the presentation.
5. In every presentation, first slide should be _____.
6. To save a presentation, we can use key combination _____ .
7. In LibreOffice Impress, by default the presentation is saved with _____ extension.

8. The keyboard shortcut key for slide show is _____.
9. The shortcut key to close the LibreOffice Impress is _____.
10. The shortcut key to insert a new slide is _____.

Ans. 1. slide 2. Slide Sorter 3. Export 4. Master Slide 5. Title Slide 6. Ctrl + S
7. .odp 8. F5 9. Alt + F4, Ctrl + Q 10. Ctrl + M

C. State whether the following statements are true or false:

1. The order of the slides cannot be changed in slides pane.
2. Animations once applied can be changed but cannot be removed.
3. A user can create his/her own slide master.
4. Once a pre-defined slide master is selected, the background of the slide cannot be changed.
5. It is not possible to insert audio or video clips in the presentation.
6. We can run the slide show from the current slide.
7. Images can be added and formatted in a slide.
8. Slide transition is applied to an object in the slide.

Ans. 1. False 2. False 3. True 4. False 5. False 6. True 7. True 8. False

SECTION B (Subjective Type Questions)

A. Short answer type questions:

1. What is animation? Name any two effects of animation.

Ans. An animation consists of a sequence of images or objects called frames that are displayed in succession when the animation runs. Any object on the slide can be animated. It makes the presentation more interesting, and appealing. We use Normal View to apply animation on the objects.

2. Name all the views available in Impress.

Ans. The views available in Impress are Normal, Outline, Notes, Slide Sorter.

3. Differentiate between Save and Save As commands.

Ans. **Save As:** It is used to make a duplicate copy of the same presentation.

Save: It is used for saving a presentation after making changes.

4. What is Slide Transition? Name the views in which slide transition can be added in the presentation.

Ans. Slide Transition gives the effects on the slides when one slide comes after the other in a presentation at the time of slide show. Single type of transition effect can be applied to all slides or a different transition effect to different slides in a presentation. Slide transition can be added on the slides in the Normal and Slide Sorter views.

5. Write steps to add a table in a presentation.

Ans. A table can be added:

Click on the Insert → Table option from the Menu bar. The Insert Table dialog box will be displayed where you give the number of rows and columns you wish to insert in a table.

B. Long answer type questions:

1. Aman is working as a Marketing Manager in an Advertising Company. He has prepared a presentation on his latest product. Which features will be used for the following tasks?
   a. To view all slides together.
   b. To set the timings and the speed of the slide show.
   c. To give the effects of "Fly In" for the pictures in all the slides.
   d. To add a picture to the slides.

Ans. a. Slide Sorter View
b. Slide Show
c. Animation
d. Insert → Image

2. What are bullets and numbering? Give steps to add bullets and numbering in your slide.

Ans. Sometimes we need to write points in our slides. If the sequence of the points is important then use numbering otherwise use bullets.

The steps to use bullets and numbering are:

Click on the **Bullets on/off** tool present on the Text Formatting toolbar.

OR

Select the **Format** → **Bullets and Numbering**...option.

3. What is Text alignment? Explain the different types of alignment options.

Ans. The placement of text in respect to the page margins of the slide is called text alignment. Text can be aligned in the following four ways:

Left: Text is aligned on the left with uneven right edge. It is the default alignment.

Right: Text is aligned on the right with uneven left edge

Center: Text is aligned on the center with uneven left and right edges

Justified: Text is aligned on both left and right equally.

4. Write steps to draw a shape in a presentation.

Ans. Follow the given steps to draw a shape:

- Select any of the shapes on the Drawing toolbar.
- Select the desired shapes from the available selection then click and drag on the slide.
- Release the mouse button and see the selected shape with default setting visible on the slide.

5. Write the steps to run a slide show.

Ans. After a presentation is made it can be displayed full screen slide by slide by running a slide show.

To run the slide show:

- Go to **Slide Show** → **Start from First Slide**.

OR

- Right-click and select the **Start from First Slide**.

OR

Use the keyboard shortcut **F5**.

Unsolved

SECTION A (Objective Type Questions)

A. Choose the correct option.

1. The default view of the slide in the presentation is _____.
   a. Slide Master
   b. Slide Sorter
   c. Slide Show
   d. Normal
2. The function key to look for help in presentation is _____.
   a. F4
   b. F5
   c. F1
   d. F6
3. Which of the following is not a slide transition effect?
   a. Wipe
   b. Fly In
   c. Box
   d. Bars
4. Which of the following is one of the ways to go to next slide in the slide show?
   a. Mouse Click
   b. Esc Key
   c. Caps Lock Key
   d. File → New option
5. _____ toolbar has the tools related to drawing and editing of the drawing objects.
   a. Formatting
   b. Standard
   c. Drawing
   d. Slide Show
6. If you need to display your friends list or your class timetable, one must use _____ on slides.
   a. Pictures
   b. Drawings
   c. Charts
   d. Tables

B. Fill in the blanks.

1. _____ is the actual work area of the LibreOffice, Impress where one slide at a time is created using different elements.
2. The image can be added using _____ menu.
3. The default Slide layout is _____ layout.
4. Alignment of the text can be done using _____ menu.
5. _____ an image means to change the size of the image.

B. State whether the following statements are true or false:

1. A presentation cannot be saved as PDF.
2. Effects given to different objects from a slide is called Slide Transition.
3. To apply transition to all slides, click the Apply Transition to All Slides button.
4. Slide Sorter view can be used to move a slide in a presentation.
5. A new presentation can use the template.

SECTION B (Subjective Type Questions)

A. Short answer type questions:

1. What all you can do to a table added in a slide?
2. Name three functions that can be performed in the Slide Sorter view of a presentation.
3. Name the Function key to run a slide show from the current slide.
4. Mention any four components of the LibreOffice Impress.
5. Write features to add the logo of the company at the bottom right corner of all the slides.

B. Long answer type questions:

1. Give one important feature of each view of a presentation:
   a. Notes view
   b. Slide Sorter view
   c. Master Slide
2. Give the steps to do the following:
   a. To open Slide Master
   b. Adding a new Slide
   c. Grouping an object
3. Give key combinations for the following:
   a. Closing a presentation
   b. Moving one cell back in a table
   c. Ungroup an object
4. Differentiate between:
   a. Grouping and ungrouping an object
   b. Slide and presentation
   c. Bullets and numbering

C. Competency-based/Application-based questions:

1. Superna is the Wiz Kid of the class. She is responsible for making the presentation to be shown during the class assembly. The presentation includes, the class performance video file, pictures of plantation drive taken up by the class, visit to old age home images and a small write up on the triumph of the old people staying there. Ending with the thank you note to the Principal.

   Make a presentation to show how Superna would have made the presentation to cover all the points mentioned above.
2. Rohan works in an advertising firm. He is to submit an advertising plan for his client, which would include the advertisement concept, mix of advertising medium to be used, sample creative, budget, and the final outcome expected from the activity taken up.

   Make a presentation to show how Rohan would have made the presentation to cover all the points mentioned above.
3. Create a presentation on "Say No to Plastic". Keep maximum of 6 slides. Do the following in the presentation:
   a. Give a name to each slide
   b. Change the font for the slide title.
   c. Convert the presentation to a PDF file.
4. Create a presentation which demonstrates details of a car launched by any company of your choice. Include the following slides:
   a. Introduction of the company.
   b. List of cars the company sells.
   c. Introduction of the new car launched.

d. All models of the car should be displayed in tabular format. (Model name, Basic Price, Average, Capacity).
e. Modify the appearance of the table and set the animation effect as box.
f. Add the image of each model with its description.
g. Change the background colour of each slides of your presentation.

LAB ACTIVITY

1. Complete the following activities.
   - Open 'LibreOffice Impress'.
   - Start the presentation using 'Empty Presentation'.
   - Explore different tools of 'LibreOffice Impress'.
   - Explore the Menu bar of 'LibreOffice Impress'.
   - Set the desired background slide design.
   - Set the appropriate output medium.
   - Select the appropriate 'Slide Layout'.
   - Type the information about 'Network'.
   - Save the presentation with the name 'Network'.
   - Exit from LibreOffice 'Impress'.
2. Create a presentation which demonstrates details of a car launched by any company of your choice. Include the following sliders: [NCERT]
   - Introduction of the company
   - List of cars the company sells
   - Introduction of the new car launched.
3. Complete the following activities and tick on the circle.
   - Open 'LibreOffice Impress' and start the presentation using Template.
   - Set the desired background slide design.
   - Set the appropriate output medium and then preview the slide design.
   - Select the desired slide transition.
   - Put 'Digital India' as the subject of the Presentation.
   - Type information about 'Digital India' in the slide.
   - Display the slide in different views.
   - Save the presentation with the name 'Digital' and exit from 'Impress'.
4. For the presentation created in the question above, add the following functionalities:
   - All models of the car should be displayed in tabular format. (Model name, Basic Price, Average, Capacity) [NCERT]
   - Modify the appearance of the table and set animation effect as box.
   - Add the image of the each model with its description.
   - Change the background colour of each slides of your presentation.

CAREER HERE

After learning LibreOffice Impress you can join in collaboration with the other officials for administrative jobs like:

- Digital Marketing
- Graphics Designer