Answer Key

CodePilot (5.0)

1. Word Tables the Easy Way

LEARNING LOGS

A. 1. (iii)   2. (iv)   3. (i)   4. (ii)   5. (iv)

B. 1. T   2. F   3. T   4. F   5. T

C. 1. Borders and shading   2. Table Layout   3. Table

4. Table Design   5. Tab

D. 1. To select a group of cells, click on one cell, then drag the mouse to select more cells. Release the mouse button when you are done.

2. When you insert a table a small hollow square at the bottom right corner appears. This is called Table Resize Handle. It is used to resize the table. Click on it and drag it around, you will see the size of the table change.

3. Tables in Word documents are commonly used for:

- Organising data in a clear and readable format.
- Comparing values or showing relationships between items.
- Presenting schedules, lists and other data that require clear alignment.

4. Difference between rows and columns:

Rows	Columns
A row is a horizontal line of cells in a table.	A column is a vertical line of cells in a table.
Each row typically contains data of the same type.	Columns contain data organised under specific headings.

5. To split a cell in a table, follow the given steps:

1 Select the cell you want to split.

2 Click on the Table Layout tab.

3 Click on Split Cells option.

4 Enter the desired number of columns and rows.

5 Click on the OK button.

COMPETENCY-BASED QUESTIONS

1. Sarika should improve the look of her table using different Table Styles, Borders and Shading features.

2. Naman should select the entire table using the Table Move handle. Then, he can go to the Table Layout tab and use the Cell Size group to change the column width and row height.

LAB LEARNING

Do it yourself.

CODE CHECK

Do it yourself.

2. Word Power Tools

LEARNING LOGS

A. 1. (iii)   2. (i)   3. (iv)   4. (iv)   5. (ii)

B. 1. F   2. T   3. T   4. F   5. F

C. 1. Page size   2. Landscape   3. Borders and shading   4. Page border

5. Main Document, Data Source

D. 1. A watermark is used to indicate the document status, add branding or provide an attractive background.

2. Column Formatting involves dividing your document's text into multiple columns and adjusting the width, alignment and layout of those columns.

3. To insert columns in a document, follow these steps:

   1 Select the text.

   2 Click on the Layout tab.

   3 Click on the Columns drop-down arrow.

   4 Select the number of columns.

4. Difference between Paragraph border and Page border:

Paragraph Border	Page Border
A line around a paragraph or a block of text to highlight or separate it visually.	A decorative line or design that frames the entire page outside the margins.

5. The mail merge components are:
   - **Main Document:** The template, such as a letter or email, that contains the fixed content.
   - **Data Source:** The file, often a spreadsheet or database, that holds the variable information like names and addresses.
   - **Merge Fields:** The placeholders in the main document that are linked to specific columns in the data source and are replaced with unique information for each recipient.

COMPETENCY-BASED QUESTIONS

1. Ritul should use mail merge. It helps her send many invitation letters quickly by adding names and addresses to the same letter automatically. This way, she can finish her work fast.

2. Tarush should use Landscape orientation to achieve this. To do so he should click on Layout tab -> Orientation drop-down arrow -> Landscape.
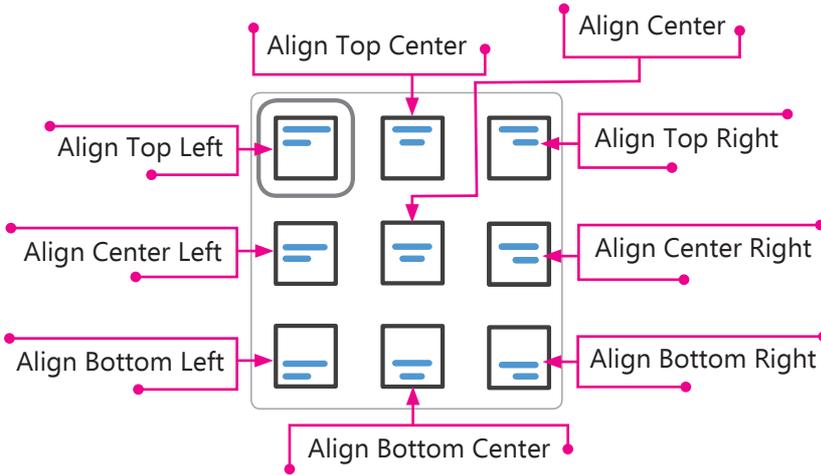
LAB LEARNING

Do it yourself.

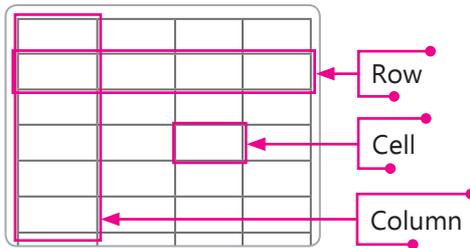### CODE CHECK

Do it yourself.

Periodic Assessment-1

(Based on chapters 1 & 2)

A.

Align Top Center

Align Center

Align Top Left

Align Top Right

Align Center Left

Align Center Right

Align Bottom Left

Align Bottom Right

Align Bottom Center

B. 1. c   2. a   3. b   4. e   5. d

C.

Row

Cell

Column

<div style="background:#1f6f8b;color:white;padding:4px 8px;">

3. Slides that Impress

</div>

LEARNING LOGS

A. 1. (i)   2. (iii)   3. (ii)   4. (i)   5. (iii)

B. 1. T   2. F   3. T   4. F   5. F

C. 1. Theme   2. Text box   3. SmartArt   4. Grouped   5. Slides Pane

D. 1. Notes Page View is used for writing scripts, adding extra details and printing handouts with notes.

2. Resizing is adjusting the size of a shape to make it fit better on your slide while Rotating is adjusting the angle of a shape to make it fit better on your slide.

3. To insert an image using the Stock Images option, follow the given steps:

   1 Click on the Insert tab.

   2 Click on the Pictures and select Stock Images option.

   3 Type the desired keyword in the search box and press the Enter key.

   4 Select the image you want to insert.

   5 Click on the Insert (1) button.

4. Difference between Slide Show View and Reading View in PowerPoint:

Slide Show View	Reading View
Used to show the presentation to an audience.	Used to review the slides easily.
Shows animations, transitions and media as they will appear.	Good for easy navigation and exiting quickly.

5. Normal View is the default view in PowerPoint where slides are created and edited. It is useful for writing text, adding pictures or shapes and designing each slide. This view has three sections:

   • **Slide Area:** The main area where you can work on and design individual slides.

   • **Slides Pane:** A side panel that shows Thumbnails of all the slides.

   • **Notes Pane:** A space below the slide to write notes for the presenter.

COMPETENCY-BASED QUESTIONS

1. Amir can use the Shape Effects feature in PowerPoint to add a shadow behind the shape to give it a 3D effect on the slide.

2. Gayathri can use group feature to combine multiple objects to move them together as a single unit.

LAB LEARNING

Do it yourself.

CODE CHECK

Do it yourself.

4. Adding Life to Slides

A. 1. (i) 2. (i) 3. (ii) 4. (ii) 5. (iv)

B. 1. T 2. T 3. T 4. F 5. F

C. 1. Slide Master 2. Audio Format, Playback 3. Table

4. Online Videos 5. Three

D. 1. The advantage of using the grid to insert the table is that as you drag across the columns and rows, this lets you see a preview of the table on your slide.

2. The purpose of inserting video in PowerPoint is to explain complex ideas easily, keep the audience interested and make the content more engaging and clearer.

3. The audio file formats that can be inserted into PowerPoint are AIFF Audio (.aiff), MP3 (.mp3), MP4 Audio (.mp4), Windows Audio (.wav) and Windows Media Audio (.wma).

4. Slide Master is a feature used to change the overall design of a presentation. It allows you to edit the background, font and layout for all slides at the same time, instead of making changes to each slide separately. This makes it easier to keep your slides consistent and save time.

5. To change the table style in a slide, follow the given steps:

1 Select the table.

2 Click on the **Table Design** contextual tab.

3 Click on the **Table Styles** drop-down arrow.

4 Choose any table style for your table.

COMPETENCY-BASED QUESTIONS

1. Ravi can use the Slide Master feature to apply the same font and background to all slides and make the presentation look professional.

2. Nisha should use the Insert feature to add audio and video to her presentation.

LAB LEARNING

Do it yourself.

CODE CHECK

Do it yourself.

5. Understanding Excel

A. 1. (ii) 2. (ii) 3. (i) 4. (iii) 5. (ii)

B. 1. T 2. F 3. T 4. F 5. T

C. 1. Ribbon 2. Column 3. Formula, Extending 4. Text 5. Workbook

D.
1. A page made of rows and columns to store and organise data.

2. Worksheet Tab lets you navigate, rename, add, delete or move sheets while Navigation Buttons help you move between worksheet tabs.

3. To enter data into a worksheet, click on a cell and start typing. The text or numbers will appear in the Formula Bar. Press Enter to move down a cell or Tab to move right. To edit data, double-click the cell and type the new data.

4. Three important features of Excel are:
   • Organises data in rows and columns.
   • Fills in series of data quickly with AutoFill and Flash Fill.
   • Formats data with different fonts, sizes and colours.

5. The different data types in Excel are:
   • **Text:** Includes letters, numbers and special characters like !, @, &, %.
     Example: Orange!, ABC123@
   • **Number:** Consists of digits (0–9) and can include decimals and signs (-, +) for calculations.
     Example: 10, 250, 15.6, -25.
   • **Date and Time:** Represents calendar dates and clock times. The default format is dd-mm-yyyy for dates and hh:mm or hh:mm:ss for time.
     Example: 21-06-2025, 10:30, 10:25:45.

COMPETENCY-BASED QUESTIONS

1. Aarav should use the Number data type.

2. Shalini can use the Navigation Buttons or keyboard keys (like arrow keys) to move around the worksheet.
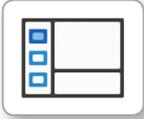
LAB LEARNING

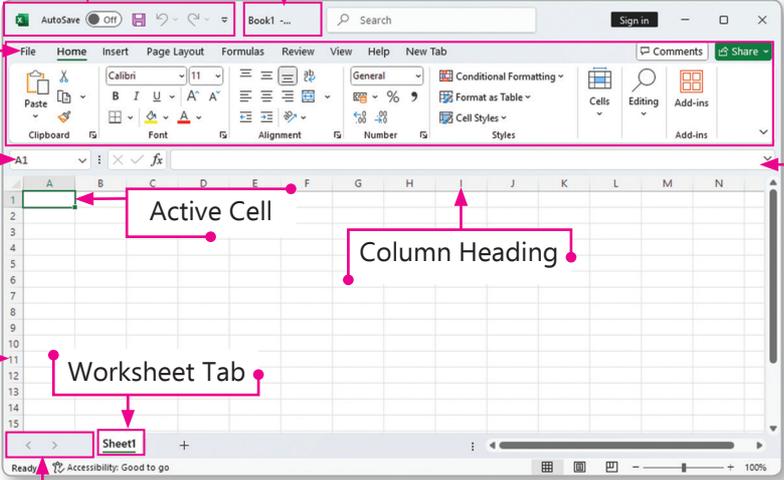Do it yourself.

CODE CHECK

Do it yourself.

Periodic Assessment-2

(Based on chapters 3 to 5)

A.

1. Normal

2. Outline View

3. Slide Sorter

4. Notes Page

B.
1. Record Audio
2. Online Videos
3. Table
4. Slide Master

C.

Quick Access Toolbar

Title Bar

File Tab

Name Box

Formula Bar

Active Cell

Column Heading

Row Heading

Worksheet Tab

Worksheet Tab Navigation buttons

Test Sheet-1

(Based on chapters 1 to 5)

A. 1. (iv)   2. (iv)   3. (iii)   4. (ii)
5. (ii)   6. (i)

B. 1. F   2. T   3. T   4. F
5. F   6. F

C. 1. Table   2. Landscape   3. Grouped   4. Online Videos
5. Text   6. Table

D. 1. Tables in Word documents are commonly used for:
  - Organising data in a clear and readable format.
  - Comparing values or showing relationships between items.
  - Presenting schedules, lists and other data that require clear alignment.

2. To split a cell in a table, follow the given steps:
   1. Select the cell you want to split.
   2. Click on the Table Layout tab.
   3. Click on Split Cells option.
   4. Enter the desired number of columns and rows.
   5. Click on the OK button.

3. Column Formatting involves dividing your document's text into multiple columns and adjusting the width, alignment and layout of those columns.

4. Difference between Paragraph border and Page border:

Paragraph Border	Page Border
A line around a paragraph or a block of text to highlight or separate it visually.	A decorative line or design that frames the entire page outside the margins.

5. Notes Page View is used for writing scripts, adding extra details and printing handouts with notes.

6. To insert an image using the Stock Images option, follow the given steps:
   1. Click on the Insert tab.
   2. Click on the Pictures and select Stock Images option.
   3. Type the desired keyword in the search box and press the Enter key.
   4. Select the image you want to insert.
   5. Click on the Insert (1) button.

7. The purpose of inserting video in PowerPoint is to explain complex ideas easily, keep the audience interested and make the content more engaging and clearer.

8. Slide Master is a feature used to change the overall design of a presentation. It allows you to edit the background, font and layout for all slides at the same time, instead of making changes to each slide separately. This makes it easier to keep your slides consistent and save time.

9. Worksheet Tab lets you navigate, rename add, delete or move sheets while Navigation Buttons help you move between worksheet tabs.

10. The different data types in Excel are:
   - **Text:** Includes letters, numbers and special characters like !, @, &, %.
     Example: Orange!, ABC123@
   - **Number:** Consists of digits (0–9) and can include decimals and signs (-, +) for calculations.
     Example: 10, 250, 15.6, -25.
   - **Date and Time:** Represents calendar dates and clock times. The default format is dd-mm-yyyy for dates and hh:mm or hh:mm:ss for time.
     Example: 21-06-2025, 10:30, 10:25:45.

6. Exploring the Online World

LEARNING LOGS

A. 1. (ii)   2. (iii)   3. (iii)   4. (iii)   5. (iv)

B. 1. T   2. F   3. F   4. T   5. T

C. 1. Paperless   2. Attach files   3. Internet   4. VOIP   5. Email address

D. 1. Social networking allows people to connect with others, share posts and interact with friends and family. Examples of social networking apps are Facebook, Instagram and X (formerly Twitter).

2. Video conferencing lets people communicate face-to-face online using a camera and microphone. It is used for online classes, meetings and virtual collaboration. Popular platforms include Google Meet, Zoom and Microsoft Teams.

3. Cloud storage is an online service that lets you save and access files like documents, photos and videos from any device with Internet access. It keeps your files safe if your device is lost or damaged and makes sharing or collaborating with others easy. Examples of cloud storage services are Google Drive, Microsoft OneDrive, Apple iCloud and Dropbox.

4. The basic steps to compose and send an email are:

   1 Click on the Compose button.

   2 Type the recipient's email address in the To field.

3 Write the Subject of the email.

4 Type your message in the Message Body.

5 Click on the Send button.

5.

Spam	Drafts
Contains unwanted emails (junk mail).	Stores the emails you started writing but haven't sent yet.
Keeps unwanted emails out of your inbox.	Allows you to edit and send emails later.

COMPETENCY-BASED QUESTIONS

1. Arpitha should use platforms like Facebook and Instagram.
2. Samaira should use the Bcc (Blind Carbon Copy) field while sending the email.

LAB LEARNING

Do it yourself.

CODE CHECK

Do it yourself.

7. Smart with Data

LEARNING LOGS

A. 1. (ii)   2. (iii)   3. (iii)   4. (iv)

B. 1. F   2. T   3. T   4. F

C. 1. Meaningful   2. Anomaly   3. Sorting   4. Language

D. 1. A survey involves asking clear questions to individuals to collect useful information. It helps gather facts, numbers, or observations to gain new understanding and useful information. Surveys are one of the most common ways to collect data.

2. Data processing is the act of converting raw data into meaningful and useful information. This process involves a series of actions such as cleaning, organising and analysing data to extract valuable insights for decision-making.

3. Sorting data means putting information into a clear and organised order. For example, you can arrange books on a shelf from A to Z or line up numbers from the smallest to the largest.

Sorting data can be done in different ways:

   i. **Alphabetical Order:** Arranging words like names or subjects from A to Z or Z to A.

   ii. **Numerical Order:** Arranging numbers like marks, heights or scores from smallest to largest or vice versa.

   iii. **Date Order:** Arranging events or timelines from oldest to newest or newest to oldest.

4. Data can support decision-making by providing useful information that helps choose the best option, make predictions and ensure decisions are based on facts and trends rather than guesses.

COMPETENCY-BASED QUESTIONS

1. I would identify trends by noting which hobbies are most preferred by students and use this information to plan school activities that align with their interests.

2. I would look at the most popular extracurricular activities from the survey and suggest new clubs or activities based on students' interests and preferences.
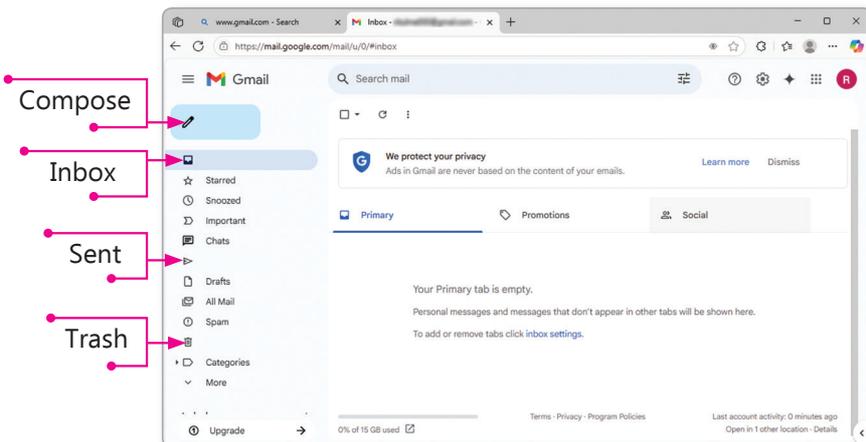
LAB LEARNING

Do it yourself.

CODE CHECK

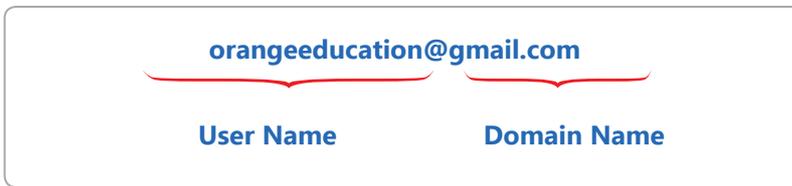Do it yourself.

Periodic Assessment-3
(Based on chapters 6 & 7)

A.

B.

orangeeducation@gmail.com

User Name   Domain Name

C. 1. Alphabetical Order   2. Numerical Order   3. Date Order

D. 1. Sorting

2. Trend

3. Anomaly

8. Scratch Meets AI

LEARNING LOGS

A. 1. (iii)   2. (i)   3. (ii)   4. (iv)

B. 1. F   2. T   3. T   4. F

C. 1. Multiple   2. Broadcast, Receive   3. Variables   4. Talk

D. 1. Broadcast and Receive blocks allow sprites to communicate with each other without being directly connected. This is useful for controlling different parts of a story or game.

2. Variables can store numbers, text or other information that needs to be updated or referenced throughout your project.

3. The translation is possible through a collaboration between Scratch and Google. It internally uses Google Translate to perform the translations.

4. The Video Sensing extension lets you use your webcam to control your project. It can detect movement in front of the camera and use it to make things happen in the game, like moving a sprite or triggering an action.

5. Difference between Global Variables and Local Variables:

Global Variables	Local Variables
Global variables are created on any sprite and can be accessed or modified by other sprites used in the project.	Local variables are created for a specific sprite and can only be used by that sprite.
These variables are created by choosing 'For all sprites'.	These variables are created by choosing 'For this sprite only'.

1. Vasudha should use Broadcast and Receive blocks to achieve this.

2. Swapnil should click on the Add Extension button and choose the Video Sensing extension to do so.

LAB LEARNING

Do it yourself.

CODE CHECK

Do it yourself.

9. Creating Apps with MIT App Inventor

LEARNING LOGS

A. 1. (i) 2. (iii) 3. (i) 4. (iii) 5. (ii)

B. 1. F 2. T 3. F 4. T 5. F

C. 1. Mobile 2. Web 3. Coding 4. Properties 5. Variables

D. 1. Apps are software program that you can use on a smartphone, tablet or computers to do specific tasks like learning, playing games, chatting or watching videos.

2. Variables block store values that can change while the app runs. You can create, set and get variable values.

3. The two features of mobile apps are:
   • **Easy to Use:** Apps are simple and user-friendly, allowing even children to learn quickly by tapping icons.
   • **Safe and secure:** Verified apps protect your data and let you control settings like notifications and privacy.

4. The three most commonly used UI components in MIT App Inventor are:
   • **Buttons:** Triggers an action when tapped, like opening a screen or showing a message.
   • **Label:** A label displays text on the screen. It can be used to show messages, instructions, or even the result of an action.
   • **TextBox:** A TextBox allows users to enter text. This is useful when you need to collect information from the user, such as their name or email.

5. Difference between Native Apps and Web Apps:

Native Apps	Web Apps
A native app is software built for a specific operating system, like iOS or Android.	A web app is a software program that works in a web browser like Chrome or Safari.
Takes up space on your device	Opened directly in a browser

COMPETENCY-BASED QUESTIONS

1. Ravi should use Label component to display the message.
2. Rashita should use educational apps to get started with basic coding.

LAB LEARNING

Do it yourself.

CODE CHECK

Do it yourself.

10. AI Industry 5.0: Smart Robots

LEARNING LOGS

A. 1. (iii)   2. (ii)   3. (iii)   4. (iv)   5. (i)

B. 1. T   2. T   3. F   4. T   5. F

C. 1. Entertainment   2. Education   3. Healthcare
   4. Sensors   5. Military

D. 1. Motors are actuators that generate mechanical motion, driving the robot's joints, wheels or limbs.

2. Delivery robots use GPS, sensors and AI to move goods safely. They deliver food, parcels and medicines in urban areas. These robots save time, cut costs, are eco-friendly and work with little human contact.

3. Industry 5.0 is the next stage of industrial growth where artificial intelligence (AI) and human skills work together. Unlike Industry 4.0, which focused on machines and automation Industry 5.0 brings people and machines together.

4. Home robots assist with household tasks, providing convenience and automation. With advances in AI, sensors and connectivity, they are now smarter, more user-friendly and versatile.

5. Robotics improves healthcare by enhancing surgery precision, providing prosthetics, aiding rehabilitation and supporting recovery with robotic exoskeletons and Military robots assist with surveillance, combat and medical support. Drones track enemies, while armed robots handle high-risk tasks, like MAARS and DOGO.

COMPETENCY-BASED QUESTIONS

1. Home robots would be suitable for this because with advances in AI, sensors and connectivity, they are now smarter, easier to use and capable of many functions.

2. Robotics in agriculture boosts productivity by automating tasks like harvesting and seed control, reducing dependency on manual labour and environmental conditions.
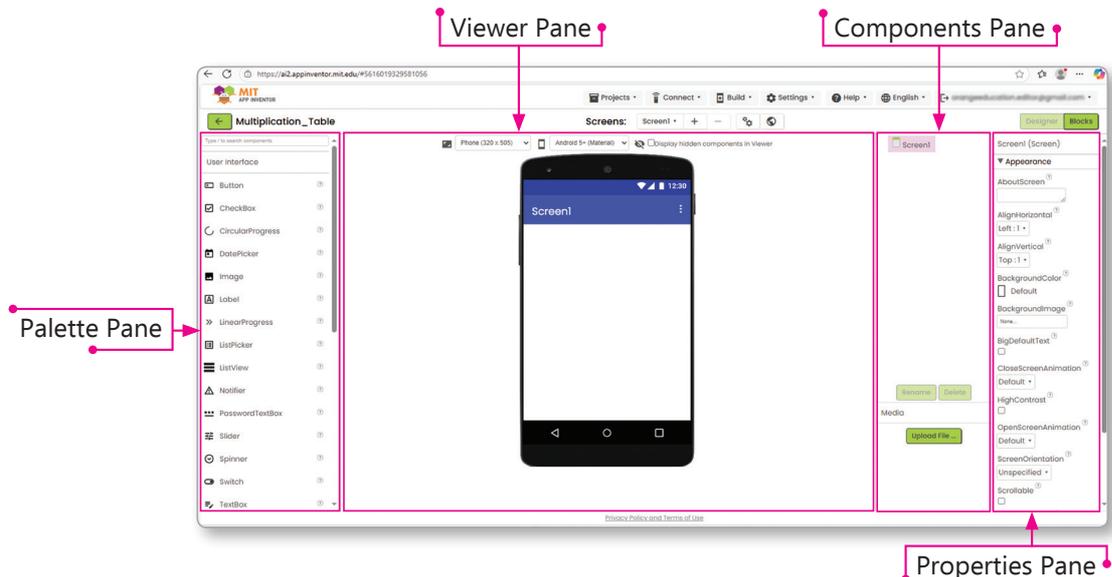
LAB LEARNING

Do it yourself.

CODE CHECK

Do it yourself.

Periodic Assessment-4
(Based on chapters 8 to 10)

A. 1. b   2. a   3. c

B.

Viewer Pane

Components Pane

Palette Pane

Properties Pane

C.   1. Sensors

    2. Actuators

    3. Motors

    4. Controllers

Test Sheet-2

(Based on chapters 6 to 10)

A.   1. (iii)   2. (iii)   3. (ii)   4. (ii)   5. (i)   6. (iv)

B.   1. F   2. T   3. T   4. F   5. F   6. F

C.   1. Attach files   2. Sorting   3. Talk

    4. Web   5. Sensors   6. Variables

D.   1. Cloud storage is an online service that lets you save and access files like documents, photos and videos from any device with Internet access. It keeps your files safe if your device is lost or damaged and makes sharing or collaborating with others easy. Examples of cloud storage services are Google Drive, Microsoft OneDrive, Apple iCloud and Dropbox.

    2. Social networking allows people to connect with others, share posts and interact with friends and family. Examples of social networking apps are Facebook, Instagram and X (formerly Twitter).

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    Sorting data can be done in different ways:

- **Alphabetical Order:** Arranging words like names or subjects from A to Z or Z to A.
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    4. Data processing is the act of converting raw data into meaningful and useful information. This process involves a series of actions such as cleaning, organising and analysing data to extract valuable insights for decision-making.

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