

HTML (Hyper Text Markup Language)

Introduction

HTML stands for Hyper Text Markup Language, which is the most widely used language on Web to develop web pages. HTML was created by Berners-Lee in late 1991 but "HTML 2.0" was the first standard HTML specification which was published in 1995. HTML 4.01 was a major version of HTML and it was published in late 1999. Though HTML 4.01 version is widely used but currently we are having HTML-5 version which is an extension to HTML 4.01, and this version was published in 2012.

HTML stands for **Hypertext Markup Language**, and it is the most widely used language to write Web Pages.

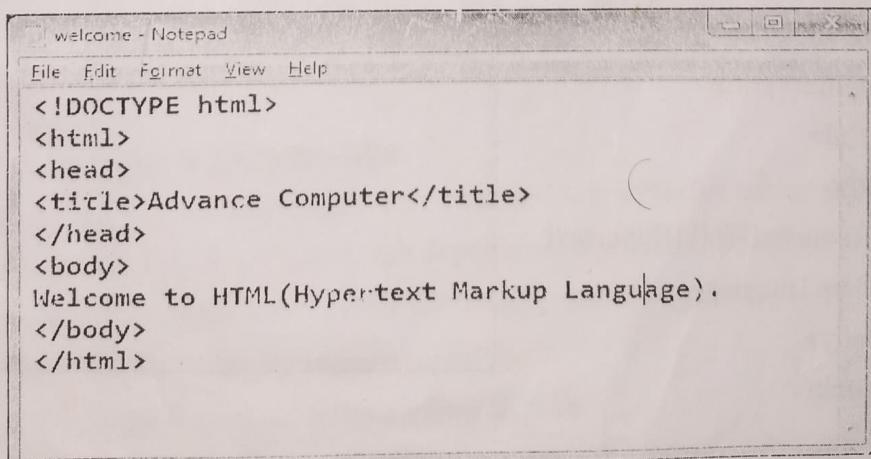
- Hypertext refers to the way in which Web pages (HTML documents) are linked together. Thus, the link available on a webpage is called Hypertext.
- As its name suggests, HTML is a Markup Language which means you use HTML to simply "mark-up" a text document with tags that tell a Web browser how to structure it to display.
- To write HTML Document use Notepad Software and save with Filename.html (Example: welcome.html).

HTML Document Structure

HTML tags are element names surrounded by angle brackets:

<Tag Name> Content goes here...</ Tag Name>

- HTML tags normally come in pairs like <p> and </p>
- The first tag in a pair is the **opening tag**, the second tag is the **closing tag**
- The end tag is written like the start tag, but with a **forward slash** inserted before the tag name



```
welcome - Notepad
File Edit Format View Help
<!DOCTYPE html>
<html>
<head>
<title>Advance Computer</title>
</head>
<body>
Welcome to HTML(HyperText Markup Language).
</body>
</html>
```

**Sr.
No.**

Tags & Description

1 <!DOCTYPE html>

The <!DOCTYPE html> declaration tag is used by the web browser to understand the version of the HTML used in the document. Current version of HTML is 5.

2 <html>

This tag encloses the complete HTML document and mainly comprises of document header which is represented by <head>...</head> and document body which is represented by <body>...</body> tags.

3 <head>

This tag represents the document's header which can keep other HTML tags like <title>, <link>, <script>, <style> etc.

4 <title>

The <title> tag is used inside the <head> tag to mention the document title.

5 <body>

This tag represents the document's body which keeps other HTML tags like <h1>, <div>, <p> etc.

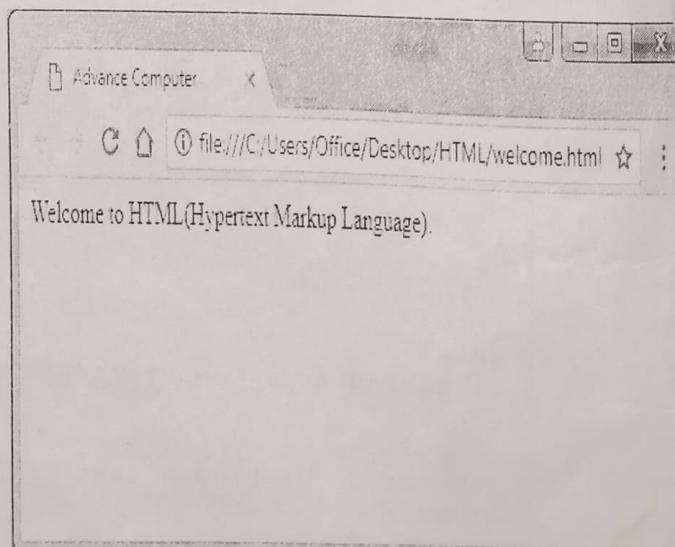
Write HTML Using Notepad

Step 1: Open Notepad (PC)

Open Start > Programs > Accessories > Notepad

Step 2: Write the HTML Code.

```
<!DOCTYPE html>
<html>
<head>
<title>Advance
Computer</title>
</head>
<body>
Welcome to HTML(Hypertext
Markup Language).
</body>
</html>
```



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Step 3: Save the HTML Page

Save the file on your computer. Select File > Save as in the Notepad menu.

Name the file "welcome.html".

Step 4: View the HTML Page in Your Browser

Open the saved HTML file in your favorite browser (double clicks on the file, or right-click - and choose "Open with").

The result will look much like above picture.

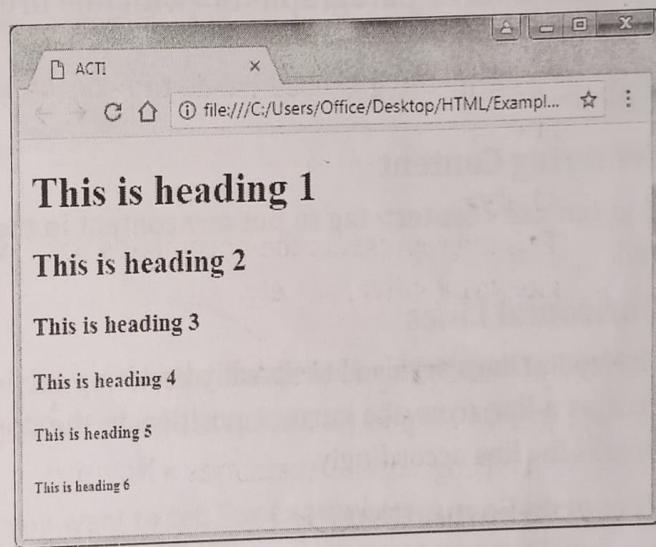
HTML Basic Tags with Examples

Heading Tags

Any document starts with a heading. You can use different sizes for your headings. HTML also has six levels of headings, which use the elements **<h1>**, **<h2>**, **<h3>**, **<h4>**, **<h5>**, and **<h6>**. While displaying any heading, browser adds one line before and one line after that heading.

Example 1

```
<!DOCTYPE html>  
<html>  
<head>  
<title>ACTI</title>  
</head>  
<body>  
<h1>This is heading 1</h1>  
<h2>This is heading 2</h2>  
<h3>This is heading 3</h3>  
<h4>This is heading 4</h4>  
<h5>This is heading 5</h5>  
<h6>This is heading 6</h6>  
</body>  
</html>
```



Note: Use HTML headings for headings only. Don't use headings to make text **BIG** or **bold**.

HTML Paragraphs & Line Breaks

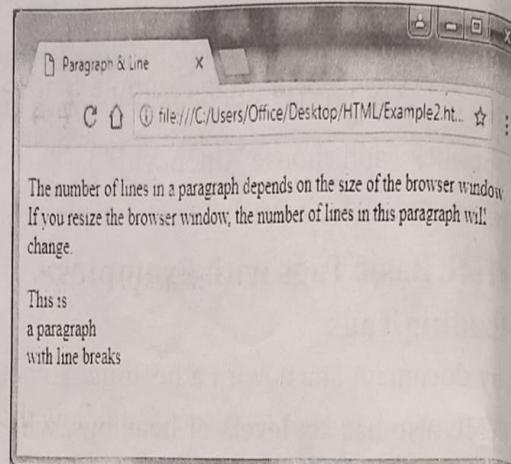
- The **<p>** tag offers a way to structure your text into different paragraphs.
- The number of lines in a paragraph depends on the size of the browser window. If you resize the browser window, the number of lines in this paragraph will change.
- The HTML **
** element defines a **line break**.

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- Use
 if you want a line break (a new line) without starting a new paragraph:

Example 2 ✓

```
<!DOCTYPE html>
<html>
<head>
<title>Paragraph & Line</title>
</head>
<body>
<p>The number of lines in a paragraph depends on the size of the browser window. If you resize the browser window, the number of lines in this paragraph will change.</p>
<p>This is<br>a paragraph<br>with line breaks</p>
</body>
</html>
```



Centering Content

You can use <center> tag to put any content in the center of the page or any table cell.

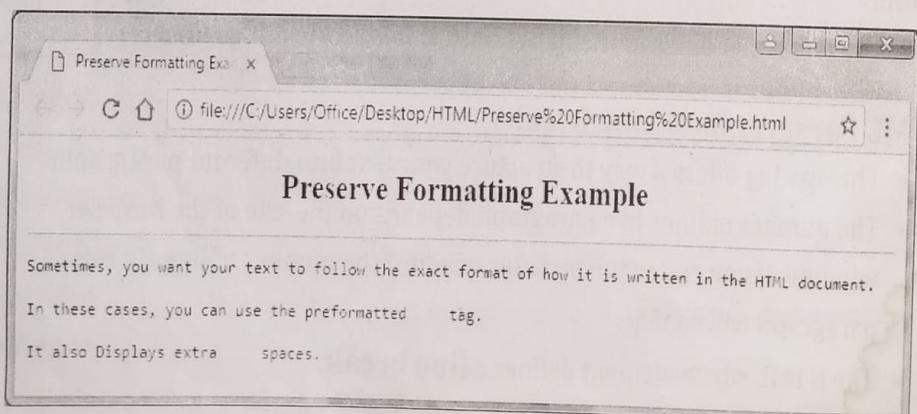
Horizontal Lines

Horizontal lines are used to visually break-up sections of a document. The <hr> tag creates a line from the current position in the document to the right margin and breaks the line accordingly.

Preserve Formatting ✓

Sometimes, you want your text to follow the exact format of how it is written in the HTML document. In these cases, you can use the preformatted tag <pre>.

Any text between the opening <pre> tag and the closing </pre> tag will preserve the formatting of the source document.



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Example 3

```
<!DOCTYPE html>
<html>
<head>
<title>Preserve Formatting Example</title>
</head>
<body>
<center>
<h2>Preserve Formatting Example</h2>
</center><hr>
<pre>
```

Sometimes, you want your text to follow the exact format of

How it is written in the HTML document.

In these cases, you can use the preformatted `pre` tag.

It also displays extra spaces.

```
</pre>
</body>
</html>
```

HTML - Attributes

An attribute is used to define the characteristics of an HTML element and is placed inside the element's opening tag. All attributes are made up of two parts – a **name** and a **value**.

- The **name** is the property you want to set. For **example**, the paragraph `<p>` element in the example carries an attribute whose name is **align**, which you can use to indicate the alignment of paragraph on the page.
- The **value** is what you want the value of the property to be set and always put within quotations. The below example shows three possible values of align attribute: **left**, **center** and **right**.

Core Attributes

The four core attributes that can be used on the majority of HTML elements (although not all) are –

- Id
- Title
- Class
- Style

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The Id Attribute

The **id** attribute of an HTML tag can be used to uniquely identify any element within an HTML page. There are two primary reasons that you might want to use an **id** attribute on an element –

- If an element carries an **id** attribute as a unique identifier, it is possible to identify just that element and its content.
- If you have two elements of the same name within a Web page (or style sheet), you can use the **id** attribute to distinguish between elements that have the same name.

Example

```
<p id = "html">This para explains what is HTML</p>
<p id = "css">This para explains what is Cascading Style Sheet</p>
```

The title Attribute

The **title** attribute gives a suggested title for the element.

Example

```
<h3 title = "Hello HTML!">Titled Heading Tag Example</h3>
```

The class Attribute

The **class** attribute is used to associate an element with a style sheet, and specifies the class of element.

The style Attribute

The **style** attribute allows you to specify Cascading Style Sheet (CSS) rules within the element.

Example

```
<p style = "font-family:arial; color:#FF0000;">Some text...</p>
```

HTML - Formatting

HTML also defines special **elements** for defining text with a special **formatting**. Different formatting tags are given below.

Bold Text

Anything that appears within **...** element, is displayed in bold style.

Italic Text

Anything that appears within **<i>...</i>** element is displayed in italicized.

Underlined Text

Anything that appears within **<u>...</u>** element, is displayed with underline

Strike Text

Anything that appears within **<strike>...</strike>** element is displayed with strikethrough

Superscript Text

The content of a **^{...}** element is written in superscript. The characters are displayed half a character's height above the other characters.

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Subscript Text

The content of a `_{...}` element is written in subscript. The characters are displayed half a character's height beneath the other characters.

Inserted Text

Anything that appears within `<ins>...</ins>` element is displayed as inserted text.

Deleted Text

Anything that appears within `...` element, is displayed as deleted text.

Smaller Text

The content of the `<small>...</small>` element is displayed one font size smaller than the rest of the text surrounding it.

Marked Text

The content of the `<mark>...</mark>` element is displayed as marked/highlighted text.

Strong Text

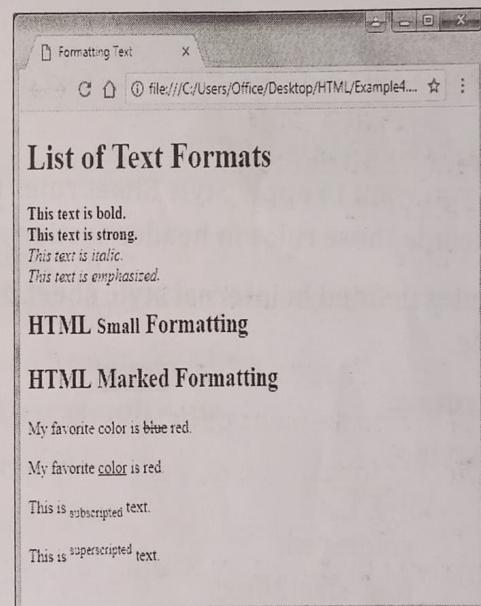
The content of the `...` element is displayed important text.

EM Text

The content of the `...` element is displayed emphasized text.

Example 4 ✓

```
<!DOCTYPE html>
<html>
<head>
<title>Formatting Text</title>
</head>
<body>
<h1 style="color:blue;">List of Text
Formats</h1>
<b>This text is bold.</b><br>
<strong>This text is strong.</strong><br>
<i>This text is italic.</i><br>
<em>This text is emphasized.</em>
<h2>HTML <small>Small</small> Formatting</h2>
<h2>HTML <mark>Marked</mark> Formatting</h2>
<p>My favorite color is <del>blue</del> red.</p>
<p>My favorite <ins>color</ins> is red.</p>
<p>This is <sub>subscripted</sub> text.</p>
<p>This is <sup>superscripted</sup> text.</p>
</body>
</html>
```



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The HTML Style Sheet

Cascading Style Sheets (CSS) provide easy and effective alternatives to specify various attributes for the HTML tags. Using CSS, you can specify a number of style properties for a given HTML element. Each property has a name and a value, separated by a colon (:). Each property declaration is separated by a semi-colon (;).

You can use CSS in three ways in your HTML document -

- **External Style Sheet** – Define style sheet rules in a separate .css file and then include that file in your HTML document using HTML <link> tag.
- **Internal Style Sheet** – Define style sheet rules in header section of the HTML document using <style> tag.
- **Inline Style Sheet** – Define style sheet rules directly along-with the HTML elements using style attribute.

External Style Sheet

If you need to use your style sheet to various pages, then it's always recommended to define a common style sheet in a separate file. A cascading style sheet file will have extension as .css and it will be included in HTML files using <link> tag.

Syntax:

```
<link rel = "stylesheet" type = "text/css" href = "/html/style.css">
```

Internal Style Sheet

If you want to apply Style Sheet rules to a single document only, then you can include those rules in header section of the HTML document using <style> tag.

Rules defined in internal style sheet overrides the rules defined in an external CSS file.

Syntax:

```
<style >  
  body {  
    color: red;  
    font-size: 20px;  
  }  
</style>
```

Inline Style Sheet

You can apply style sheet rules directly to any HTML element using style attribute of the relevant tag. This should be done only when you are interested to make a particular change in any HTML element only.

Rules defined inline with the element overrides the rules defined in an external CSS file as well as the rules defined in <style> element.

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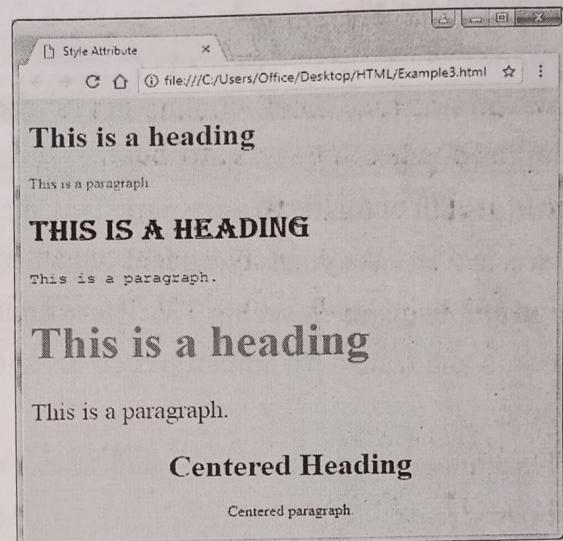
Syntax:

```
<tagname style="property:value;">
```

- Use the **style** attribute for styling HTML elements
- Use **background-color** for background color
- Use **color** for text colors
- Use **font-family** for text fonts
- Use **font-size** for text sizes
- Use **text-align** for text alignment
- Use **text-decoration**: underline;

Example 5

```
<!DOCTYPE html>
<html>
<head>
<title>Style Attribute</title>
</head>
<body style="background-
color:powderblue;">
<h1 style="color:blue;">This is a
heading</h1>
<p style="color:red;">This is a paragraph. </p>
<h1 style="font-family:algerian;">This is a heading</h1>
<p style="font-family:courier;">This is a paragraph.</p>
<h1 style="font-size:300%;color:green;">This is a heading</h1>
<p style="font-size:160%;color:blue;">This is a paragraph.</p>
<h1 style="text-align:center;">Centered Heading</h1>
<p style="text-align:center;">Centered paragraph.</p>
</body>
</html>
```



HTML Quotation Mark and Block quote Elements

When you want to quote a passage from another source, you should put it in between **<blockquote>...</blockquote>** tags.

Text inside a **<blockquote>** element is usually indented from the left and right edges of the surrounding text, and sometimes uses an italic font.

The **<q>...</q>** element is used when you want to add a double quote within a sentence.

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Example 6

```
<!DOCTYPE html>
```

```
<html>
```

```
<head>
```

```
<title>Quotation
```

```
Mark</title>
```

```
</head>
```

```
<body>
```

```
<p>Did you watch
```

```
<q>Spider-Man</q>?
```

```
<p>Here is a paragraph about <q>Joys of City Life</q> </p>
```

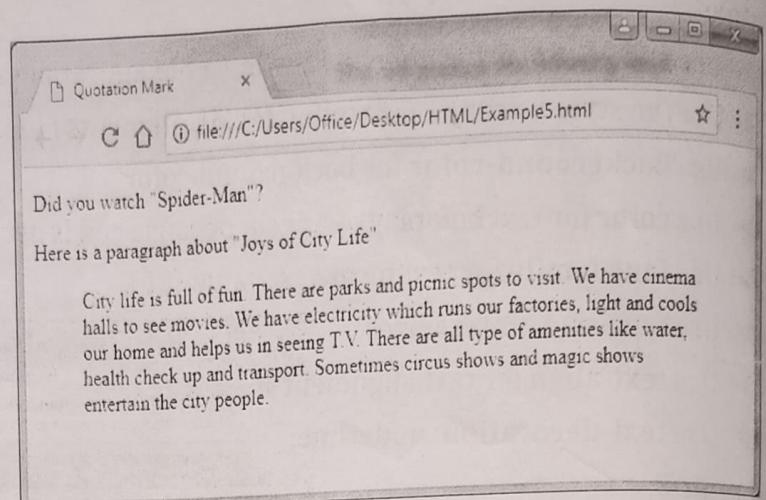
```
<blockquote>
```

City life is full of fun. There are parks and picnic spots to visit. We have cinema halls to see movies. We have electricity which runs our factories, light and cools our home and helps us in seeing T.V. There are all type of amenities like water, health checkup and transport. Sometimes circus shows and magic shows entertain the city people.

```
</blockquote>
```

```
</body>
```

```
</html>
```



HTML Comment Tags

HTML comments are placed in between `<!-- ... -->` tags. So, any content placed within `<!-- ... -->` tags will be treated as comment and will be completely ignored by the browser.

HTML Colors

In HTML, a color can be specified by using a color name, an RGB value, or a HEX value.

Color Names

In HTML, a color can be specified by using a color name: Red, Orange, Yellow, Cyan and Blue etc.

RGB Value

In HTML, a color can also be specified as an RGB value, using this formula: `rgb(red, green, blue)`

For example, `rgb(255,0,0)` is displayed as red, because red is set to its highest value (255) and the others are set to 0.

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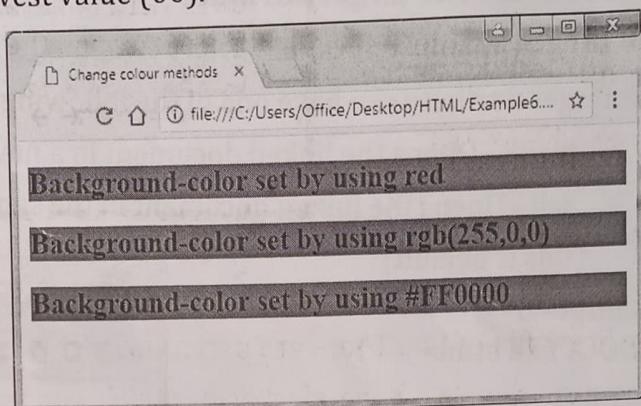
HEX Value

In HTML, a color can also be specified using a hexadecimal value in the form: #RRGGBB, where RR (red), GG (green) and BB (blue) are hexadecimal values between 00 and FF.

For example, #FF0000 is displayed as red, because red is set to its highest value (FF) and the others are set to the lowest value (00).

Example 7 ✓

```
<!DOCTYPE html>
<html>
<head>
<title>Change colour
methods</title>
</head>
<body>
<h2 style="background-color:red;color:blue">
Background-color set by using red
</h2>
<h2 style="background-color:rgb(255,0,0);color:blue">
Background-color set by using rgb(255,0,0)
</h2>
<h2 style="background-color:#FF0000;color:blue">
Background-color set by using #FF0000
</h2>
</body>
</html>
```



HTML Links

A webpage can contain various links that take you directly to other pages and even specific parts of a given page. These links are known as **hyperlinks**. Hyperlinks allow visitors to navigate between Web sites by clicking on words, phrases, and images.

A link is specified using HTML tag **<a>**. This tag is called anchor tag and anything between the opening **<a>** tag and the closing **** tag becomes part of the link and a user can click that part to reach to the linked document. Following is the simple syntax to use **<a>** tag.

```
<a href="url" ... attributes-list>link text</a>
```

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HTML Link Colors

By default, a link will appear like this (in all browsers):

- An unvisited link is underlined and blue
- A visited link is underlined and purple
- An active link is underlined and red

HTML Links - The target attribute

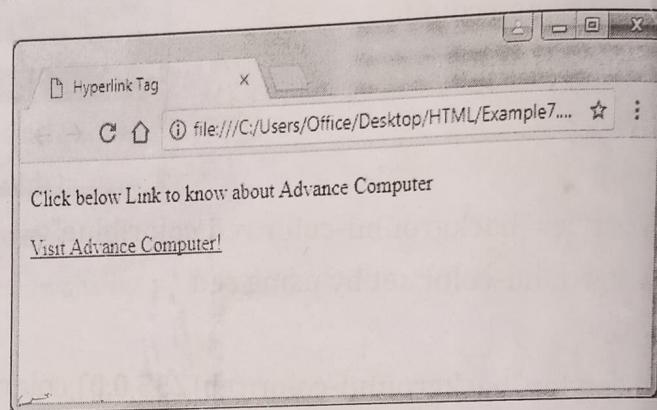
The **target** attribute specifies where to open the linked document.

The target attribute can have one of the following values:

- _blank - Opens the linked document in a new window or tab
- _self - Opens the linked document in the same window/tab as it was clicked
(this is default)

Example 8

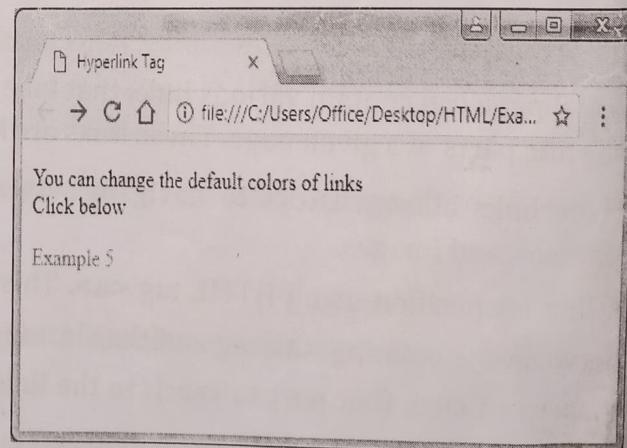
```
<!DOCTYPE html>
<html>
<head>
<title>Hyperlink Tag</title>
</head>
<body>
<p>Click below Link to know about Advance Computer</p>
<a href="http://actidigapahandi.com/" target="_blank">
Visit Advance Computer!</a>
</body>
</html>
```



Example 9

You can change the default colors of links:

```
<!DOCTYPE html>
<html>
<head>
<title>Hyperlink Tag</title>
<style>
a:link {
    color:green;
    background-color: transparent;
    text-decoration: none;
}
a:visited {
```



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```
color: green;  
background-color: transparent;  
text-decoration: none;  
}  
  
a:hover {  
color: red;  
background-color: transparent;  
text-decoration: underline;  
}  
  
a:active {  
color: yellow;  
background-color: transparent;  
text-decoration: underline;  
}  
</style>  
</head>  
<body>  
<p>You can change the default colors of links<br> Click below</p>  
<a href="Example5.html" target="_self">Example 5</a>  
</body></html>
```

HTML Links - Create a Bookmark

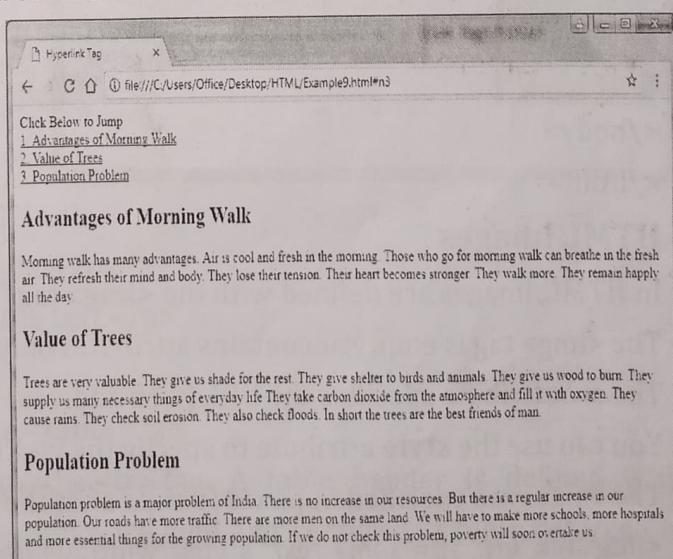
HTML bookmarks are used to allow readers to jump to specific parts of a Web page. Bookmarks can be useful if your webpage is very long.

To make a bookmark, you must first create the bookmark, and then add a link to it.

When the link is clicked, the page will scroll to the location with the bookmark.

Example 10

```
<!DOCTYPE html>  
<html>  
<head>  
<title>Hyperlink Tag</title>  
</head>  
<body>  
Click Below to Jump<br>
```



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1. Advantages of Morning Walk

2. Value of Trees

3. Population Problem

<h2 id="n1">Advantages of Morning Walk</h2>

<p>

Morning walk has many advantages. Air is cool and fresh in the morning. Those who go for morning walk can breathe in the fresh air. They refresh their mind and body. They lose their tension. Their heart becomes stronger. They walk more. They remain happily all the day.

</p>

<h2 id="n2">Value of Trees</h2>

<p>

Trees are very valuable. They give us shade for the rest. They give shelter to birds and animals. They give us wood to burn. They supply us many necessary things of everyday life. They take carbon dioxide from the atmosphere and fill it with oxygen. They cause rains. They check soil erosion. They also check floods. In short the trees are the best friends of man.

</p>

<h2 id="n3">Population Problem</h2>

<p>

Population problem is a major problem of India. There is no increase in our resources. But there is a regular increase in our population. Our roads have more traffic. There are more men on the same land. We will have to make more schools, more hospitals and more essential things for the growing population. If we do not check this problem, poverty will soon overtake us.

</p>

</body>

</html>

HTML Images

In HTML, images are defined with the tag.

The tag is empty, it contains attributes only, and does not have a closing tag.

The src attribute specifies the URL (web address) of the image.

You can use the style attribute to specify the width and height of an image.

The values are specified in pixels (use px after the value).

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The alt Attribute

The alt attribute provides an alternate text for an image. If a browser cannot find an image, it will display the value of the alt attribute.

Example 11

```
<!DOCTYPE html>
<html>
<head>
<title>Image Tag</title>
</head>
<body>
<h2>Advance Computer Lab
Photo</h2>

</body>
</html>
```

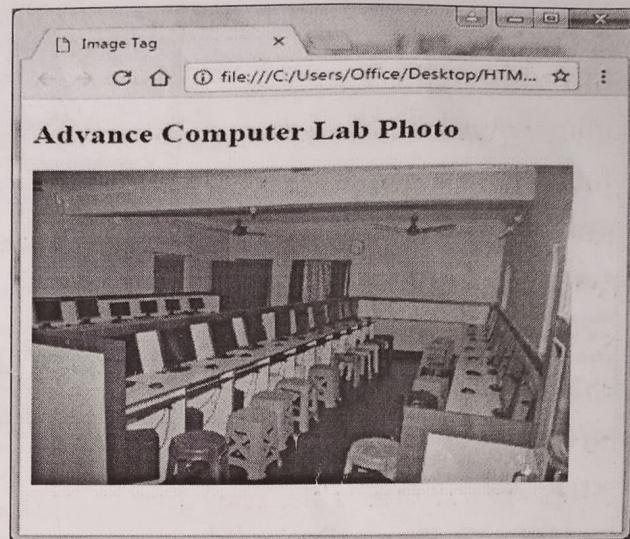


Image Floating

Use the CSS **float** property to let the image float to the right or to the left of a text:

Example 12

```
<p>

```

The image will float to the right of
the text.</p>

```
<p>

```

The image will float to the left of the text.</p>

HTML Table

An HTML table is defined with the **<table>** tag.

Each table row is defined with the **<tr>** tag. A table header is defined with the **<th>** tag. By default, table headings are bold and centered. A table data/cell is defined with the **<td>** tag.

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Example 13 ✓

```
<!DOCTYPE html>
<html>
<body>
<title>Advance
Computer</title>
<table style="width:50%">
<tr>
<th>Student Name</th>
<th>Gender</th>
<th>Course</th>
</tr>
<tr>
<td>Ranjit Kumar Dash</td>
<td>Male</td>
<td>PGDCA</td>
</tr>
<tr>
<td>Sasmita Panda</td>
<td>Female</td>
<td>DCA</td>
</tr>
<tr>
<td>Ramakrishna Swain</td>
<td>Male</td>
<td>PGDCA</td>
</tr>
</table>
</body>
</html>
```

Student Name	Gender	Course
Ranjit Kumar Dash	Male	PGDCA
Sasmita Panda	Female	DCA
Ramakrishna Swain	Male	PGDCA

HTML Table - Adding a Border and Caption

If you do not specify a border for the table, it will be displayed without borders. A border is set using the CSS **border** property.

The **caption** tag will serve as a title or explanation for the table and it shows up at the top of the table.

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Example 14

```
<!DOCTYPE html>
<html>
<head>
<title>Advance Computer</title>
<style>
table, th, td {
    border: 1px solid black;
}
</style>
</head>
<body>
<table style="width:100%">
<caption>Student Data</caption>
<tr>
<th>Student Name</th>
<th>Gender</th>
<th>Course</th>
</tr>
<tr>
<td>Ranjit Kumar Dash</td>
<td>Male</td>
<td>PGDCA</td>
</tr>
<tr>
<td>Sasmita Panda</td>
<td>Female</td>
<td>DCA</td>
</tr>
<tr>
<td>Ramakrishna Swain</td>
<td>Male</td>
<td>PGDCA</td>
</tr>
</table> </body> </html>
```

Student Data		
Student Name	Gender	Course
Ranjit Kumar Dash	Male	PGDCA
Sasmita Panda	Female	DCA
Ramakrishna Swain	Male	PGDCA

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HTML Table - Collapsed Borders

If you want the borders to collapse into one border, add the CSS **border-collapse** property:

Example

```
table, th, td {  
    border: 1px solid black;  
    border-collapse: collapse;  
}
```

HTML Table - Background Color

If you want to change background colour of table or row or cell, add the CSS **background-color** property.

Example

```
table { background-color : aqua; }  
th { background-color : Yellow; }
```

HTML Table - Adding Cell Padding

Cell padding specifies the space between the cell content and its borders.

Example

```
th, td {  
    padding: 15px;  
}
```

HTML Table - Left-align Headings

By default, table headings are bold and centered.

To left-align the table headings, use the CSS **text-align** property:

Example

```
th {  
    text-align: left;  
}
```

HTML Table - Adding Border Spacing

Border spacing specifies the space between the cells.

Example

```
table {  
    border-spacing: 5px; }
```

HTML Table - Merge Cells

- You will use **colspan** attribute if you want to merge two or more columns into a single column.
- You will use **rowspan** if you want to merge two or more rows.

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Example 15

```
<!DOCTYPE html>
```

```
<html>
```

```
<head>
```

```
<title>Advance Computer</title>
```

```
<style>
```

```
table, th, td {
```

```
    border: 1px solid black;
```

```
    color:blue;
```

```
    padding: 5px;
```

```
    text-align:center;
```

```
    font-size:36px;
```

```
}
```

```
table {
```

```
    border-spacing:10px;
```

```
    width:80%;
```

```
    background-color:aqua;
```

```
}
```

```
th {
```

```
    background-color:yellow;
```

```
    color:red;
```

```
}
```

```
</style>
```

```
</head>
```

```
<body>
```

```
<table >
```

```
<caption>Student Mark Sheet</caption>
```

```
<tr>
```

```
<th rowspan=2>Student Name</th>
```

```
<th colspan=3>Subjects</th>
```

```
<th rowspan=2>Total Mark</th>
```

```
</tr>
```

```
<tr>
```

```
<th>English</th>
```

```
<th>Math</th>
```

```
<th>Science</th>
```

Student Name	Subjects			Total Mark
	English	Math	Science	
Sidharth Kumar	85	70	60	215
Sasmita Panda	45	60	55	160

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```
</tr>
<tr>
<td>Sidharth Kumar</td>
<td>85</td>
<td>70</td>
<td>60</td>
<td>215</td>
</tr>
<tr>
<td>Sasmita Panda</td>
<td>45</td>
<td>60</td>
<td>55</td>
<td>160</td>
</tr>
</table>
</body>
</html>
```

A Special Style for One Table

To define a special style for a table, add an **id** attribute to the table (Different Odd & Even rows Style)

Example 16

```
<!DOCTYPE html>
```

```
<html>
<head>
<title>Table
Format</title>
<style>
table {
```

```
    width:100%;
```

```
}
```

```
table, th, td {
```

```
    border: 1px solid black;
```

```
    border-collapse: collapse;
```

```
    padding: 5px;
```

```
    text-align: left;
```

Student Name	Gender	Age
Susanta Kumar	Male	22
Kajol Panda	Female	19
Anita Mishra	Female	25

Student Name	Gender	Age
Susanta Kumar	Male	22
Kajol Panda	Female	19
Anita Mishra	Female	25

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```
}

table#t01 tr:nth-child(even) {
    background-color: pink;
}

table#t01 tr:nth-child(odd) {
    background-color:aqua;
}

table#t01 th {
    background-color: black;
    color: white;
}

tr:hover {background-color:yellow}
table#t01 tr:hover {background-color:yellow}

</style>
</head>
<body>
<table>

<tr>
    <th>Student Name</th>
    <th>Gender</th>
    <th>Age</th>
</tr>

<tr>
    <td>Susanta Kumar</td>
    <td>Male</td>
    <td>22</td>
</tr>

<tr>
    <td>Kajol Panda</td>
    <td>Female</td>
    <td>19</td>
</tr>

<tr>
    <td>Anita Mishra</td>
    <td>Female</td>
    <td>25</td>
</tr>
```

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```
</tr>
</table>
<br>
<table id="t01">
<tr>
<th>Student Name</th>
<th>Gender</th>
<th>Age</th>
</tr>
<tr>
<td>Susanta Kumar</td>
<td>Male</td>
<td>22</td>
</tr>
<tr>
<td>Kajol Panda</td>
<td>Female</td>
<td>19</td>
</tr>
<tr>
<td>Anita Mishra</td>
<td>Female</td>
<td>25</td>
</tr>
</table>
</body>
</html>
```

HTML List

HTML offers web authors three ways for specifying lists of information. All lists must contain one or more list elements. Lists may contain –

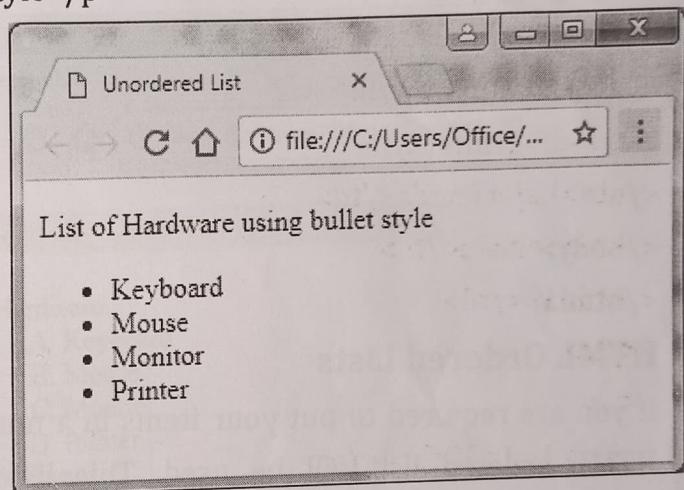
- **** – An unordered list. This will list items using plain bullets.
- **** – An ordered list. This will use different schemes of numbers to list your items.
- **<dl>** – A definition list. This arranges your items in the same way as they are arranged in a dictionary.

HTML Unordered Lists

An unordered list is a collection of related items that have no special order or sequence. This list is created by using HTML **** tag. Each item in the list is marked with a bullet.

Example 17 ✓

```
<!DOCTYPE html>
<html>
<head>
<title>Unordered List</title>
</head>
<body>
<p>List of Hardware using bullet style</p>
<ul>
    <li>Keyboard</li>
    <li>Mouse</li>
    <li>Monitor</li>
    <li>Printer</li>
</ul>
</body>
</html>
```



The type Attribute

You can use type attribute for **** tag to specify the type of bullet you like. By default, it is a **disc**. Following are the possible options –

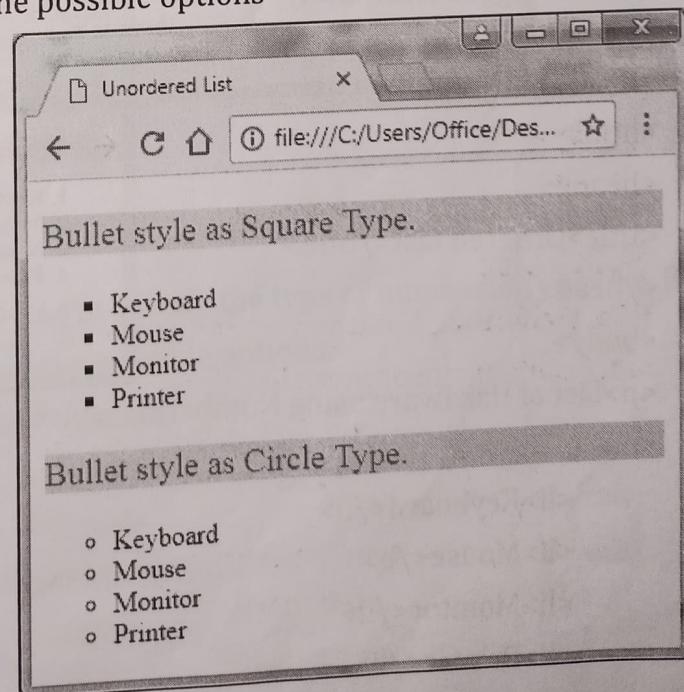
```
<ul type = "square">
<ul type = "disc">
<ul type = "circle">
```

In CSS type attribute property :

```
<ul style="list-style-type:disc">
```

Example 18 ✓

```
<!DOCTYPE html>
<html>
<head>
<title>Unordered List</title>
</head>
<body>
```



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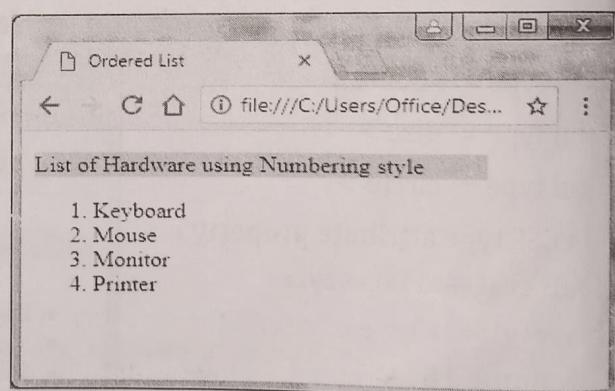
```
<p style="background-color:aqua;font-size:20px; color:red;">
Bullet style as Square Type.</p>
<ul type="square">
<li>Keyboard</li>
<li>Mouse</li>
<li>Monitor</li>
<li>Printer</li>
</ul>
<p style="background-color:aqua;font-size:20px; color:red;">
Bullet style as Circle Type.</p>
<ul type="circle">
<li>Keyboard</li>
<li>Mouse</li>
<li>Monitor</li>
<li>Printer</li>
</ul>
</body>
</html>
```

HTML Ordered Lists

If you are required to put your items in a numbered list instead of bulleted, then HTML ordered list will be used. This list is created by using **** tag. The numbering starts at one and is incremented by one for each successive ordered list element tagged with ****.

Example 19 ✓

```
<!DOCTYPE html>
<html>
<head>
<title>Ordered List</title>
</head>
<body>
<p>List of Hardware using Numbering style</p>
<ol>
<li>Keyboard</li>
<li>Mouse</li>
<li>Monitor</li>
<li>Printer</li>
</ol>
```



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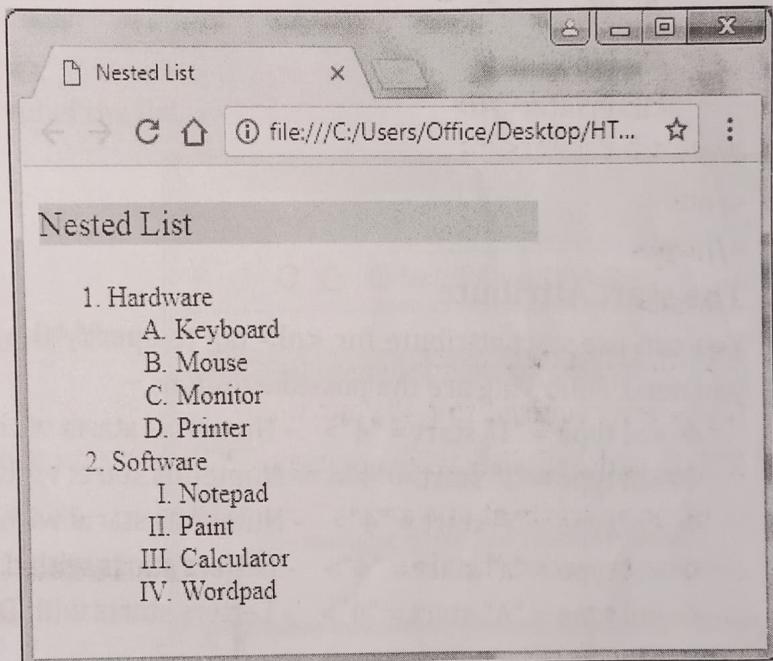
```
</ol>
</body> </html>
```

Nested HTML Lists

List can be nested (lists inside lists):

Example 20 ✓

```
<!DOCTYPE html>
<html>
<head>
<title>Nested List</title>
</head>
<body>
<div style="background-color:pink; width:300px; font-size:20px;">
<p>Nested List</p></div>
<ol>
<li>Hardware</li>
<ol type="A">
<li>Keyboard</li>
<li>Mouse</li>
<li>Monitor</li>
<li>Printer</li>
</ol>
<li>Software</li>
<ol type="I">
<li>Notepad</li>
<li>Paint</li>
<li>Calculator</li>
<li>Wordpad</li>
</ol>
</li>
</ol>
</body>
</html>
```



The type Attribute

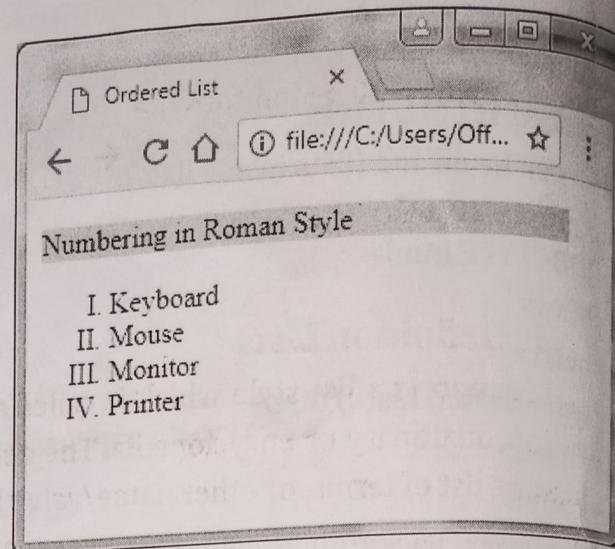
You can use type attribute for **** tag to specify the type of numbering you like. By default, it is a number. Following are the possible options -

- ✓ **<ol type = "1">** - Default-Case Numerals.
- ✓ **<ol type = "I">** - Upper-Case Numerals.
- ✓ **<ol type = "i">** - Lower-Case Numerals.
- ✓ **<ol type = "A">** - Upper-Case Letters.
- ✓ **<ol type = "a">** - Lower-Case Letters.

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Example 21 ✓

```
<!DOCTYPE html>
<html>
<head>
<title>Ordered List</title>
</head>
<body>
<div style="background-color:pink;
width:300px;">
<p>Numbering in Roman
Style</p></div>
<ol type="I">
<li>Keyboard</li>
<li>Mouse</li>
<li>Monitor</li>
<li>Printer</li>
</ol>
</body>
</html>
```



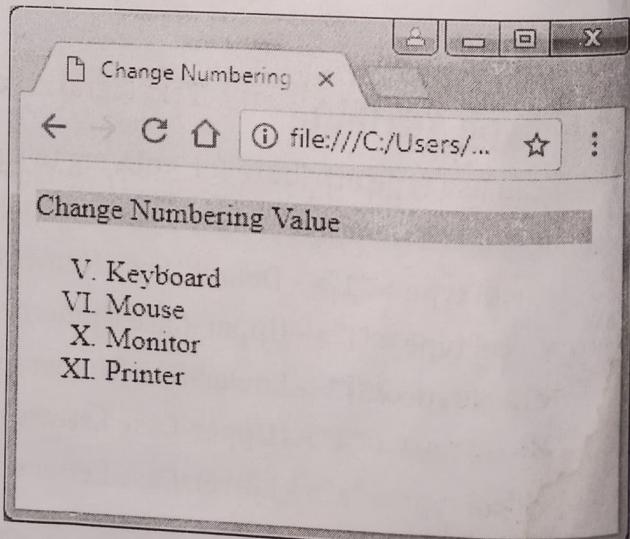
The start Attribute

You can use start attribute for **** tag to specify the starting point of numbering you need. Following are the possible options –

- ❖ <ol type = "1" start = "4"> - Numerals starts with 4.
- ❖ <ol type = "I" start = "4"> - Numerals starts with IV.
- ❖ <ol type = "i" start = "4"> - Numerals starts with iv.
- ❖ <ol type = "a" start = "4"> - Letters starts with d.
- ❖ <ol type = "A" start = "4"> - Letters starts with D.

Example 22

```
<!DOCTYPE html>
<html>
<head>
<title>Change Numbering
Value</title>
</head>
<body>
<div style="background-
color:pink; width:300px;">
<p>Change Numbering
Value</p></div>
<ol type="I" start="5">
```



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```
<li>Keyboard</li>
<li>Mouse</li>
<li value="10">Monitor</li>
<li>Printer</li>

</ol>
</body>
</html>
```

HTML Definition Lists

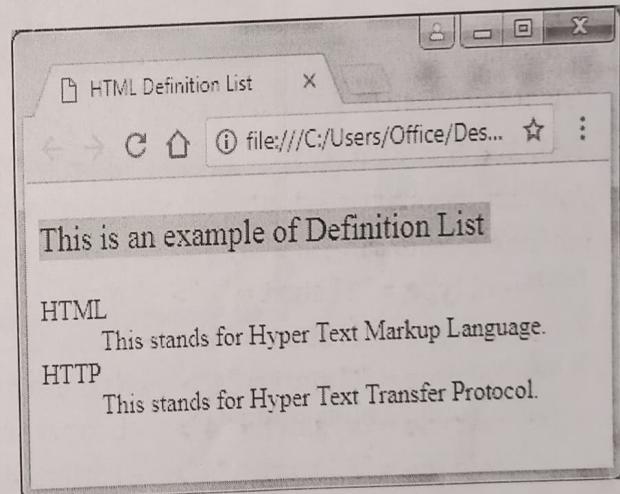
HTML supports a list style which is called **definition lists** where entries are listed like in a dictionary or encyclopedia. The definition list is the ideal way to present a glossary, list of terms, or other name/value list.

Definition List makes use of following three tags.

- ❖ <dl> - Defines the start of the list
- ❖ <dt> - A term
- ❖ <dd> - Term definition
- ❖ </dl> - Defines the end of the list

Example 23

```
<!DOCTYPE html>
<html>
<head>
<title>HTML Definition List </title>
</head>
<body>
<div style="background-
color:pink;width:300px; font-
size:20px;">
<p>This is an example of Definition
List</p></div>
<dl>
<dt>HTML</dt>
<dd>This stands for Hyper Text Markup Language.</dd>
<dt>HTTP</dt>
<dd>This stands for Hyper Text Transfer Protocol.</dd>
</dl>
</body>
</html>
```



Horizontal Lists

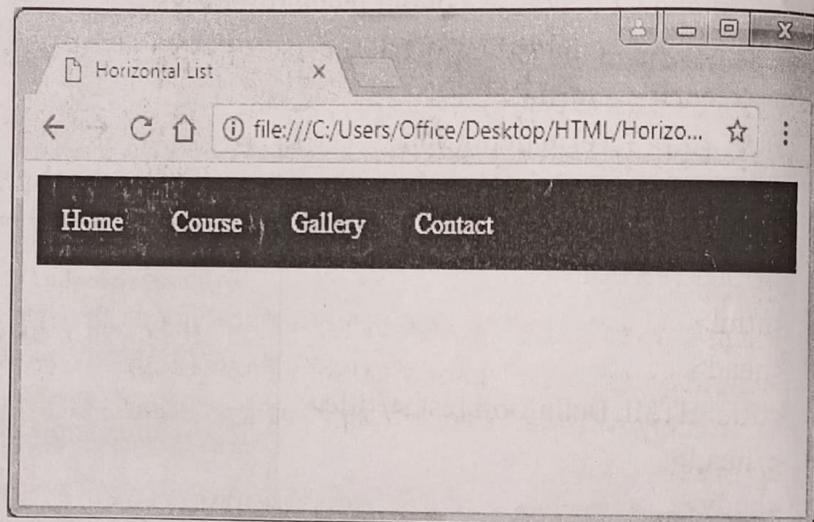
HTML lists can be styled in many different ways with CSS.

One popular way is to style a list horizontally, to create a menu:

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Example 24 ✓

```
<!DOCTYPE html>
<html>
<head>
<title>Horizontal List</title>
<style>
ul {
    list-style-type: none;
    margin: 0;
    padding: 0;
    overflow: hidden;
    background-color: black;
}
li {
    float: left;
}
li a {
    display: block;
    color: white;
    text-align: center;
    padding: 16px;
    text-decoration:
    none;
}
li a:hover {
    background-color: pink;
    color: blue;
}
</style>
</head>
<body>
<ul>
<li><a href="#home">Home</a></li>
<li><a href="#course">Course</a></li>
<li><a href="#gallery">Gallery</a></li>
<li><a href="#contact">Contact</a></li>
</ul>
</body>
</html>
```



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HTML - Forms

HTML Forms are required, when you want to collect some data from the site visitor. For example, during user registration you would like to collect information such as name, email address, credit card, etc.

There are various form elements available like text fields, textarea fields, drop-down menus, radio buttons, checkboxes, etc.

HTML Form Controls

Text Input

`<input type="text">` defines a one-line input field for **text input**:

Syntax :

```
<form>
<input type="text" name="name">
</form>
```

Radio Button Input

`<input type="radio">` defines a **radio button**.

Radio buttons let a user select ONE of a limited number of choices:

Syntax :

```
<form>
<input type="radio" name="name" value="male" checked> Male<br>
<input type="radio" name="name" value="female"> Female<br>
<input type="radio" name="name" value="other"> Other
</form>
```

The Submit Button

`<input type="submit">` defines a button for **submitting** the form data to a **form-handler**.

The form-handler is typically a server page with a script for processing input data. The form-handler is specified in the form's **action** attribute:

Syntax :

```
<form action="/action_page.php" method="get/post">
  <input type="submit" value="Submit">
</form>
```

Checkbox Control

Checkboxes are used when more than one option is required to be selected. They are also created using HTML `<input>` tag but type attribute is set to checkbox.

Syntax :

```
<form>
  <input type = "checkbox" name = "CCA" > CCA
  <input type = "checkbox" name = "DCA" > DCA
  <input type = "checkbox" name = "PGDCA" > PGDCA
</form>
```

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Select Box Control

A select box, also called drop down box which provides option to list down various options in the form of drop down list, from where a user can select one or more options.

Example 25 ✓

```
<!DOCTYPE html>
<html>
<head>
<title>Form</title>
</head>
<body>
<h2>Fill the Form</h2>
<form >
<fieldset>
<legend>Personal
Information :</legend>
First name:
<input type="text" name="Firstname" value="Advance">
Last name:
<input type="text" name="lastname" value="Computer"><br>
Select Gender:<br>
<input type="radio" name="name" value="male" checked> Male
<input type="radio" name="name" value="female"> Female<br>
Select Course:<br>
<input type = "checkbox" name = "CCA" value="CCA"> CCA
<input type = "checkbox" name = "DCA" value="DCA"> DCA
<input type = "checkbox" name = "PGDCA" value="PGDCA"> PGDCA<br>
Select Address :
<select name = "Address">
<option value = "dph" selected>Digapahandi</option>
<option value = "pattapur">Pattapur</option>
<option value = "pdm">Padmanabhapur</option>
<option value = "dengausta">Dengausta</option>
</select><br><br>
<input type="submit" value="Submit">
<input type="reset" value="Reset">
</fieldset>
</form>
</body>
</html>
```

