**HTML**

**Note-**

* For Italic and Underlined refer below example-

<body>  
 <h1>This is <i>italic</i> heading</h1>  
 <p>This is <u>underlined</u> paragraph</p>

<h2>This is <b>a bold</b> heading</h2>  
 </body>

This will display the following result −

**This is *italic* heading**

This is underlined paragraph

This is **a bold** heading

* For alignment refer below example-

<body>   
 <p align = "left">This is left aligned</p>   
 <p align = "center">This is center aligned</p>   
 <p align = "right">This is right aligned</p>   
 </body>

This will display the following result −

This is left aligned

This is center aligned

This is right aligned

You can use jsbin tool for practice!

**---------------------------------------------------------------------------------------------------------------------**

* HTML stands for HyperText Markup Language, which is the most widely used language on Web to develop web pages.

Sample-

*<!DOCTYPE html>  
 <html>  
   
 <body>  
 <h1>Hello World!</h1>  
 </body>  
   
 </html>*

* Most HTML elements have an opening tag and a closing tag.

Opening tags look like this: <h1>

Closing tags look like this: </h1>

<!DOCTYPE html>

<html>  
  
 <head>  
 <title>This is document title</title>  
 </head>  
   
 <body>  
 <h1>This is a heading</h1>  
 <p>Document content goes here.....</p>  
 </body>  
   
</html>

* **<!DOCTYPE...>**

This tag defines the document type and HTML version.

* **<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.

* **<head>**

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

* **<title>**

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

* **<body>**

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

* **<h1>**

This tag represents the heading.

* **<p>**

This tag represents a paragraph.

## **Heading Tags-**

* HTML also has six levels of headings, which use the elements **<h1>, <h2>, <h3>, <h4>, <h5>,** and **<h6>**

## **Paragraph Tags-**

* The <p> tag offers a way to structure your text into different paragraphs

## **Line Break Tags-**

***Note****:- you can also use </br> or <br>*

* Whenever you use the **<br />** element, anything following it starts from the next line. This tag is an example of an **empty** element, where you do not need opening and closing tags, as there is nothing to go in between them.
* The <br /> tag has a space between the characters **br** and the forward slash. If you omit this space, older browsers will have trouble rendering the line break, while if you miss the forward slash character and just use <br> it is not valid in XHTML.
* Example-

<html>

<body>  
 <p>Hello<br />  
 You delivered your assignment on time.<br />  
 Thanks<br />  
 Mahnaz</p>  
 </body>  
   
</html>

This will produce the following result −

Hello

You delivered your assignment on time.

Thanks

Mahnaz

* Whenever you use the **<br />** element, anything following it starts from the next line. This tag is an example of an **empty** element, where you do not need opening and closing tags, as there is nothing to go in between them.
* The <br /> tag has a space between the characters **br** and the forward slash. If you omit this space, older browsers will have trouble rendering the line break, while if you

## **Centering Content Tags-**

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

Example- <body>   
 <center>  
 <p>This text is in the center.</p>  
 </center>  
 </body>

**Comments**

* 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.

Example-

<head> <!-- Document Header Starts -->  
 <title>This is document title</title>  
 </head> <!-- Document Header Ends →

Result-

Document content goes here.....

* Comments do not nest which means a comment cannot be put inside another comment. Second the double-dash sequence "--" may not appear inside a comment except as part of the closing --> tag. You must also make sure that there are no spaces in the start-of comment string.
* You can comment multiple lines by the special beginning tag <!-- and ending tag --> placed before the first line and end of the last line.

Example-

<body>  
 <!--   
 This is a multiline comment and it can  
 span through as many as lines you like.  
 -->  
   
 <p>Document content goes here.....</p>  
 </body>

Result-

Document content goes here.....

**Colour Change-**

The <body> tag has following attributes which can be used to set different colors −

* **bgcolor** − sets a color for the background of the page.
* **text** − sets a color for the body text.
* **alink** − sets a color for active links or selected links.
* **link** − sets a color for linked text.
* **vlink** − sets a color for *visited links* − that is, for linked text that you have already clicked on.

Example- <font color = "red">

<h2>CatPhotoApp</h2>

**Links-**

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

Example-

<p> This is a paragraph </p>

<a href = “<https://www.google.com>” > This is an awesome link </a>

*Target Attributes-*

* \_blank **:-** Opens the linked document in a new window or tab.
* \_self :- Opens the linked document in the same frame.
* \_parent :- Opens the linked document in the parent frame
* \_top :- Opens the linked document in the full body of the window.
* Targetframe :- Opens the linked document in a named *targetframe*.

When you link HTML documents related to the same website, it is not required to give a complete URL for every link. You can get rid of it if you use **<base>**tag in your HTML document header. This tag is used to give a base path for all the links. So your browser will concatenate given relative path to this base path and will make a complete URL.

Example-

<head>  
 <title>Hyperlink Example</title>  
 <base href = "http://www.tutorialspoint.com/">  
 </head>  
   
 <body>  
 <p>Click following link</p>  
 <a href = "/html/index.htm" target = "\_blank">HTML Tutorial</a>  
 </body>

You can set colors of your links, active links and visited links using **link**, **alink**and **vlink** attributes of <body> tag.

<html>  
   
 <head>  
 <title>Hyperlink Example</title>  
 <base href = "http://www.tutorialspoint.com/">  
 </head>  
   
 <body alink = "#54A250" link = "#040404" vlink = "#F40633">  
 <p>Click following link</p>  
 <a href = "/html/index.htm" target = "\_blank" >HTML Tutorial</a>  
 </body>  
   
</html>

**Image tags-**

It's simple to use an image as hyperlink. We just need to use an image inside hyperlink at the place of text as shown below −

**<body>  
 <p>Click following link</p>  
 <a href = "http://www.tutorialspoint.com" target = "\_self">   
 <img src = "/images/logo.png">   
 </a>  
 </body>**

This is just like the br tag it does not need a </img> to close.

You can change a height, width of an image as shown below-

**<img src = "/images/logo.png" height=”100” width =”80”>**

It will scale proportionally if you give only 1 parameter

**Lists-**

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

* <ul> − An unordered list. This will list items using plain bullets.
* <ol> − 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 **<ul>** tag. Each item in the list is marked with a bullet.

Example-

<body>  
 <ul>  
 <li>Beetroot</li>  
 <li>Ginger</li>  
 <li>Potato</li>  
 <li>Radish</li>  
 </ul>  
 </body>

Output-

* Beetroot
* Ginger
* Potato
* Radish

## **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 **<ol>** tag. The numbering starts at one and is incremented by one for each successive ordered list element tagged with <li>

<body>  
 <ol>  
 <li>Beetroot</li>  
 <li>Ginger</li>  
 <li>Potato</li>  
 <li>Radish</li>  
 </ol>  
 </body>

Result-

1. Beetroot
2. Ginger
3. Potato
4. Radish

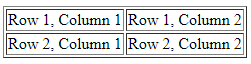
**Tables-**

The HTML tables allow web authors to arrange data like text, images, links, other tables, etc. into rows and columns of cells. The HTML tables are created using the **<table>** tag in which the **<tr>** tag is used to create table rows and **<td>** tag is used to create data cells. The elements under <td> are regular and left aligned by default. **<th>** is for header.

Example-

<head>  
 <title>HTML Tables</title>  
 </head>  
   
 <body>  
 <table border = "1">  
 <tr>  
 <td>Row 1, Column 1</td>  
 <td>Row 1, Column 2</td>  
 </tr>  
   
 <tr>  
 <td>Row 2, Column 1</td>  
 <td>Row 2, Column 2</td>  
 </tr>  
 </table>  
   
 </body>

Result-



If you do not need a border the you can use border = “0”. There are two attributes called *cellpadding* and *cellspacing* which you will use to adjust the white space in your table cells. The cellspacing attribute defines space between table cells, while cellpadding represents the distance between cell borders and the content within a cell.

Example-

<table border = "1" cellpadding = "5" cellspacing = "5">

**Difference between HTML and XML**

|  |  |
| --- | --- |
| **HTML** | **XML** |
| HTML is an abbreviation for HyperText Markup Language. | XML stands for eXtensible Markup Language. |
| HTML was designed to display data with focus on how data looks. | XML was designed to be a software and hardware independent tool used to transport and store data, with focus on what data is. |
| HTML is a markup language itself. | XML provides a framework for defining markup languages. |
| HTML is a presentation language. | XML is neither a programming language nor a presentation language. |
| HTML is case insensitive. | XML is case sensitive. |
| HTML is used for designing a web-page to be rendered on the client side. | XML is used basically to transport data between the application and the database. |
| HTML has it own predefined tags. | While what makes XML flexible is that custom tags can be defined and the tags are invented by the author of the XML document. |
| HTML is not strict if the user does not use the closing tags. | XML makes it mandatory for the user the close each tag that has been used. |
| HTML does not preserve white space. | XML preserves white space. |
| HTML is about displaying data,hence static. | XML is about carrying information,hence dynamic. |