HTML

BRIDGE COURSE

TOPICS COVERED 95%

- Lists
- Tables
- Nested List
- Styling Tables Using CSS

LISTS

HTML contains various tags to display items in an organised layout on a web page. We can organise the content on a web page using lists. Lists are used to group related pieces of information together to make it convenient and easy to read. HTML supports three types of list formatting:

- Ordered List
- Unordered List
- Description List

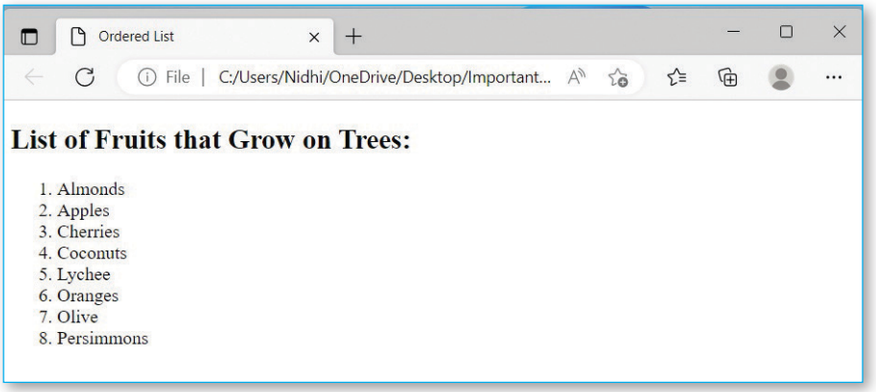
ORDERED LISTS

An **ordered** list is used when the items in the list are required to be in a particular order and need to be numbered. It is also known as a **numbered list.** An **ordered list** is enclosed within the **<OL> ... </OL>** tag. Each item in the list is given an **<LI>** tag that specifies the list item. By default, it starts with numbers.

Write HTML codes to print an ordered list.

```
<!DOCTYPE html>
<HTML>
<HEAD><TITLE> Ordered List</TITLE ></HEAD>
<BODY>
<H2> List of Fruits that Grow on Trees:</H2>
<OL>
<LI>Almonds</LI>
```

```
<LI>Apples</LI>
<LI>Cherries</LI>
<LI>Coconuts</LI>
<LI>Lychee</LI>
<LI>Oranges</LI>
<LI>Olive</LI>
<LI>Persimmons</LI>
</OL>
</BODY>
</HTML>
```



TYPE Attribute

We can change the default item marking of an ordered list to letters and Roman numerals by using the **TYPE** attribute. Syntax: **<OL TYPE = "Value">**

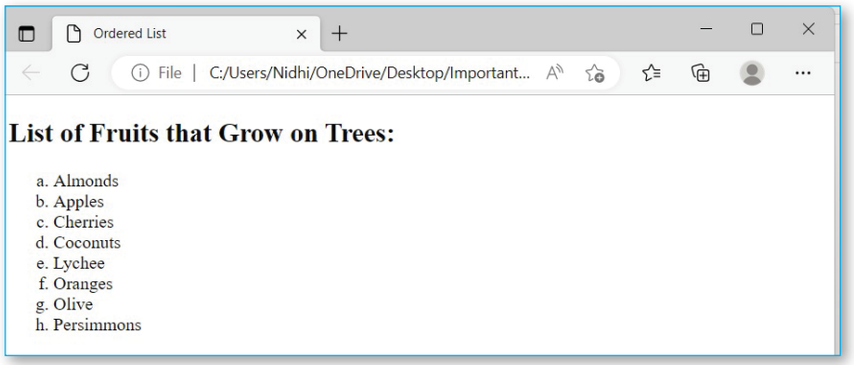
The different values of the TYPE attribute are:

- 1: The items on the list will be marked in numbers.
- A: The items on the list will be marked in uppercase letters.
- a: The items on the list will be marked in lowercase letters.
- i: The items on the list will be marked in lowercase Roman numerals.
- I: The items on the list will be marked in uppercase Roman numerals.

To create an ordered list starting at a specific number with a custom style, use **<ol type="A" start="3">**, which will begin the list with **C** and continue with uppercase letters.

Use of TYPE attribute with <OL> tag in HTML.

```
<!DOCTYPE html>
<HTML>
<HEAD>
<TITLE> Ordered List </TITLE></HEAD>
<BODY>
<H2> List of Fruits that Grow on Trees:</H2>
<OL Type="a">
<LI>Almonds</LI>
<LI>Apples</LI>
<LI>Cherries</LI>
<LI>Coconuts</LI>
<LI>Lychee</LI>
<LI>Oranges</LI>
<LI>Olive</LI>
```



```
<LI>Persimmons</LI>
</OL>
</BODY>
</HTML>
```

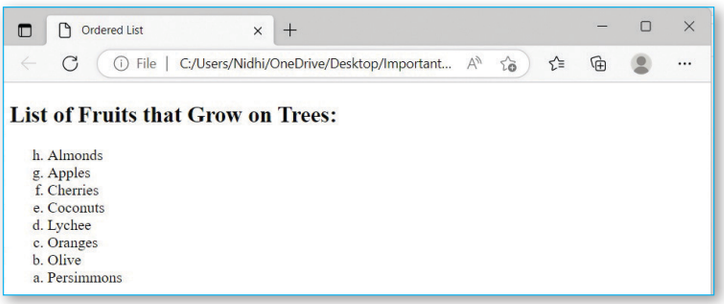
REVERSED Attribute

By default, HTML arranges items in ascending order. We can change the order of the list in descending order by using the Reversed attribute. Syntax: **<OL REVERSED>**

To use reversed numbering in an ordered list, the **<OL REVERSED>** tag will automatically display the list in descending order. If you wish to change the numbering style while keeping it reversed, you can specify the type by using **<OL TYPE="" REVERSED>**.

Use of REVERSED attribute with OL tag in HTML.

```
<!DOCTYPE html>
<HTML>
<HEAD>
<TITLE>Ordered List</TITLE>
</HEAD>
<BODY>
<H2> List of Fruits that Grow on Trees:</H2>
<OL Type="a" REVERSED>
<LI>Almonds</LI>
<LI>Apples</LI>
<LI>Cherries</LI>
<LI>Coconuts</LI>
<LI>Lychee</LI>
<LI>Oranges</LI>
<LI>Olive</LI>
<LI>Persimmons</LI>
</OL>
</BODY>
</HTML>
```



UNORDERED LISTS

An **unordered list** is used when the items in the list are not required to be in a specific order. It is also called a bulleted list. An **unordered list** is enclosed within the **<UL> ..... </UL>** tag. Each item in the list is given an **<LI>** tag, which specifies the list item.

Write HTML codes to print an unordered list.

```
<!DOCTYPE html>
```

```
<HTML>
<HEAD>
<TITLE> Unordered List </TITLE> </HEAD>
<BODY>
<H2>People working in the field of public health:</H2>
<UL>
<LI>First responders</LI>
<LI>Restaurant inspectors</LI>
<LI>Health educators</LI>
<LI>Scientists and researchers</LI>
<LI>Nutritionists</LI>
<LI>Community planners</LI>
<LI>Social workers</LI>
<LI>Public health
physicians</LI>
</UL>
</BODY>
</HTML>
```

DESCRIPTION LISTS

A **description list** is not a list of items. We can use this type of list formatting for defining terms on a web page. It is also called a **definition list.**

A description list is enclosed within the **<DL> ..... </DL>** tag.

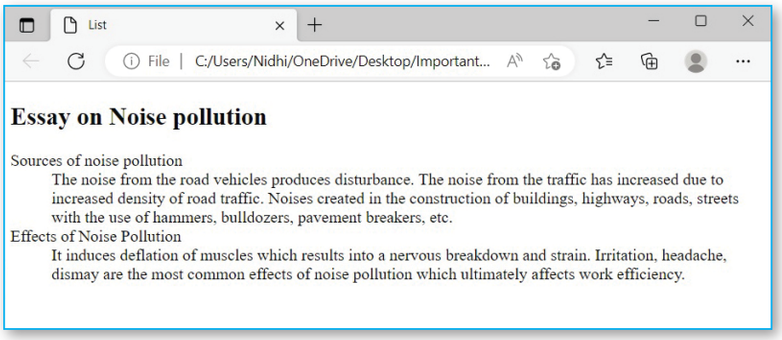
It contains the following tags:

- **<DL> tag (Definition List):** This tag indicates the beginning of a definition list, grouping terms and their corresponding descriptions.
- **<DT> tag (Definition Term):** This tag specifies the name or terms being defined within the list.
- **<DD> tag (Definition Description):** This tag provides a description or explanation for each term listed, following the <DT> tag.

Write HTML code to print a description list.

```
<!DOCTYPE html>
<HTML>
<HEAD>
<TITLE> List</TITLE></HEAD>
<BODY>
```

```
<H2> Essay on Noise pollution</H2>
<DL>
<DT>Sources of noise pollution</DT>
<DD>The noise from the road vehicles produces disturbance. The noise
from the traffic has increased due to increased density of road traffic.
Noises created in the construction of buildings, highways, roads, streets
with the use of hammers, bulldozers, pavement breakers, etc.</DD>
<DT>Effects of Noise Pollution</DT>
<DD>It induces deflation of muscles which results into a nervous breakdown
and strain. Irritation, headache, dismay are the most common effects of
noise pollution which ultimately affects work efficiency.</DD>
</DL>
</BODY>
</HTML>
```



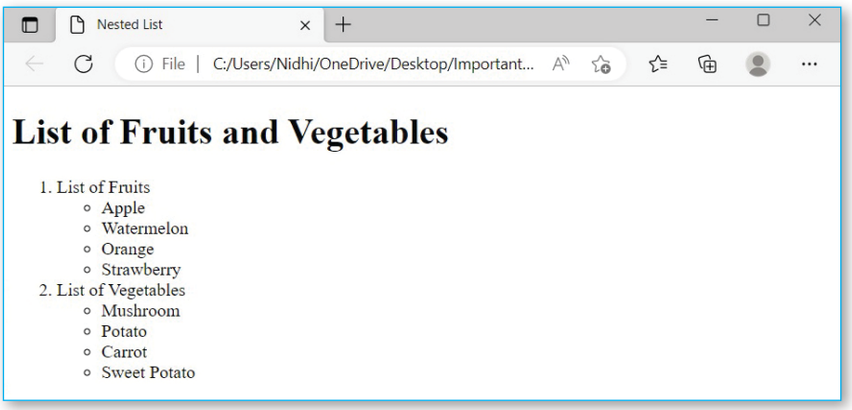
NESTED LIST

An item on a list can contain another list. The list within a list is known as a **nested list or sub-list.**

Write HTML code to create a nested list.

```
<!DOCTYPE html>
<HTML>
<HEAD><TITLE> Nested List</TITLE></HEAD>
<BODY>
<H1>List of Fruits and Vegetables</H1>
<OL>
<LI> List of Fruits
   <UL>
   <LI>Apple</LI>
   <LI>Watermelon</LI>
   <LI>Orange</LI>
   <LI>Strawberry</LI>
   </UL>
```

```
</LI>
<LI> List of Vegetables
   <UL>
   <LI>Mushroom</LI>
   <LI>Potato</LI>
   <LI>Carrot</LI>
   <LI>Sweet Potato</LI>
   </UL>
</LI>
</OL>
</BODY>
</HTML>
```



LIST WITH CSS

We can make a list attractive using CSS properties. The default type of bullet that appears in an unordered list is a disc. CSS properties for lists are:

Property	Value	Description
list-style-image	url	Set a picture or image as a list item
list-style-position	inside, outsides	Specify the position of list item
list-style-type	disc, circle, square, none	Specify the style of bullets for list item

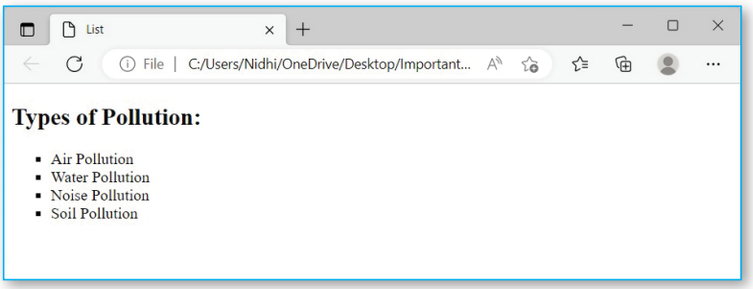
The syntax for using the list-style-type property is:

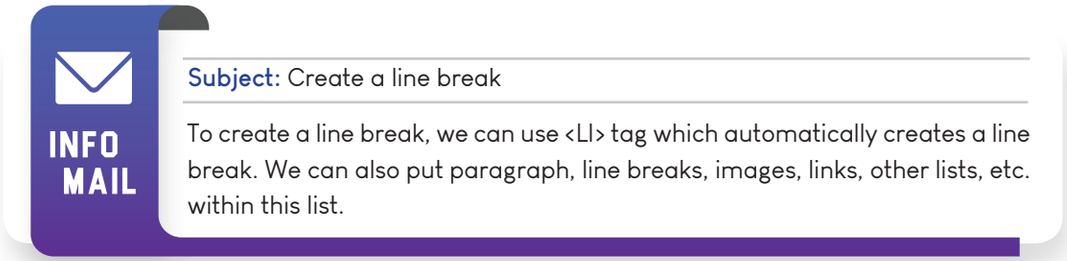
<ul style="list-style-type: value; list-style-image: url('url path'); list-style-position: value;">

Write HTML code to create a list by using properties of CSS.

```
<!DOCTYPE html>
<HTML>
```

```
<HEAD>
<TITLE> List</TITLE></HEAD>
<BODY>
<H2>Types of Pollution:</H2>
<UL style="list-style-type:square">
<LI>Air Pollution</LI>
<LI>Water Pollution</LI>
<LI>Noise Pollution</LI>
<LI>Soil Pollution</LI>
</UL>
</BODY>
</HTML>
```





TABLES

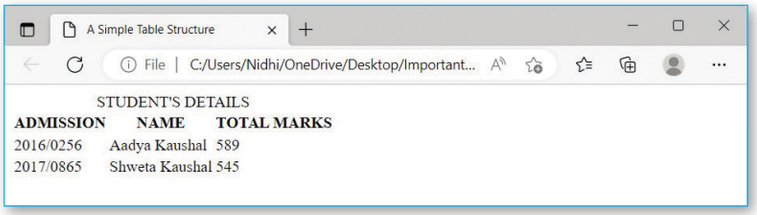
Tables are used in HTML to display data in a tabular format. Presenting information in a tabular form makes it easy to understand. To create a table in HTML, we use five basic tags:

1. **<TABLE> tag:** The table is defined with this tag. All other tags are enclosed within the <TABLE> tag.
2. **<TR> tag:** This tag defines a row of cells, where TR stands for **Table Row**.
3. **<TD> tag:** This tag defines the data cell, where TD stands for **Table Data**.
4. **<TH> tag:** This tag defines the heading of each column or row, where TH stands for **Table Header**. The heading is displayed as bold-faced and center-aligned in all browsers by default.
5. **<CAPTION> tag:** This tag defines the heading of the table. By default, the table caption is centre-aligned.

Write HTML codes to show the student's details in a table.

```
<!DOCTYPE html>
<HTML>
<HEAD>
<TITLE>A Simple Table Structure</TITLE></HEAD>
```

```
<BODY>
<TABLE>
<CAPTION> STUDENT'S DETAILS</CAPTION>
<TR>
     <TH>ADMISSION</TH>
     <TH>NAME</TH>
     <TH>TOTAL MARKS</TH>
</TR>
<TR>
     <TD>2016/0256</TD>
     <TD>Aadya Kaushal</TD>
     <TD>589</TD>
</TR>
<TR>
     <TD>2017/0865</TD>
     <TD>Shweta Kaushal</TD>
     <TD>545</TD>
</TR>
</TABLE>
</BODY>
</HTML>
```



STYLING TABLES USING CSS

CSS allows us to style tables for a single HTML page. It is defined using the **<Style>** tag in the head section of the HTML document.

Syntax of using the <STYLE> tag:

```
<HEAD>
   <STYLE>
   Tag_Name
   {
   Property_name: value;
   }
</STYLE>
</HEAD>
```

Selector: We write the name of the tag to be styled here.

Declaration Box: We mention the tag properties that need to be styled along with the properties in it. The two parts of a declaration box are name and value. A property along with its value is called a declaration.

PURE FACT

CSS (Cascading Style Sheets) was first proposed by Håkon Wium Lie on October 10, 1994 while working with Tim Berners-Lee at CERN.

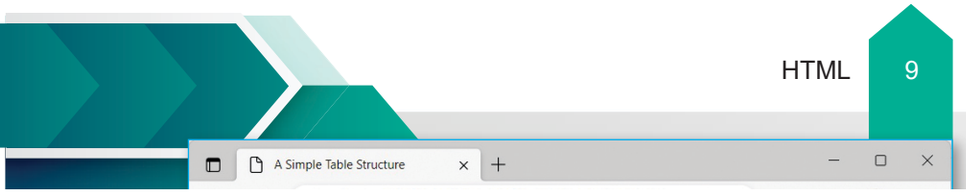
BORDER PROPERTY

The border property is used to define the border of a table.

Property	Options	Description	Values
border	width	Specifies the thickness of the border	Thickness in cm, px, pt, medium or thick
	style	Specifies the type of border	Dotted, dashed, solid, double, groove, ridge, inset, outset, none, and hidden
	colour	Specifies the colour of all sides of the border	Colour name

Write HTML codes to use border property.

```
<!DOCTYPE html>
<HTML>
<HEAD>
<TITLE>A Simple Table Structure</TITLE>
<STYLE>
Table
{
border:2px solid blue;
}
</STYLE>
</HEAD>
<BODY>
<TABLE>
<CAPTION>STUDENT'S DETAILS</CAPTION>
<TR>
   <TH>ADMISSION</TH>
   <TH>NAME</TH>
   <TH>TOTAL MARKS</TH>
</TR>
```

```
<TR>
   <TD>2016/0256</TD>
   <TD>Aadya Kaushal</TD>
   <TD>589</TD>
</TR>
<TR>
   <TD>2017/0865</TD>
   <TD>Shweta Kaushal</TD>
   <TD>545</TD>
</TR>
</TABLE>
</BODY>
</HTML>
```

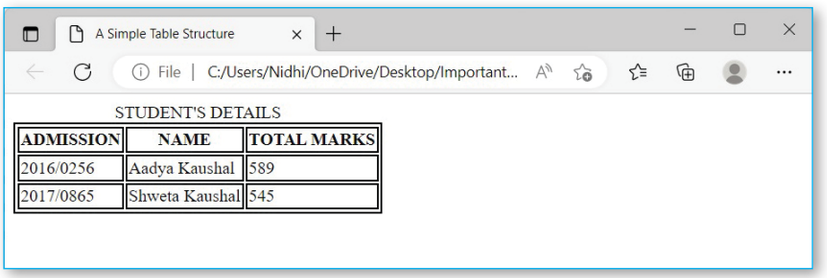
Syntax for defining a common style for more than one HTML tag.

```
<HEAD>
<STYLE>
   Tag1_name, Tag2_name, Tag3_name, and so on
        {
          Property1_name: value;
          Property2_name: value;
          -    -
          -    -
          }
</STYLE>
</HEAD>
```

Write HTML codes to use border property for defining a common style for more than one HTML tag.

```
<!DOCTYPE html>
<HTML>
<HEAD><TITLE>A Simple Table Structure</TITLE>
<STYLE>
TABLE,TH,TD
{
```

```
border:2px solid black;
}
</STYLE>
</HEAD>
<BODY>
<TABLE>
<CAPTION>STUDENT'S DETAILS</CAPTION>
<TR>
<TH>ADMISSION</TH>
<TH>NAME</TH>
<TH>TOTAL MARKS</TH>
</TR>
<TR>
<TD>2016/0256</TD>
<TD>Aadya Kaushal </TD>
<TD>589</TD>
</TR>
<TR>
<TD>2017/0865</TD>
<TD>Shweta Kaushal </TD>
<TD>545</TD>
</TR>
</TABLE>
</BODY>
</HTML>
```

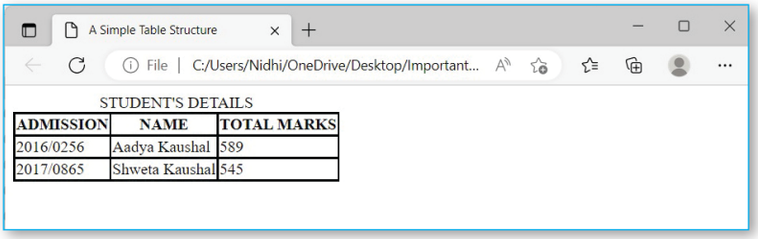


BORDER-COLLAPSE PROPERTY

The **border-collapse** property in the **<style>** tag is used to create a single border or separated for the table cells.

Property	Value	Description
border-collapse	separate	Applies separate border for each cell
	collapse	Applies single border for each cell

```
<!DOCTYPE html>
<HTML>
<HEAD>
<TITLE>A Simple Table Structure</TITLE>
<STYLE>
TABLE, TH, TD
{
border:2px solid black;
border-collapse:collapse;
}
</STYLE> </HEAD><BODY><TABLE>
<CAPTION>STUDENT'S DETAILS</CAPTION>
<TR>
   <TH>ADMISSION</TH>
   <TH>NAME</TH>
   <TH>TOTAL MARKS</TH>
</TR>
<TR>
   <TD>2016/0256</TD>
   <TD>Aadya Kaushal</TD>
   <TD>589</TD>
</TR>
<TR>
   <TD>2017/0865</TD>
   <TD>Shweta Kaushal</TD>
   <TD>545</TD>
</TR>
</TABLE>
</BODY>
</HTML>
```



PADDING PROPERTY

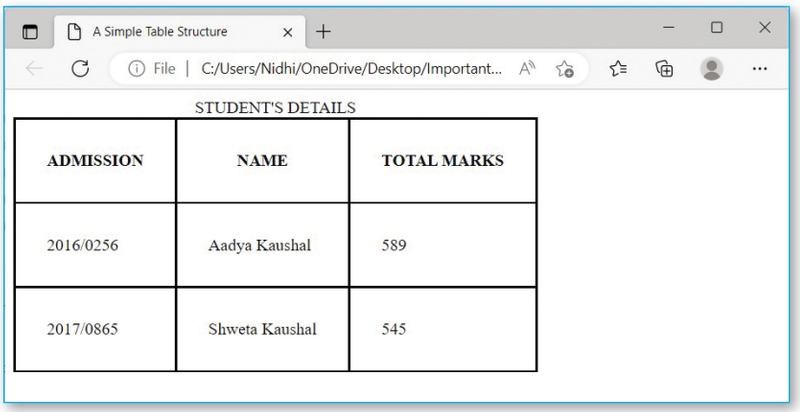
We use **padding** to add space between the border and the contents of a cell. We can use **spacing** to increase the border size or distance between cells. Since the table contents are present in **<TH>** and **<TD>**, the padding property is declared for these two elements in the style tag.

Property	Value	Description
padding	length	It specifies the space between cell contents in cm, px, or pts.
	%	It specifies the space between the cell contents in the percentage of the element in which it is used.

Write HTML code to add space between contents of cell and the border.

```
<!DOCTYPE html>
<HTML>
<HEAD><TITLE>A Simple Table Structure</TITLE>
<STYLE>
TABLE,TH,TD
{
Border:2px solid black;
Border-collapse:collapse;
}
TH, TD
{
padding: 30px;
}
</STYLE>
</HEAD>
<BODY>
<TABLE>
<CAPTION>STUDENT'S DETAILS</CAPTION>
<TR>
   <TH>ADMISSION</TH>
   <TH>NAME</TH>
   <TH>TOTAL MARKS</TH>
</TR>
```

```
<TR>
    <TD>2016/0256</TD>
    <TD>Aadya Kaushal</TD>
    <TD>589</TD>
</TR>
<TR>
    <TD>2017/0865</TD>
    <TD>Shweta Kaushal</TD>
    <TD>545</TD>
</TR>
</TABLE>
</BODY>
</HTML>
```



IMAGES IN HTML

Images enhance the look of a web page and make it attractive. These are used to convey information and catch the attention of website visitors. The most widely used image formats supported by HTML are **GIF, JPEG** and **PNG**. The images on a web page can be inserted using the **<IMG>** tag, which is an empty tag. It has the following attributes:

Attribute	Value	Description
SRC	URL (or location) of the image	SRC stands for source. It specifies the location of the image.
ALT	Text	ALT stands for alternate text. It specifies which alternative text should be displayed if selected image is not displayed.

Except for **SRC** attribute, all other attributes are optional in the **<IMG>** tag.

Syntax of <IMG> tag:

<IMG SRC="URL of the image" ALT="alternate text" WIDTH="500" HEIGHT="600">

ALT = "Alternate Text"

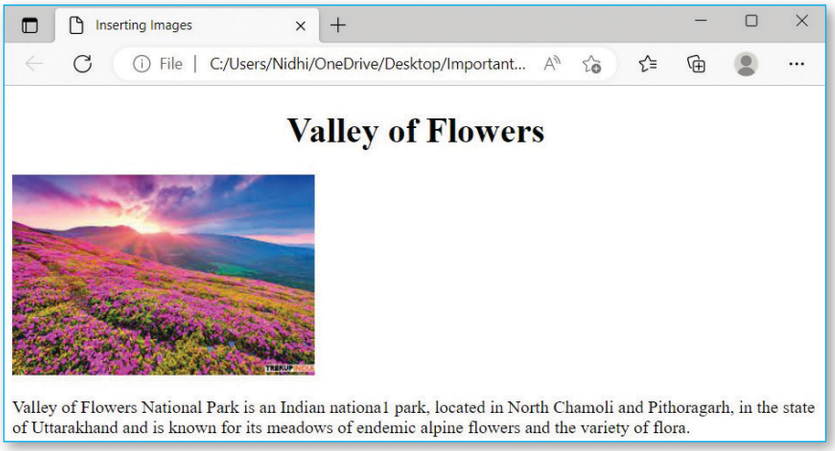
WIDTH = "Value of width in pixels"

HEIGHT = "Value of height in pixels"

Write HTML code for inserting an image on a web page.

```
<!DOCTYPE HTML>
```

```
<HTML>
<HEAD>
<TITLE> Inserting Images </TITLE>
</HEAD>
<BODY>
<H1 STYLE = "text-align:center"> Valley of Flowers </H1>
<IMG SRC = "D:\Valley_of_Flower.jpg">
<P> Valley of Flowers National Park is an Indian nationa1 park, located
in North Chamoli and Pithoragarh, in the state of Uttarakhand and is
known for its meadows of endemic alpine flowers and the variety of flora.
</P>
</BODY>
</HTML>
```



IMAGES WITH CSS

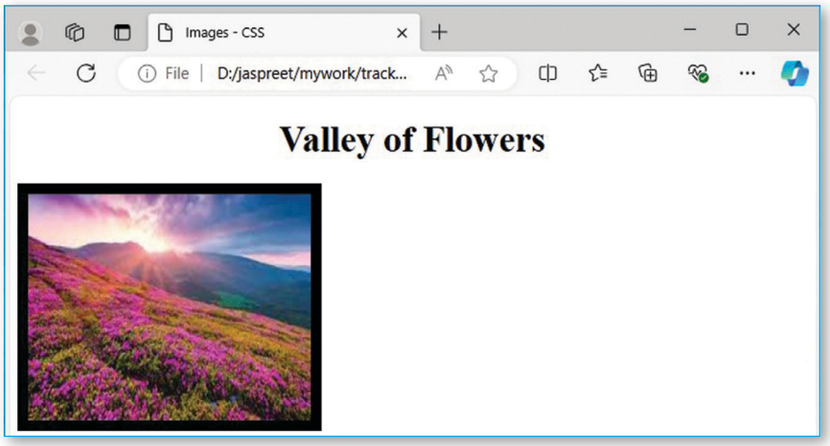
We can use CSS to control the display of the image. To control the display of the image we can set the following image properties using CSS:

- **Border:** To set the width of an image border.
- **Height:** To set the height of an image.
- **Width:** To set the width of an image.

Write HTML code to set properties of an image using CSS.

```
<!DOCTYPE HTML>
<HTML>
<HEAD>
<TITLE> Images - CSS </TITLE>
</HEAD>
```

```
<BODY>
<H1 STYLE = "text-align:center">Valley of Flowers </H1>
<IMG STYLE = "Border:10px Solid Black; Height:200px; Width:250px;" SRC
= "D:\Valley_of_Flower.jpg" >
<P> Valley of Flowers National Park is an Indian national park, located
in North Chamoli and Pithoragarh, in the state of Uttarakhand and is
known for its meadows of endemic alpine flowers and the variety of flora.
</P>
</BODY>
</HTML>
```



HYPERLINK IN HTML

A website is a collection of web pages that are interlinked with each other and contain related information. These web pages are linked with the help of a feature of HTML called a **hyperlink**. A hyperlink is generally an underlined text that, when clicked will take you to another web page. Generally, hyperlinks are seen in blue colour. HTML allows us to create two types of linking which are:

- **Interlinking (Local):** The process of linking a particular section of the same web page is called interlinking. In this case, the hyperlink and the linked section appear on the same web page. Hence, interlinking is also known as internal linking.
- **Intralinking (Global):** The process of linking a web page to another web page of the same website or another website is called intralinking. It is also known as external linking.

CREATING LINKS

To create a link, we use the **<A>** tag (**A** stands for anchor), thus it is called an **anchor tag** or a **link tag**. An anchor tag is a container tag used with the **HREF** attribute (which stands for **Hypertext Reference)** to specify the destination of the link.

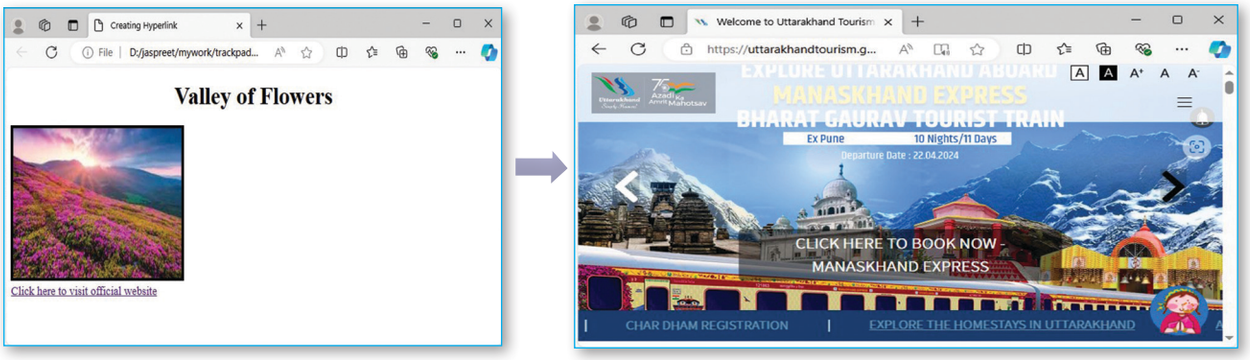
Syntax to create a hyperlink:

<A HREF = "destination URL"> Link Text </A>

Links can be text or images. When a user hovers the mouse pointer over a link, the pointer takes the shape of a pointing hand, indicating the presence of an active link. Clicking on a hyperlink takes us to a web page that contains more information about it. The address of the web page is specified in the **HREF** attribute.

Write HTML code to create a text hyperlink on a web page.

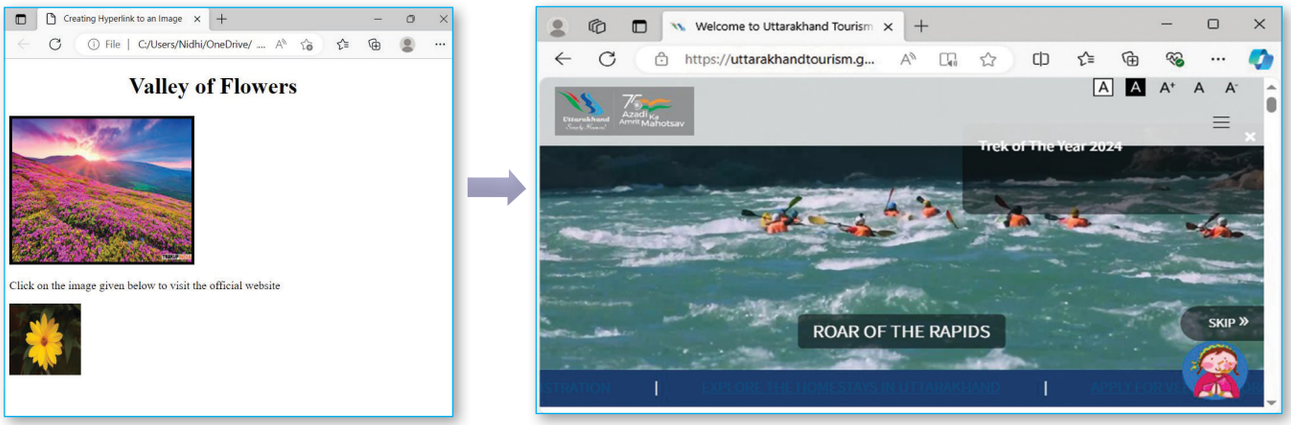
```
<!DOCTYPE HTML>
<HTML>
<HEAD>
<TITLE> Creating Hyperlink </TITLE>
</HEAD>
<BODY>
<H1 STYLE = "text-align:center">Valley of Flowers </H1>
<IMG Style = "Border:4px Solid Black; Height:200px; Width:250px;"
src = "D:\Valley_of_Flower.jpg" >
<br>
<A HREF = "https://uttarakhandtourism.gov.in/destination/valley-of-
flowers">
Click here to visit official website </A>
</BODY>
</HTML>
```



Write HTML code to create a hyperlink on an image.

```
<!DOCTYPE HTML>
<HTML>
<HEAD>
<TITLE> Creating Hyperlink to an Image </TITLE>
</HEAD>
<BODY>
```

```
<H1 STYLE = "text-align:center">Valley of Flowers </H1>
<IMG Style = "Border:4px Solid Black; Height:200px; Width:250px;"
src = "D:\Valley_of_Flower.jpg">
<br>
<P> Click on the image given below to visit the official website</P>
<A HREF = "https://uttarakhandtourism.gov.in/destination/valley-of
flowers">
<IMG Style = "Height:100px; Width:100px;" SRC = "E:/YellowFlower.jpg">
</A>
</BODY>
</HTML>
```



The link to the image is displayed on the web browser.

HYPERLINK WITH CSS

We can set the following properties of a hyperlink using CSS:

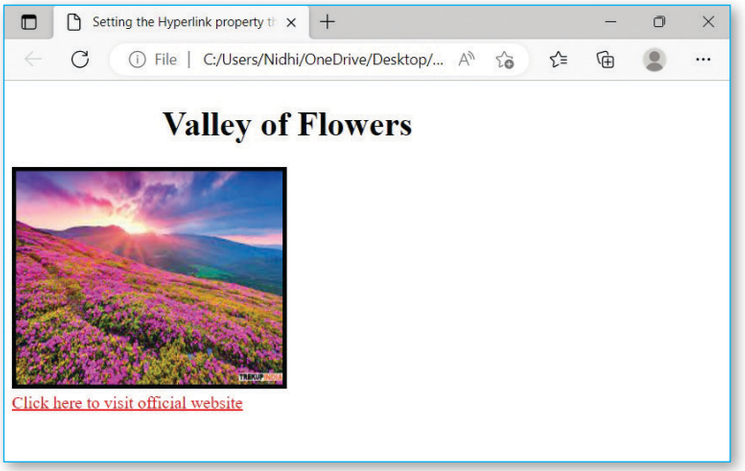
- **a:link** → This property signifies the unvisited hyperlinks.
- **a:visited** → This property signifies visited hyperlinks.
- **a:hover** → This property signifies a hyperlink on which the user's mouse is hovering.
- **a:active** → This property signifies a hyperlink on which the user is currently clicking.

These properties are usually specified in the header part of the HTML document. But, **a:hover** property must be specified after **a:link** and **a:visited** in the CSS definition to make it effective and **a:active** is specified after **a:hover** in the CSS definition.

HTML codes to set the hyperlink properties using CSS:

```
<!DOCTYPE HTML>
<HTML>
   <HEAD>
```

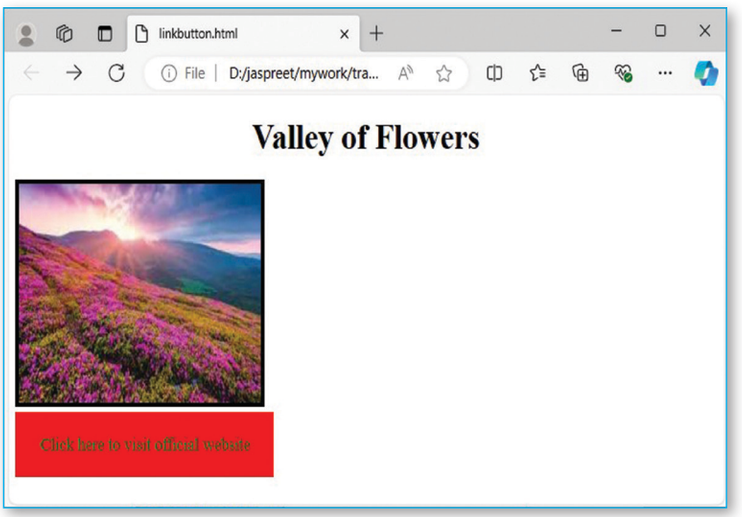
```
   <STYLE>
   /*Unvisited Link */
   A:Link {Color: Red}
   /*Visited Link */
   A:Visited {Color: Green}
   /*Mouse over Link */
   A:Hover {Color: hotpink}
   /*Selected Link */
   A:Active {Color: Blue}
   </STYLE>
   </HEAD>
<BODY>
   <H1 STYLE = "text-align:center">Valley of Flowers </H1>
<IMG STYLE = "border:4px solid black; height:200px; width:250px;"
SRC = "D:\Valley_of_Flower.jpg" >  <br>
<A HREF = "https://uttarakhandtourism.gov.in/destination/valley-of-
flowers">
Click here to visit official website </A>
</BODY>
</HTML>
```



LINKS AS BUTTONS

CSS properties allow us to display links as buttons. HTML codes display links as buttons:

```
<!DOCTYPE HTML>
<HTML>
   <HEAD>
   <STYLE>
   a:link, a:visited {
   background-color: red;
   color: green;
   padding: 20px 25px;
   text-align: center;
   text-decoration: none;
   display: inline-block;
   }
   </STYLE>
   </HEAD>
<BODY>
   <H1 STYLE = "text-align:center">Valley of Flowers </H1>
<IMG Style = "Border:4px Solid Black; Height:200px; Width:250px;"
src = "D:\Valley_of_Flower.jpg" >
```



```
      <br>
<A  HREF  =  "https://uttarakhandtourism.gov.in/destination/valley-of-
flowers">
Click here to visit official website </A>
</BODY>
</HTML>
```

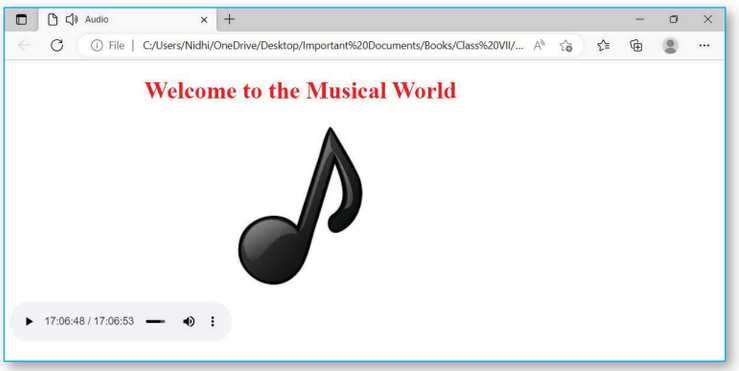
EMBEDDING AUDIO AND VIDEO

The HTML5 **<AUDIO>** and **<VIDEO>** tags allow us to add media to a website. To add media, we are required to set the **SRC** attribute to identify the media source and include the controls attribute so the user can play and pause the media whenever required. The AUTOPLAY attribute is used to play audio/video automatically when the web page opens.

EMBEDDING AUDIO

We use **<audio>** tag to embed sound content in an HTML document.

```
<!DOCTYPE HTML>
<HTML>
<HEAD>
<TITLE> Audio </TITLE>
</HEAD>
<BODY>
<H1 STYLE = "text-align:center; color:red">
Welcome to the Musical World
</H1>
<P STYLE = "text-align:center">
<IMG  SRC  =  "D:\MusicalNote.
Jpg">
</P>
<AUDIO  SRC  =  "D:\flute.mp3"
AUTOPLAY CONTROLS>
</AUDIO>
</BODY>
</HTML>
```

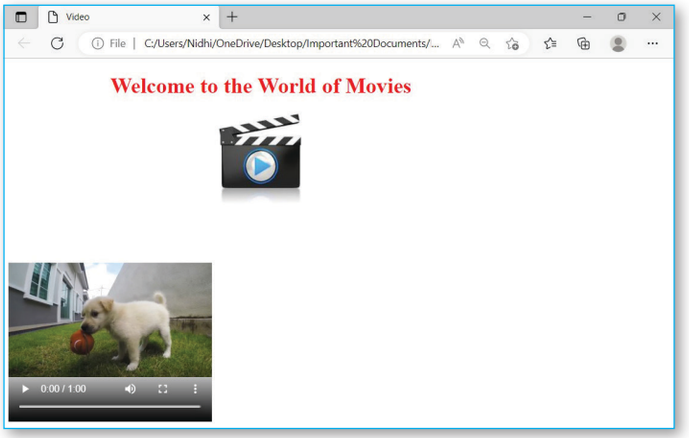


EMBEDDING VIDEO

We use **<VIDEO>** tag to embed video in an HTML document.

```
<!DOCTYPE HTML>
```

```
<HTML>
<HEAD>
<TITLE> Video </TITLE>
</HEAD>
<BODY>
<H1 STYLE = "text-align:center;
color:red">
Welcome to the World of Movies
</FONT></H1>
<P STYLE = "text-align:center">
<IMG SRC = "D:\VideoLogo.Png">
</P>
<VIDEO SRC = "D:\Rain.mp4" Width = "300" Height = "300" AUTOPLAY CONTROLS>
</VIDEO>
</BODY>
</HTML>
```



The Web browser displays the video and starts playing it. In some browsers, you need to click on the play button to start the video.

The <audio> and <video> tags might not work in some browsers that do not support HTML5 and the file formats.

WAV, MP3, and **OGG** are the file formats currently supported to embed audio.

MP4, WebM, and **OGG** are the file formats currently supported to embed video.

FRAMES AND iFRAMES

Frames allow us to divide the web page into several independent parts or panes. The frames work as an independent window allowing multiple views at one time. These also help in making one-part static while allowing other parts to change as per our commands. For example, when we click on the refresh button, we can reload one frame without having to reload the entire web page. A collection of frames in a web browser is called a **frameset.**

CREATING FRAMES

In HTML5, Frames(inline) are created using <iframe> tag, which embeds an independent HTML document into the current document.

Syntax:

<iframe src=”url” title=”description”></iframe>

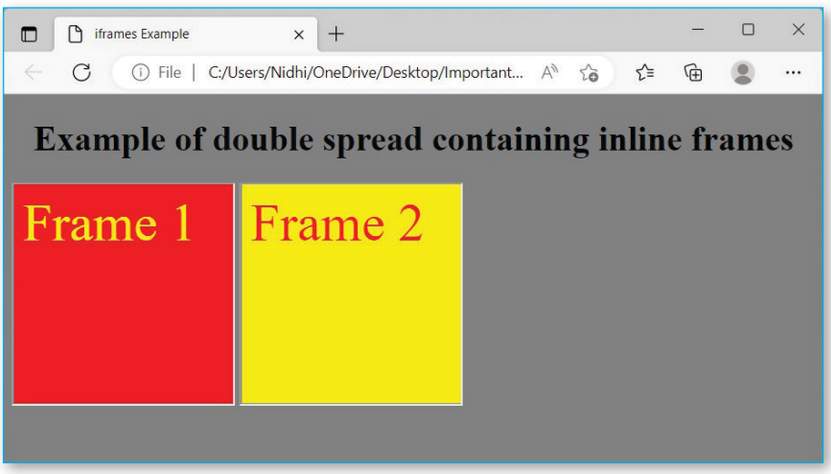
We use the **src** attribute to specify the URL of the document that contains the inline frame and the **title** attribute to describe the content of the iframe.

Other attributes of <iframe> tag are:

- **Height:** It is used to control the height of the iframe and its values can be specified in pixel or percentage (**px** or **%**).
- **Width:** It is used to control the width of the iframe and its values can be specified in pixel or percentage (**px** or **%**).

Example:

```
<!DOCTYPE HTML>
<HTML>
   <HEAD>
   <TITLE> iframes Example </TITLE>
   <STYLE>
   Body {Background-Color:Grey}
   </STYLE>
   </HEAD>
<BODY>
<H1 STYLE = "text-align:center"> Example of double spread containing inline frames </H1>
<iframe src = "Frame1.html" Height = "200" Width = "200"> </iframe>
<iframe src = "Frame2.html" Height = "200" Width = "200"> </iframe>
</BODY>
</HTML>
```



To run the provided HTML code successfully, you will need two additional HTML files that the **iframe** elements will load. These files are specified by the **src** attributes in the **iframe** tags.

- **Frame1.html:** This is the file that will be loaded into the first iframe.
- **Frame2.html:** This is the file that will be loaded into the second iframe.

iFRAMES AND CSS

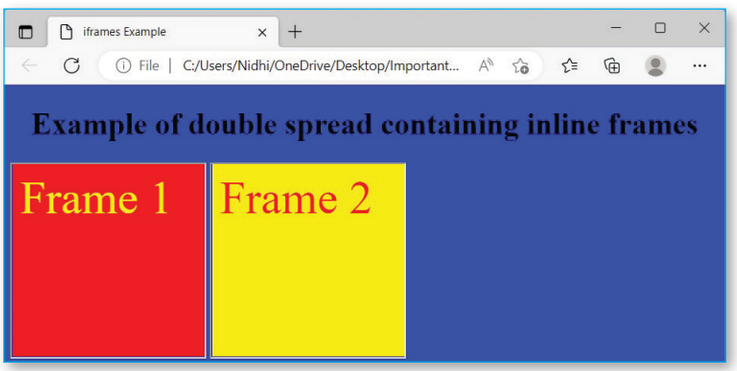
Let's learn the properties of CSS to make frames attractive.

HEIGHT AND WIDTH PROPERTIES

We can also use the **style** attribute and use CSS height and width properties to control the frames.

Example:

```
<!DOCTYPE HTML>
<HTML>
<HEAD>
<TITLE> iframes Example </TITLE>
<STYLE>
Body {Background-Color:Blue}
</STYLE>
</HEAD>
<BODY>
<H1 STYLE = "text-align:center"> Example of double spread containing
inline frames </H1>
<iframe src = "Frame1.html" Style="Height:200px;Width:200px;" Title =
"iframe Example"> </iframe>
<iframe src = "Frame2.html" Style="Height:200px;Width:200px;" Title =
"iframe Example"> </iframe>
</BODY>
</HTML>
```



The web browser displays the inline frames.

BORDER PROPERTY

We can display frames with or without borders by applying the CSS property – Border.

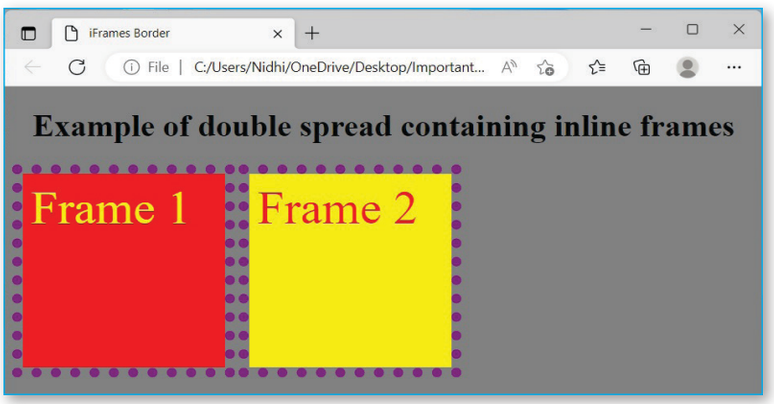
Border properties can be applied in the following ways:

- **border-width:value**
  Where value = thin, thick, medium, or numeric values specified in pixels.

- **border-style:value**
  Where value can be specified as none, hidden, dotted, dashed, solid, double, groove, ridge, inset, or outset.
- **border-color: value**
  Where value can be specified as the name of the colours or in hexadecimal code.

Example:

```
<!DOCTYPE HTML>
<HTML>
<HEAD>
<TITLE> iFrames Border </TITLE>
<STYLE>
Body {Background-Color:Grey}
iframe{border-width:10px;border-style:dotted;border-color:purple;}
</STYLE>
</HEAD>
<BODY>
<H1 STYLE = "text-align:center"> Example of double spread containing inline frames </H1>
<iframe src = "Frame1.html" Style="Height:200px;Width:200px;" Title = "iframe Example"> </iframe>
<iframe src = "Frame2.html" Style="Height:200px;Width:200px;" Title = iframe Example"> </iframe>
</BODY>
</HTML>
```



FORMS IN HTML

HTML forms are used to collect information from the site visitors. Different types of forms can be created in HTML like sign up/register, application form, feedback form, query form, etc. The three important components of a form in HTML are: a **<FORM>** tag, the input controls and buttons.

The **<FORM>** tag is used to define a form in an HTML document. It is placed within the **<BODY>** tag. While designing and building a form, we use different input elements that allow site visitors to type or select information. These elements can include text fields, radio buttons, checkboxes, etc. All forms must include a **Submit** button. When the site visitor fills in the information, then, it should be sent to the webserver for processing after the **Submit** button is clicked.

CREATING FORMS

The syntax for creating a form in HTML is:

<FORM NAME = "Name of the form" **ACTION =** "Script URL" **METHOD = "GET/POST">**

...(Input Elements)

</FORM>

- **ACTION:** This attribute specifies what action should be taken once the **SUBMIT** button is clicked by the user. The Script URL specifies the location where the data collected by the form is submitted. It also produces a response in return.
- **METHOD**: This attribute specifies what will happen when the form is submitted. Two values can be assigned to the **METHOD** attribute, **Get** and **Post.**
  - ★ **Get:** It is the default value for the METHOD attribute. The form data is sent as the URL variable, i.e., it appends the form data into the URL. Get value should not be used for sensitive information.
  - ★ **Post:** The form data is sent as an HTTP post transaction and form data is not appended to the URL. This value is used for submitting sensitive information.

INPUT CONTROLS

Input controls are the elements that are used to accept input from the site visitors. All the controls have to be filled in before submitting the form. Now, learn the various types of input controls.

Text Input Controls

There are three types of text input controls used on forms:

Single-line text input control

This control is used to enter single-line inputs. It is used as a search box or name. The two attributes associated with single-line text input controls are: **SIZE** and **MAXLENGTH.** The **SIZE** attribute defines the size of the text box and **MAXLENGTH** defines the number of characters the textbox can hold.

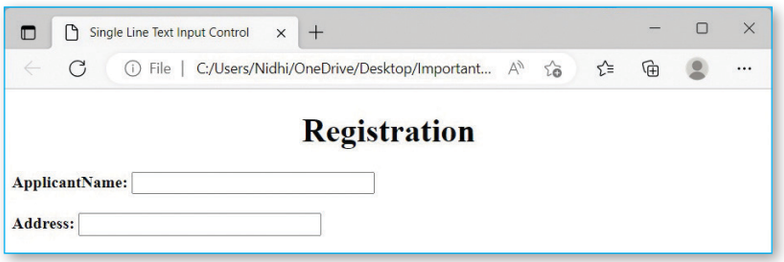
Syntax of single-line text input control:

<INPUT TYPE = "TEXT" NAME = "The word that describes the textbox" SIZE = "The width you want to use for the text box" MAXLENGTH = "Maximum number of characters">

Write HTML codes for creating a single-line text input control:

```
<!DOCTYPE html>
```

```
<HTML>
<HEAD>
<TITLE> Single Line Text Input Control </TITLE>
</HEAD>
<BODY>
<FORM NAME = "Registration Form" METHOD = "POST" ACTION =
"mailto:info@orangeeducation.in">
<H1 STYLE = "text-align:center"> Registration </H1>
<B>ApplicantName:</B>
<INPUT TYPE = "TEXT" NAME = "APPLI_NAME" SIZE = "30" MAXLENGTH = "20">
<BR> <BR>
<B>Address: </B>
<INPUT TYPE = "TEXT" NAME = "ADDRESS" SIZE = "30" MAXLENGTH = "40">
</FORM>
</BODY>
</HTML>
```



Password input control

This control is same as the text input control, but it masks the characters as soon as the user enters them. The characters entered/typed appear as * instead of normal text.

Syntax of password input control:

<INPUT TYPE = "Password" NAME = "The word that describes the textbox" SIZE = "The width you want to use for the text box" MAXLENGTH = "Maximum number of characters">

Multi-line text input control

This control allows us to enter multiple lines. The <TEXTAREA> tag contains the ROWS and COLS attributes, where ROWS attribute indicates the number of rows the text area should accommodate and COLS attribute indicates the width area.

Syntax of multi-line text input control:

<TEXTAREA NAME = "The word that describes the text area" ROWS = "Number of rows the text box should accommodate" COLS = "Width of the text area"></TEXTAREA>

Checkbox Input Control

This control is used when multiple options from a group are required to be selected by the site-visitor.

When selected, the checkbox is marked with a tick mark. While defining checkboxes, we need to specify the following:

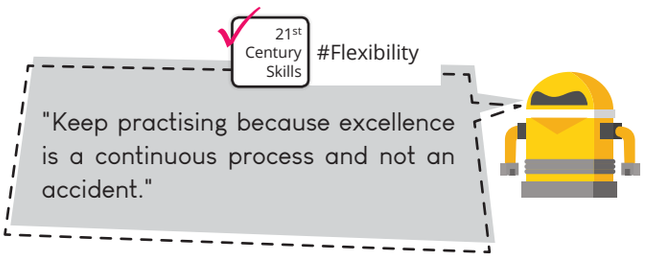
- The group name should be specified for all the checkboxes by using the **NAME** attribute.
- Each checkbox should be specified with a word describing the purpose of the checkbox which is done with the help of the **VALUE** attribute.
- The text that needs to be displayed beside the checkbox should be specified.

Syntax of Checkbox input control:

<INPUT TYPE = "CHECKBOX" NAME = "A Word describing the group name" VALUE = "A word that describes the checkbox">

Radio Input Control

This control is used when one out of the multiple options from a group is required to be selected by the site visitor. Only the selected radio button in a group is filled. While defining checkboxes, we need to specify the following:



- The group name should be specified for all the radio buttons by using the **NAME** attribute.
- Each radio button should be specified with a word describing the purpose of the radio button which is done with the help of the **VALUE** attribute.
- The text that is needed to be displayed beside the radio button should be specified.

Syntax of radio input control:

<INPUT TYPE = "RADIO" NAME = "A Word describing the group name" VALUE = "A word that describes the radio button">

Clickable Buttons

This control creates a button that acts when clicked. The form has two types of buttons:

- **Submit:** We can create a Submit button to send all the form data to the server. **Syntax of submit button:**
  <INPUT TYPE = "SUBMIT" NAME = "Name of the button" VALUE = "Text you want to display on the button">
- **Reset:** We can create a reset button to reset the values of all the controls to the initial values in the form.

Syntax of reset button:

<INPUT TYPE = "RESET" NAME = "Name of the button" VALUE = "Text you want to display on the button">

Write HTML codes to create a form.

```
<!DOCTYPE html>
<HTML>
```

```
<HEAD> <TITLE> Registration Form </TITLE> </HEAD>
<BODY STYLE="background-color:lightpink">
<FORM NAME="Registration From" METHOD="POST" ACTION="mailto:abc@gmail.com">
<H1 STYLE = "text-align:center"> Registration Form </H1>
<B>Applicant Name:</B>
<INPUT TYPE="TEXT" NAME="APPLI_NAME" SIZE="30" MAXLENGTH="20"> <BR> <BR>
<B>Address: </B>
<INPUT TYPE="TEXT" NAME="Address" SIZE="30" MAXLENGTH="40"> <BR> <BR>
<B> State: </B>
<INPUT TYPE="TEXT" NAME="State" SIZE="30" MAXLENGTH="40">
<B> City: </B>
<INPUT TYPE="TEXT" NAME="City" SIZE="30" MAXLENGTH="40">
<BR> <BR>
<B> Gender: </B>
<INPUT TYPE="RADIO" NAME="Gender" VALUE="M" > Male
<INPUT TYPE="RADIO" NAME="Gender" VALUE="F" CHECKED > Female
<BR> <B> Username (for this website):</B>
<INPUT TYPE="TEXT" NAME="Username" SIZE="30" MAXLENGTH="40">
<BR> <BR> <B> Password (for this website):</B>
<INPUT TYPE="Password" NAME="PWD" SIZE="30" MAXLENGTH="20"> <BR>
<B>Area of Interest: </B> <BR>
<INPUT TYPE= "CHECKBOX" NAME= "INTEREST_AREA" VALUE= "Spritual"> Spritual
<INPUT TYPE= "CHECKBOX" NAME= "INTEREST_AREA" VALUE= "Adventure"
CHECKED> Adventure
<INPUT TYPE= "CHECKBOX" NAME= "INTEREST_AREA" VALUE= "Wildlife">
Wildlife
<BR> <BR>
<B>Comment: </B>
<BR>
<TEXTAREA
NAME="Comment"
ROWS="10"
COLS="60">
Type your comments
here…
</TEXTAREA> <BR>
<INPUT
TYPE="Submit"
VALUE="Submit">
</FORM>
</BODY>
</HTML>
```