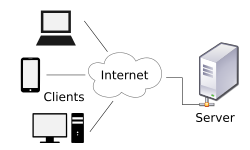
**Chapter 1**

**Terms used in WEB**

## Client/Server:-

The computer that serve or provide information from a central location is termed as the server. This computer contains all the web sites. A special software is to be installed on server called as Web-Server. This software accepts request from client and provide response. The computer that request for information is termed as the client. A browser is to be installed on client machine called as web-client.

Both server and client should be connected through a network and that network is normally internet. Normally server and client are two separate machines but for testing purpose we can install both web-server and web-client on a single machine also.



**Web Pages:-**

Web pages are those files that contain information and are stored on server. They travel to client after a client sends the request and then interpreted by the browser. HTML language is used to write web pages. Complete source code of the web page gets transferred to client machine. Browser is an interpreter for HTML.

**Web Site:-**

A web site is a collection of web pages. Every web site has a URL. Example [www.facebook.com](http://www.facebook.com) is the url for facebook website. First page displayed when we open a web site is called as home page and the name of this page is generally index.html.

**Web Developer:-**

The Individual who develops these web pages are called **WEB Developer**.

**Web Server:-**

Web server is a special software that is installed on server to handle request and response. It also contains various web pages stored in folders category wise. Whenever user sends the request for a web page then the web server accepts that request and send that web page to the client as a response. **Example: Apache web server, JBOSS server, Web Logic Server.**

**Web Client/Browser:-**

The software which is installed on client machine is called as web client or web browser. It is an interpreter which can interpret/run html pages. A user can type request/URL in the address bar provided by the browser then after hitting enter button it sends that request to the particular server and then it waits for the response from the server. Finally when response is received from the server then it starts interpreting/running it line by line and display the result in its body.

Some of the most popular browsers are Netscape navigator, Internet Explorer, Google Chrome.

**TCP/IP:-**

TCP/IP(Transmission Control Protocol/Internet Protocol) is a protocol for the internet. Both server and client computer follows the rules set by the TCP/IP. It provides end-to-end connectivity specifying how data should be formatted, addressed, transmitted, routed and received at the destination.

**Http:-**

The **Hypertext Transfer Protocol** (**HTTP**) is an application protocol for distributed, collaborative, hypermedia information systems. HTTP is the foundation of data communication for the World Wide Web. It is a connection less protocol.

# Chapter 2 HTML

**Introduction:-**

HTML was invented by Tim Berners-Lee. HTML stands for **H**yper **T**ext **M**arkup **L**anguage. HTML is not a programming language, it is a **markup language**. A markup language is a set of **markup tags**. The purpose of the tags are to **describe page content not design.** CSS is used for designing. HTML is the language interpreted by the browser. Web pages are also called HTML documents. HTML is a set of special codes that can be embedded in text to add formatting and linking information. HTML is specified as TAGS in an HTML documents. W3C (World Wide Web Consortium) was appointed to standardize this language.

## HTML Versions:-

|  |  |
| --- | --- |
| **Version** | **Year** |
| HTML 1.0 | 1991 |
| HTML 2.0 | 1995 |
| HTML 3.0 | 1997 |
| HTML 4.0 | 1997 |
| HTML 4.01 | 1999 |
| HTML 5 | 2014 |
| HTML 5.1 | 2016 |
| HTML 5.2 | 2017 |

## Instructions for writing the HTML document:-

## It is not a case sensitive language i.e. we can write HTML tags in both uppercase and lowercase.

## We have to write complete HTML code in <html></html> tag.

## Browser will interpret/run HTML program on client machine.

## HTML programs are not compiled.

## Complete source code of HTML program is transferred to client from the server so any client can view the source code.

## Client can view the complete code by right clicking on the web page and choose view source.

## We can use any text editor to write HTML code such as notepad or Notepad+ or Dreamweaver.

## HTML programs are saved with extension .html

## To execute double click on the html file or write its complete url in browser

## HTML TAGS:-

Tags are instructions that are embedded directly into the text of the document. An html tag is a signal to the browser that it should do something other than just throw text up on the screen. By conventional all HTML tags begin with an open angle bracket (<) and end with close angle bracket (>). HTML is a language for describing web pages. With HTML you can create your own Web site. HTML is not a programming language, it is a markup language, and markup language is a set of markup tags.

HTML tags can be of two types:

**Paired Tags:-**

A tag is said to be a paired tag if it has a companion tag. For example <B> tag is a paired tag. The <B> tag with its companion tag </B> causes the text contained between them to be rendered in bold. In paired tags the first tag (<B>) is often called the opening tag and the second tag (</B>) is called the closing tag. The opening tag activates the effect and the closing tag turns the effect off.

## Singular Tag/Unpaired Tags:-

The second type of tag is the singular tag or standalone tag. A standalone tag does not have a companion tag. For example <br> tag will insert a line break. This tag does not have a companion tag. But sometimes it creates confusion because a person can think that this is an opening tag and this will be followed by a closing tag. So now a days we write singular tag like this <br />. This shows that <br /> is both opening and closing.

## HTML Documents are Web Pages:-

HTML documents describe web pages and contain HTML tags and plain text. HTML documents are also called web pages. The purpose of a web browser (like Internet Explorer, Mozilla, Firefox or Netscape Navigator) is to read HTML documents and display them as web pages. The browser does not display the HTML tags, but uses the tags to interpret the content of the page:

## Structure and Example of a HTML program:-

<html>

<head>

<title>My First Page</title>

</head>

<body>

<h1>Chapter 1</h1>

<p>This is some text. This is some text. This is some text. This is some text. This is some text. This is some text. This is some text. This is some text. This is some text. This is some text. This is some text. This is some text. This is some text. This is some text. </p>

</body>

</html>

## Explanation:-

The text between <html> and </html> describes the start and end of web page.

The text between <head> and </head> is the head part of the browser.

The text between <title> and </title> will be shown on title bar.

The text between <body> and </body> is the body part of the browser

The text between <h1> and </h1> is displayed as a heading.

The text between <p> and </p> is displayed as a paragraph.

## List of HTML Tags:-

## 1. <HTML>:- The entire web page is enclosed within <html></html> tag. The <html> indicated starting of web page and </html> indicates end of web page. This tag is further divided into two distinct sections using the <head> </head> tag and <body></body> tag.

## 2. <HEAD>:-This tag indicates the head of the browser. The <head> tag contains information about the document, including its title, scripts used, style definitions, and document descriptions. Not all browsers require this tag, but most browsers find any available additional information about the document within the <head> tag. Additionally, the <head> tag can contain other tags that have information for search engines and indexing programs. This tag also contains a <title> tag. Information placed in this section is essential to the inner workings of the document and has nothing to do with the content of the document. All information placed within the <HEAD> </HEAD> tags is not displayed in the browser, excluding information contained within the <TITLE> </TITLE> tags.

## 3. <TITLE>:-A web page could have a title that describes what the page is about. Text included between the <TITLE> </TITLE> tag shows up in the title bar of the browser window. To use the <title> tag, enter it between the opening and closing <head> tags.

## 4. <BODY>:-This tag is used to indicate the start and end of the main body of html document. The <body> element contains all the contents of an HTML document, such as text, hyperlinks, images, tables, lists, etc. Whatever we write under BODY tag like plain text, formatted text, images will display in browser’s body.

## Editing HTML:-Use a plain text editor (like Notepad) to edit HTML. There are many text editors and html editors in the industry. Notepad is a text editor comes with Microsoft windows. If we don’t have any HTML editor then we can use Notepad to edit html pages.

Some HTML editors:

* FrontPage
* Dreamweaver.

**Steps to create an html page using Notepad:-**

1. Open Notepad editor or any other text/html editor.
2. Write your html code.
3. Save your file with .html extension (with All Files option selected).
4. Now open the saved page in a browser.

You can see the output of your html code.

## 5. <B>:- To convert the text in bold.

## 6. <I>:- To convert the text in italic.

## 7. <U>:- To convert the text in underline text.

**Example:-**

<b>Bold Text</b>

<i>Italic Text</i>

## <u>Underline Text</u> Output:-

## Bold Text *Italic Text* Underline Text

## 8. <BR>:-The <br> tag inserts a single line break. The <br> tag is a singular tag which means that it has no end tag. In future versions of HTML elements with no end tag (closing tag) are not allowed even if <br> works in all browsers, writing <br /> instead is more future proof.

**Example:-**

This text contains<br />a line break.

**Output:-**

This text contains

a line break.

## 9. <STRONG>:- Display as strong (highlighted) text just like bold. We can change its appearance using CSS later on.

**Example:-**

<strong>Some Text</strong>

## Output:-

**Some Text**

## 10. <SMALL>:-

## The <small> tag defines the smaller text. It reduces the font size by 1 point.

## Example:-

## <small>Some Text</small>

## Output:-

## Some Text

**11. <big>:-** The <big> tag defines bigger text. It increases the font size by 1 point. This tag is not supported in HTML 5.

**Example:-**

<big>Some text</big>

**12. <center>:-** The <center> tag is used to center-align text. This tag is not supported in HTML 5.

**Example:-**

<center>This will align the text to center of the line.</center>

**13. <tt>:-** The <tt> tag defines teletype text. It is also called as monospaced text. All characters will take equal width. This tag is not supported in HTML 5.

**Example:-**

<tt>Teletype text</tt>

## 14. <STRIKE> This tag is not supported in HTML 5.

## 15. <S>:-

The <s> and <strike> tags define strikethrough text.

**Example:-**

40” LG TV <strike>50000</strike>35000.

40” LG TV <s>50000</s>35000.

## Output:-

40” LG TV ~~50000~~ 35000.

40” LG TV ~~50000~~ 35000.

## 16. <CODE>:-

## It is used to display a computer program also called as source code.

**Example:-**

<code>A piece of computer code</code>

## Output:-

A piece of computer code

## 17. <VAR>:-

It is used to display a variable.

**Example:-**

<var>Variable</var>

## Output:-

*Variable*

## 18. <KBD>:-

It is used to display keyboard input text which is input from the user.

**Example:-**

<kbd>Keyboard input</kbd>

## Output:-

Keyboard input

## 19. <SAMP>:-

It defines sample output from a computer program.

**Example:-**

<samp>Sample output from a computer program</samp>

## Output:-

Sample output from a computer program

## 20. <EM>:-

It is used to emphasized or highlight a text.

**Example:-**

<em>Emphasized text</em>

## Output:-

Emphasized text

## 21. <CITE>:-

It is also used to highlight or citation a text.

**Example:-**

<cite>Citation</cite>

## Output:-

*Citation*

## 22. <INS>:-

## 23. <DEL>:-

The <ins> tag defines a text that has been inserted into a document. The <del> tag defines text that has been deleted from a document.

**Example:-**

My favorite color is <del>blue</del> <ins>red</ins>.

## Output:-

My favorite color is ~~blue~~ red.

## 24. <BLOCKQUOTE>:-

It is used to indent a paragraph.

**Example:-**

<blockquote>  
This is some text. This is some text. This is some text. This is some text. This is some text. This is some text. This is some text. This is some text. This is some text. This is some text. This is some text. This is some text. This is some text.

</blockquote>

## Output:-

This is some text. This is some text. This is some text. This is some text. This is some text. This is some text. This is some text. This is some text. This is some text. This is some text. This is some text. This is some text. This is some text.

## 25. <Q>:-

It is used to insert quotation marks around the text.

**Example:-**

<q>build a future where people live in harmony with nature</q>.

## Output:-

“build a future where people live in harmony with nature”

26. <DFN>:-

It is used to define the definition term.

**Example:-**

<p><dfn>HTML</dfn> is the standard markup language for creating web pages.</p>

## Output:-

HTML is the standard markup language for creating web pages.

**27. < H1>:-**

**28. < H2>:-**

**29. < H3>:-**

**30. < H4>:-**

**31. < H5>:-**

**32. < H6>:-**

The <h1> to <h6> tags are used to define HTML headings. <h1> defines the most important heading. <h6> defines the least important heading.

Note: Browsers automatically add an empty line before and after a heading because these are block tags.

Use HTML headings for headings only. Don’t use headings to make text BIG or bold. Search engines use your headings to index the structure and content of your web pages. H1 headings should be used as main headings, followed by H2 headings, then the less important H3 headings, and so on.

**Example:-**

<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>

## Output:-

# This is heading 1

## This is heading 2

### This is heading 3

#### This is heading 4

##### This is heading 5

###### This is heading 6

## 33. <SUB>:-

The <sub> tag defines subscript text. Subscript text appears half a character below the baseline. Subscript text can be used for chemical formulas, like H2O.

**Example:-**

<p>This text contains <sub>subscript</sub> text.</p>  
**Output:-**

This text contains subscript text.

34. <SUP>:-

The <sup> tag defines superscript text. Superscript text appears half a character above the baseline. Superscript text can be used for footnotes, like 52

**Example:-**

<p>This text contains <sup>superscript</sup> text.</p>

**Output:-**

This text contains superscript text.

## 35. <ADDRESS>:-

The <address> tag defines the contact information for the author or owner of a document. This way, the reader is able to contact the document's owner. The <address> element is usually added to the header or footer of a webpage. The content of the <address> element usually renders in *italic*. Most browsers will also add a line break before and after the <address> element.

**Example:-**

<address>

Written by matrixcomputers.co.in<br />

<a href="mailto:matrix.computers@ymail.com">Email us</a><br />

Address: 10/564 mansarovar, jaipur<br />

Phone: +91 9414752750  
</address>

**Output:-**

*Written by matrixcomputers.in*[*Email us*](mailto:matrix.computers@ymail.com) *Address: 10/564 mansarovar, jaipur  
Phone: +91 9414752750*

## ATTRIBUTES:-

Some HTML tags require additional information to be supplied to them. For instance when a picture is placed on screen information like the height and width of the picture can be specified.

Additional information supplied to an HTML tag is known as Attributes of a tag. Attribute are written immediately following the tag, separated by space. Multiple attributes can be associated with a tag, also separated by a space. Attributes are always specified in the start tag. Attributes come in name/value pairs like: name=“value”

Attribute values should always be enclosed in quotes. Double quotes are the most common, but single quotes are also allowed. In some situations, when the attribute value itself contains quotes, it is necessary to use single quotes. name=’learn html with attribute using single “quote” ’.

Note: - Use Lowercase Attributes for convenience. Attribute names and attribute values are case-insensitive.

However, the World Wide Web Consortium (W3C) recommends lowercase attributes/attribute values in their HTML 4 recommendation. Newer versions of (X) HTML will demand lowercase attributes.

## Attributes of body tag:-

**1. bgcolor:-** Specifies the background color of a document. Color can be specified in following form:

*rgb(x,x,x)*

*#xxxxxx  
colorname* (Deprecated. Use styles instead.)

**2. text:-** The text attribute specifies the color of the text in a document. The text attribute of <body> is deprecated in HTML 4.01.

3. **background:-** Specifies the background image.

**Example:-**

<html>

<body bgcolor="#E6E6FA" text="green" background=”aaa.gif”>

Matrix Computers

</body>

</html>

## 36. <P>:-

HTML documents are divided into paragraphs. Paragraphs are defined with the <p> tag. Browsers automatically add an empty line before and after a paragraph.

**Attributes:-**

1. align:- To left, right, center or justify align the paragraph

**Example:-**

<p align=”left”>This is a paragraph This is a paragraph This is a paragraph This is a paragraph This is a paragraph This is a paragraph This is a paragraph This is a paragraph This is a paragraph This is a paragraph This is a paragraph </p>

<p align=”right”>This is a paragraph This is a paragraph This is a paragraph This is a paragraph This is a paragraph This is a paragraph This is a paragraph This is a paragraph This is a paragraph This is a paragraph This is a paragraph </p>

<p align=”center”>This is a paragraph This is a paragraph This is a paragraph This is a paragraph This is a paragraph This is a paragraph This is a paragraph This is a paragraph This is a paragraph This is a paragraph This is a paragraph </p>  
<p align=”justify”>This is a paragraph This is a paragraph This is a paragraph This is a paragraph This is a paragraph This is a paragraph This is a paragraph This is a paragraph This is a paragraph This is a paragraph This is a paragraph </p>

**Output:-**

This is a paragraph This is a paragraph This is a paragraph This is a paragraph This is a paragraph This is a paragraph This is a paragraph This is a paragraph This is a paragraph This is a paragraph This is a paragraph

This is a paragraph This is a paragraph This is a paragraph This is a paragraph This is a paragraph This is a paragraph This is a paragraph This is a paragraph This is a paragraph This is a paragraph This is a paragraph

This is a paragraph This is a paragraph This is a paragraph This is a paragraph This is a paragraph This is a paragraph This is a paragraph This is a paragraph This is a paragraph This is a paragraph This is a paragraph

This is a paragraph This is a paragraph This is a paragraph This is a paragraph This is a paragraph This is a paragraph This is a paragraph This is a paragraph This is a paragraph This is a paragraph This is a paragraph

**37. <font>:-** The <font> tag specifies the font face, font size, and font color of text. This tag is not supported in HTML 5.

**Attributes:-**

1. color:-Specifies the color of text

2. face:-Specifies the fontname of text

3. size:-Specifies the size of text

**Example:-**

<font size="3" color="red">This is some text</font><br />

<font size="2" color="blue">This is some text</font><br />

<font face="verdana" color="green">This is some text</font><br />

**Output:-**

This is some text  
This is some text  
This is some text

## 38. <BDO>:-

bdo stands for Bi-Directional Override. The <bdo> tag is used to override the current text direction.

**Attributes:-**

1. dir:- Specifies the text direction of the text inside a <bdo> element(ltr, rtl)

|  |  |  |  |
| --- | --- | --- | --- |
|  |  |  |  |

**Example:-**

<bdo dir="rtl">Here is some Hebrew text!</bdo>

**Output:-**

!txet werbeH emos si ereH

## 39. <HR>:-

The <hr> tag creates a horizontal line in an HTML page. The <hr> element can be used to separate content in an HTML page.

**Attributes:-**

1. align:- Specifies the alignment of a <hr> element. (left, right,center).
2. width:- Specifies the width of a <hr> element in percent or in pixcels.
3. noshade:- Specifies that the rule has no shading.
4. color:- Specifies the color.
5. size:- Specifies the weight.

**Example:-**

<hr align=”right” width=50% color=”red” size=”2” noshade>

**Output:-**

**\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**

## 40. <ABBR>:-

The <abbr> tag describes an abbreviated phrase. By marking up abbreviations you can give useful information to browsers, spell checkers, translation systems and search-engine indexers. The title attribute is used in the <abbr> tag, to show the full version of the abbreviation when you mouse over it.

**Attributes:-**

1. title:- It contains the full form of the abbreviated word.

**Example:-**

The <abbr title="World Health Organization">WHO</abbr> was founded in 1948.

**Output:-**

The WHO was founded in 1948.

**41. <acronym>:-** An acronym can be spoken as if it were a word, example NATO, NASA, ASAP, GUI. This element is not supported in HTML 5

**Attributes:-**

1. title:- Specifies extra information about an element

**Example:-**

Can I get this <acronym title="as soon as possible">ASAP</acronym>?

**Output:-**

Can I get this ">ASAP</acronym>?

## 42. <!--\_\_\_\_\_\_\_\_\_\_\_\_-->:-

The comment tag is used to insert comments in the source code. Comments are not displayed in the browsers. You can use comments to explain your code, which can help you when you edit the source code at a later date. This is especially useful if you have a lot of code. It is also a good practice to use the comment tag to "hide" scripts from browsers without support for it (so they don't show them as plain text):

**Example:-**

Some <!--This is a comment. Comments are not displayed in the browser--> text.  
**Output:-**

Some text.

**Special Entities:-**

|  |  |  |  |
| --- | --- | --- | --- |
| To display space ( non-breaking space). |  | &nbsp; |  |
| quotation mark = APL quote |  | &quot; | " |
| Ampersand |  | &amp; | & |
| less-than sign |  | &lt; | < |
| greater-than sign |  | &gt; | > |
| modifier letter circumflex accent |  | &circ; | ˆ |
| small tilde |  | &tilde; | ˜ |
| en space |  | &ensp; |  |
| em space |  | &emsp; |  |
| thin space |  | &thinsp; |  |
| en dash |  | &ndash; | – |
| em dash |  | &mdash; | — |
| left single quotation mark |  | &lsquo; | ‘ |
| right single quotation mark |  | &rsquo; | ’ |
| single low-9 quotation mark |  | &sbquo; | ‚ |
| left double quotation mark |  | &ldquo; | “ |
| right double quotation mark |  | &rdquo; | ” |
| double low-9 quotation mark |  | &bdquo; | „ |
| Dagger |  | &dagger; | † |
| double dagger |  | &Dagger; | ‡ |
| per mille sign |  | &permil; | ‰ |
| single left-pointing angle quotation mark |  | &lsaquo; | ‹ |
| single right-pointing angle quotation mark |  | &rsaquo; | › |
| euro sign |  | &euro; | € |

**Example:-**

The tag to change line is &lt;br&gt;.<br />

Matrix Computers<br />

Matrix&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;Computers<br />

To print space we use &amp;nbsp;<br />

Use of Body tag &lt;body bgcolor=&quot;red&quot;&gt;<br />

Euro Currency is &euro;

**Output:-**

The tag to change line is <br>.  
Matrix Computers  
Matrix     Computers  
To print space we use &nbsp;  
Use of Body tag <body bgcolor="red">  
Euro Currency is €

## 43. <LI>:-

The <li> tag defines a list item. The <li> tag is used in both ordered (<ol>) and unordered (<ul>) lists.

## 44. <OL>:-

The <ol> tag defines an ordered list. An ordered list can be numerical or alphabetical.

**Attributes:-**

1. start:- Specifies the start value of an ordered list
2. type:- Specifies the kind of marker to use in the list (A, a, I)

**Example:-**

<ol>

<li>Coffee</li>

<li>Tea</li>

<li>Milk</li>

</ol>

**Output:-**

1. Coffee
2. Tea
3. Milk

## 45. <UL>:-

The <ul> tag defines an unordered (bulleted) list. Use the <ul> tag together with the <li> tag to create unordered lists.

**Attributes:-**

1. type:- Specifies the kind of marker to use in the list. value(disc, square, circle)
2. compact:- To display the list smaller than normal. value(compact)

**Example1:-**

<ul>

<li>Coffee</li>

<li>Tea</li>

<li>Milk</li>

</ul>

**Output:-**

* Coffee
* Tea
* Milk

**Example2:-**

<ol type="A">

<li>Software

<ul type="square">

<li>System Software

<ol>

<li>OS</li>

<li>Compiler</li>

</ol>

</li>

<li>Application Software

<ol>

<li>Word</li>

<li>Excel</li>

</ol>

</li>

</ul>

</li>

<li>Hardware

<ul type="square">

<li>CPU

<ol>

<li>I3</li>

<li>I7</li>

</ol>

</li>

<li>RAM

<ol>

<li>Hynix</li>

<li>Kingston</li>

</ol>

</li>

</ul>

</li>

</ol>

**Output:-**

1. Software
   * System Software
     1. OS
     2. Compiler
   * Application Software
     1. Word
     2. Excel
2. Hardware
   * CPU
     1. I3
     2. I7
   * RAM
     1. Hynix
     2. Kingston

## 46. <DL>:-

The <dl> tag defines a definition list. It is used with <dt> and <dd>. It can be used when we want to display a list of terms with their description.

## 47. <DT>:-

It displays the definition term.

## 48. <DD>:-

It displays the description of the term. It will also indent the description.

**Example:-**

<dl>

<dt>Hardware</dt>

<dd>Physical components of a computer system.</dd>

<dt>Software</dt>

<dd>Collection of programs</dd>

</dl>

**Output:-**

Software

Physical components of a computer system.

Hardware

Collection of programs.

## 49. <MENU>:-

The <menu> element is deprecated in HTML 4.01. The <menu> tag is used to create a list of menu choices. It is just like UL tag but no attribute “type”.

**Example:-**

<menu>

<li>C</li>

<li>C++</li>

<li>DSA</li>

</menu>

**Output:-**

* C
* C++
* DSA

**50. <dir>:-** The <dir> tag is used to list directory titles. This tag is not supported by HTML 5. It is just like <menu> tag.

**Example:-**

<dir>

<li>C</li>

<li>C++</li>

<li>DSA</li>

</dir>

**Output:-**

* C
* C++
* DSA

## 51. <IMG>:-

The <img> tag defines an image in an HTML page. It is a singular tag. Images are not technically inserted into an HTML page, images are linked to HTML pages. The <img> tag creates a holding space for the referenced image. Src attribute is used to write the name and path of the image file. If image is stored in the same folder where html document is stored then no need to write the path.

**Attributes:-**

1. alt:- Specifies an alternate text for an image. When it is not possible to display the specified image then browser uses alt attribute to display the text written in it instead of image.
2. src:- Specifies the URL of an image.
3. width:- Specifies the width of an image in pixels.
4. height:- Specifies the height of an image in pixels.
5. border:- Specifies the border of the image.
6. align:- Specifies the left, right or center alignment default is left.
7. vspace:- Specifies the vertical space between image and text. Not Supported in HTML5.
8. hspace:- Specifies the horizontal space between image and text. Not Supported in HTML5.
9. usemap:- Specifies the map name.
10. logdesc:-
11. sizes:-
12. srcset:-
13. ismap:-
14. crossorigin:-

**Note-1:** If the image is stored in a different folder like c:\matrix then src attribute will contain “<file://c:/matrix>/img.jpg”.

**Note-2:** If the image is stored in a folder located on the web then src attribute will contain “<http://www.matrixcomputers.in/images/img.jpg>”.

**Example:-**

<img src="img1.jpg" /><br />

<img src="img1.jpg" width="200" height="200"/><br />

<img src="img1.jpg" width="200" height="200" border="5" align="right"/><br />

<img src="img.jpg" alt="Image of gaurav" border="1"/><br />

## 52. <TABLE>:-

The <table> tag defines an HTML table. An HTML table consists of the <table> element and one or more <tr>, <th>, and <td> elements. The <tr> element defines a table row, the <th> element defines a table header, and the <td> element defines a table cell. A more complex HTML table may also include <caption>, <col>, <colgroup>, <thead>, <tfoot>, and <tbody> elements.

**Attributes:-**

1. border:- Specifies a table border width, which is measured in pixels. The larger the number, the wider the border. border=0 removes borders.
2. bordercolor:- Specifies a color for the table border as #rrggbb number or name of color.
3. bgcolor:- To add background color use bgcolor attribute with a value that may be a color name or color value.
4. background:- Table background images are tiled –that is, they are repeated on the screen until the available background space is filled. Not all browsers tile images in the same way.
5. width:- Specifies table width in pixels or as a percentage of the window width.
6. align:- Specifies table alignment as left, center, right.
7. cellspacing:- Specifies, in pixels, the amount of space between cells.
8. cellpadding:- Specifies, in pixels, the amount of space between cell contents and cell borders.
9. frame:-
10. rules:-
11. summary:-

## 53. <TR>:-

The <tr> tag defines a row in an HTML table. A <tr> element contains one or more <th> or <td> elements.

## 54. <TH>:-

The <th> tag defines a header cell in an HTML table. The text in <th> elements are bold and centered by default.

## 55. <TD>:-

The <td> tag defines a standard cell in an HTML table. The text in <td> elements are regular and left-aligned by default.

**Attributes for TH and TD:-**

1. width:- Specifies the width of a cell in a either pixels or as a percentage of table width.

2. nowrap:- Prohibits text wrapping within the cell, thus requiring all text to appear on one line.

3. rowspan:- Used in <th> or <td> tags, rowspan indicates how many rows the cell should span. For example, rowspan=3 spans three rows.

4. colspan:- Used in either <th> or <td> tags, colspan indicates how many columns the cell should cover. For example, colspan=3 spans three columns.

5. align:- Specifies the horizontal alignment of cell contents as left, center, or right.

6. valign:- Specifies the vertical alignment of cell contents as top, middle or baseline.

7. abbr:-

8. axis:-

9. bgcolor:-

10. char:-

11. charoff:-

12. headers:-

13. height:- Specifies the height of the cell.

14. scope:-

**Example:-**

<html>

<head>

<title>First Page</title>

</head>

<body>

<table border="1" bordercolor="red" cellspacing="0" cellpadding="10" bgcolor="cyan" background="img1.jpg" width="75%" align="right" height="1000">

<caption>Student Details</caption>

<tr>

<th>Roll</th>

<th>Name</th>

<th>Per</th>

</tr>

<tr>

<td>101</td>

<td align="right" valign="bottom">Rahul</td>

<td>75.5</td>

</tr>

<tr>

<td width="200">102</td>

<td>Vinay</td>

<td>85.5</td>

</tr>

<tr>

<td>103</td>

<td nowrap>Gaurav Kumar Sharma Verma Gupta</td>

<td>95.5</td>

</tr>

<tr>

<td colspan="2">Max</td>

<td>95.5</td>

</tr>

</table>

</body>

</html>

**Output:-**

|  |  |  |
| --- | --- | --- |
| Student Details | | |
| **Roll** | **Name** | **Per** |
| 101 | Rahul | 75.5 |
| 102 | Vinay | 85.5 |
| 103 | Gaurav Kumar Sharma Verma Gupta | 95.5 |
| Max | | 95.5 |

## 56. <THEAD>:-

The <thead> tag is used to group header content in an HTML table. The <thead> element is used in conjunction with the <tbody> and <tfoot> elements to specify each part of a table (header, body, footer). Browsers can use these elements to enable scrolling of the table body independently of the header and footer. Also, when printing a large table that spans multiple pages, these elements can enable the table header and footer to be printed at the top and bottom of each page. The <thead> tag must be used in the following context: As a child of a <table> element, after any <caption>, and <colgroup> elements, and before any <tbody>, <tfoot>, and <tr> elements.

## 57. <TBODY>:-

The <tbody> tag is used to group the body content in an HTML table. The <tbody> element is used in conjunction with the <[thead](http://www.w3schools.com/TAGS/tag_thead.asp)> and <[tfoot](http://www.w3schools.com/TAGS/tag_tfoot.asp)> elements to specify each part of a table (body, header, footer). Browsers can use these elements to enable scrolling of the table body independently of the header and footer. Also, when printing a large table that spans multiple pages, these elements can enable the table header and footer to be printed at the top and bottom of each page. The <tbody> tag must be used in the following context: As a child of a <table> element, after any <caption>, <colgroup>, and <thead> elements.

## 58. <TFOOT>:-

The <tfoot> tag is used to group footer content in an HTML table. The <tfoot> element is used in conjunction with the <thead> and <tbody> elements to specify each part of a table (footer, header, body). Browsers can use these elements to enable scrolling of the table body independently of the header and footer. Also, when printing a large table that spans multiple pages, these elements can enable the table header and footer to be printed at the top and bottom of each page. The <tfoot> tag must be used in the following context: As a child of a <table> element, after any <caption>, <colgroup>, and <thead> elements and before any <tbody> and <tr> elements.

**Example:-**

<table border="1">

<thead>

<tr>

<th>Month</th>

<th>Savings</th>

</tr>

</thead>

<tfoot>

<tr>

<td>Sum</td>

<td>$180</td>

</tr>

</tfoot>

<tbody>

<tr>

<td>January</td>

<td>$100</td>

</tr>

<tr>

<td>February</td>

<td>$80</td>

</tr>

</tbody>

</table>

**Output:-**

| **Month** | **Savings** |
| --- | --- |
| February | $80 |
| January | $100 |
| Sum | $180 |

## 59. <CAPTION>:-

The <caption> tag defines a table caption. The <caption> tag must be inserted immediately after the <table> tag. You can specify only one caption per table. By default, the table caption will be center-aligned above a table. However, the CSS properties ”text-align” and “caption-side” can be used to align and place the caption.

**Example:-**

<table border="1">

<caption>Monthly savings</caption>

<tr>

<th>Month</th>

<th>Savings</th>

</tr>

<tr>

<td>January</td>

<td>$100</td>

</tr>

</table>

**Output:-**

Monthly savings

|  |  |
| --- | --- |
| **Month** | **Savings** |
| January | $100 |

## 60. <COL>:-

The <col> tag defines attribute values for one or more columns in a table. The <col> tag is useful for applying styles to entire columns, instead of repeating the styles for each cell, for each row. The <col> tag can only be used inside a <table> or a <colgroup> element.

## 61. <COLGROUP>:-

The <colgroup> tag is used to group columns in a table for formatting. The <colgroup> tag is useful for applying styles to entire columns, instead of repeating the styles for each column. The <colgroup> tag can only be used inside a <table> element.

Attributes:-

1. align left, right, center, justify, char Aligns the content in a column group

2. char character Aligns the content in a column group to a character

3. charoff number Sets the number of characters the content will be

aligned from the character specified by the char

attribute

4. span number Specifies the number of columns a column group should span

5. valign top, middle, bottom, baseline Vertical aligns the content in a column group

6. width pixels, %, relative\_length Specifies the width of a column group

**Example:-**

<table border="1">

<colgroup>

<col span="2" style="background-color:red;color:blue" />

<col style="background-color:yellow" />

</colgroup>

<tr>

<th>ISBN</th>

<th>Title</th>

<th>Price</th>

</tr>

<tr>

<td>3476896</td>

<td>My first HTML</td>

<td>$53</td>

</tr>

<tr>

<td>5869207</td>

<td>My first CSS</td>

<td>$49</td>

</tr>

</table>

**Output:-**

|  |  |  |
| --- | --- | --- |
| **ISBN** | **Title** | **Price** |
| 3476896 | My first HTML | $53 |
| 5869207 | My first CSS | $49 |

**62. <frameset>:-** This tag is used to divide our web page in multiple windows. The <frameset> tag can hold one or more <frame> tags. Each <frame> tag can hold a separate document. This tag is not supported in HTML 5.

**Attributes:-**

1. cols pixels,%,\* Specifies the number and size of columns in a frameset

2. rows pixels,%,\* Specifies the number and size of rows in a frameset

**63. <frame>:-** The <frame> tag denotes a particular window (frame) within a <frameset>. We can show any document or web page in the “src” attribute of frame tag. This tag is not supported by HTML 5.

**Attributes:-**

1. frameborder 0,1 Specifies whether or not to display a border around a

Frame. Default value is 1.

2. longdesc URL Specifies a page that contains a long description of the

content of a frame

3. marginheight pixels Specifies the top and bottom margins of a frame

4. marginwidth pixels Specifies the left and right margins of a frame

5. name text Specifies the name of a frame

6. noresize noresize Specifies that a frame is not resizable

7. scrolling yes,no,auto Specifies whether or not to display scrollbars in a frame default is yes.

8. src URL Specifies the URL of the document to show in a frame

**64. <noframes>:-** The <noframes> tag will work in those browsers that do not support frames. This tag is not supported in HTML 5. It can contain all the HTML elements that you can find inside the <body> element of a normal HTML page. The <noframes> element works inside the <frameset> element.

**Example:-**

## <html>

## <head>

## <title>First Page</title>

## </head>

## <frameset rows="25%,50%,\*">

## <frameset cols="50%,\*"><!--1st Row divided in 2 cols-->

## <frame src="a.html" marginheight="50" marginwidth="50" frameborder="0" name="f1"/>

## <frame src="b.html" frameborder="0" name="f2"/>

## </frameset>

## <frame src="http://www.matrixcomputers.in" scrolling="yes"/><!--2ndrownopartition-->

## <frameset cols="33%,33%,\*"><!--3rd Row divided in 3 cols-->

## <frame src="d.html" />

## <frame src="e.html" noresize="noresize"/>

## <frame src="f.html" noresize="noresize"/>

## </frameset>

## </frameset>

## <noframe><!-- if our browser does not support frame tag-->

## <body>Sorry your browser does not support frame tag.</body>

## </noframe>

## </html>

## 65. <A>:-

The <a> tag defines an anchor. It is also called as hyper link. An anchor can be used in two ways:

1. To create a hyper-link to another document, by using the href attribute.
2. To create a bookmark inside a document, by using the name attribute.

By default, links will appear as follows in all browsers:

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

**Attributes:-**

* 1. href:- Specifies the URL of the page where we want to jump.
  2. name:- Specifies the bookmark name of an anchor.
  3. target:- \_blank,\_parent,\_self,\_top

Example:-

<a href=”<http://www.google.co.in>”>Google</a>

Output:

Google

Explaination:-

a is the tag

href is the attribute

<http://www.google.co.in> is the destination URL

Google is the text to be displayed on the Web Page.

Example:-

**Index.html**

<menu>

<li><a href="purchase.html">Purchase</a></li>

<li><a href="sale.html">Sale</a></li>

</menu>

**Purchase.html**

<h1>Purchase in Quantity for last 3 years</h1>

<hr />

<table border="1">

<tr>

<th>Year</th>

<th>Quantity</th>

</tr>

<tr>

<td>2016</td>

<td>10000</td>

</tr>

<tr>

<td>2017</td>

<td>12000</td>

</tr>

<tr>

<td>2018</td>

<td>15000</td>

</tr>

</table>

**Sales.html**

<h1>Purchase in Quantity for last 3 years</h1>

<hr />

<table border="1">

<tr>

<th>Year</th>

<th>Quantity</th>

</tr>

<tr>

<td>2016</td>

<td>10000</td>

</tr>

<tr>

<td>2017</td>

<td>12000</td>

</tr>

<tr>

<td>2018</td>

<td>15000</td>

</tr>

</table>

**Linking to a specific location in a Document:-**

You link to specify places within documents with the help of a name anchor, which marks the targeted link location.

**Example of bookmark:-**

<ul>

<li><a href="#c1">Chapter 1</a></li>

<li><a href="#c2">Chapter 2</a></li>

<li><a href="#c3" target="\_blank">Chapter 3</a></li>

</ul>

<h1><a name="c1">Chapter 1</a></h1>

<p>This is some text. This is some text. This is some text. This is some text. This is some text. This is some text. This is some text. This is some text. This is some text. This is some text. This is some text. This is some text. This is some text. This is some text. This is some text. This is some text. This is some text. This is some text. This is some text. </p>

<h1><a name="c2">Chapter 2</a></h1>

<p>This is some text. This is some text. This is some text. This is some text. This is some text. This is some text. This is some text. This is some text. This is some text. This is some text. This is some text. This is some text. This is some text. This is some text. This is some text. This is some text. This is some text. This is some text. This is some text. </p>

<h1><a name="c3">Chapter 3</a></h1>

<p>This is some text. This is some text. This is some text. This is some text. This is some text. This is some text. This is some text. This is some text. This is some text. This is some text. This is some text. This is some text. This is some text. This is some text. This is some text. This is some text. This is some text. This is some text. This is some text. </p>

**Note-1:** # means jump to same page

**Note-2:** #c1 means jump to same page where bookmark c1 is available.

**Note-3:** target=”\_blank” means it will open chapter 3 in a new tab. Default is \_self that means it will open chapter 3 in same page.

**Protocol Indicator use**

* **http://** For documents on the web, including HTML documents and associated files.
* **file:///** For documents on the local hard drive. The third slash replaces the host name, so you can simply type the folder and filename.
* **ftp://** For documents on an FTP server.
* **gopher://** For documents on a Gopher server.
* **telnet://** To open a Telnet connection to a specific host. Good for connecting to library catalogs. This protocol indicator is chancy, however because you don’t know that Telnet applications are installed or configured on the visitor’s end.
* **wais://** To connect to a WAIS (Wide Area Information Server) database. This is seldom used because forms and CGI scripts offer a better way to process searches and because few visitors have WAIS clients installed and properly configured.
* **mailto:** To open a mail message window in which visitors can send an e-mail message to the specified address. Most browsers support mailto: , although it is not a standard or an officially accepted protocol. This indicator does not include //.
* **news:** To connect to a newsgroup or a specific article in a group. This is not guaranteed, though, because you don’t know which newsgroup your visitors might have access to. Also, before using the news: protocol, consider that articles periodically expire and disappear from the server. This indicator does not include //.

**Linking to Documents:-**

The basic link connects one document to another file in the same folder. To create a link from first document to second document, you include the anchor tag (<a>), the href=attribute and a URL that points to the filename of second document.

<a href="second document">Access Second Document</a>

When linking to documents within the same folder, you need include only the file name. If your document is in different folder then give the relative or absolute path of that document.

<a href="another folder/second document>Access Another folder</a>

**Linking to Documents on the Web:-**

When you link from one document to another document on the web, the documents likely reside on different servers. Linking to documents on the web requires absolute URL.

<a href="http://www.google.com/images/yourimage.jpg">Your Image</a>

**Inserting E-mail Links:-**

To create an e-mail link, simply add an anchor link with the mailto: protocol indicator and the e-mail address.

<a href="mailto:matrix.computers@ymail.com">Mail Us</a>

**Example:-**

**Index.html**

<html>

<head>

<title>First Page</title>

</head>

<frameset cols="25%,\*">

<frame src="a.html" name="f1" />

<frame src="b.html" name="f2" />

</frameset>

<noframes><!-- if our browser does not support frame tag-->

<body>Sorry your browser does not support frame tag.</body>

</noframes>

</html>

**a.html**

<html>

<head>

<title>First Page</title>

</head>

<body>

<ul>

<li><a href="b.html#c1" target="f2">Chapter 1</a></li>

<li><a href="b.html#c2" target="f2">Chapter 2</a></li>

<li><a href="b.html#c3" target="f2">Chapter 3</a></li>

</ul>

</body>

</html>

**b.html**

<html>

<head>

<title>First Page</title>

</head>

<body>

<h1><a name="c1">Chapter 1</a></h1>

<p>This is some text. This is some text. This is some text. This is some text. This is some text. This is some text. This is some text. </p>

<h1><a name="c2">Chapter 2</a></h1>

<p>This is some text. This is some text. This is some text. This is some text. This is some text. This is some text. This is some text. </p>

<h1><a name="c3">Chapter 3</a></h1>

<p>This is some text. This is some text. This is some text. This is some text. This is some text. This is some text. This is some text. </p>

</body>

</html>

**66. <BASE>:-**

The <base> tag specifies the base URL/target for all relative URLs in a document. The <base> tag goes inside the <head> element. It saves a lot of time of the developer because he or she does not have to type the URL or target of anchor again and again.

**Attributes:-**

1. href URL Specifies the base URL for all relative URLs in the page

2. target \_blank Specifies the default target for all hyperlinks and forms in the page

\_parent

\_self

\_top

framename

**Example:-**

<head>

<base href="file://c:/matrix/images/" target="\_blank" />

</head>

<body>

<img src="img1.gif" />

<img src="img2.gif" />

<img src="file://d:/images/img3.gif" />

<a href=”<http://www.matrixcomputers.in>” target=”\_self”>Matrix Computers</a>

<a href=”<http://www.aryaninfomatrix.in>”>Aryan Infomatrix pvt. Ltd.</a>

<a href=”<http://www.matrixinfotech.in>” >Matrix Infotech</a>

</body>

**67. <basefont>:-** The <basefont> tag specifies a default font-color, font-size, or font-family for all the text in a document. This tag is not supported in HTML 5.

**Attributes:-**

1. color Specifies the default color for text in a document

2. face Specifies the default font for text in a document

3. size Specifies the default size of text in a document

**Example:-**

<head>

<basefont color="red" size="5" face=”arial”>

</head>

<body>

<h1>This is a heading</h1>

<p>This is a paragraph.</p>

</body>

## <BODY>:-

The <body> tag defines the document's body. The <body> element contains all the contents of an HTML document, such as text, hyperlinks, images, tables, lists, etc.

**Attributes:-**

* 1. link :- Specifies the default color of unvisited links in a document

2. alink :- Specifies the color of an active link in a document

3. vlink :- Specifies the color of the visited links in a document

**Example:-**

<html>

<head>

<title>Title of the document</title>

</head>

<body link=”rgb(255,0,0)” alink=”#00FF00” vlink=”blue”>

<a href=”<http://www.matrixcomputers.in>” target=”\_self”>Matrix Computers</a>

<a href=”<http://www.aryaninfomatrix.in>”>Aryan Infomatrix pvt. Ltd.</a>

<a href=”<http://www.matrixinfotech.in>” >Matrix Infotech</a>

</body>

</html>

## 68. <DIV>:-

The <div> tag defines a division or a section in an HTML document. The <div> tag is used to group some words or some lines or some paragraphs to format them with styles. <Div> is a block tag.

**Attributes:-**

1. Style:- Specifies an inline style for an element

**Example:-**

<div style="color:#00FF00">

Matrix Computers

</div>

<div style="color:#FF0000">

A unit of Aryan Infomatrix pvt. ltd.

</div>

**Output:-**

Matrix Computers

A unit of Aryan Infomatrix pvt. ltd.

## 69. <SPAN>:-

The <span> tag is used to group inline-elements in a document. The <span> tag provides no visual change by itself. The <div> tag is used to group some words or some lines or some paragraphs to format them with styles. The <span> is an inline tag.

**Attributes:-**

1. Style Specifies an inline style for an element

**Example:-**

<span style="color:#00FF00">

Matrix Computers

</span>

<span style="color:#FF0000">

A unit of Aryan Infomatrix pvt. ltd.

</span>

**Output:-**

Matrix Computers A unit of Aryan Infomatrix pvt. ltd.

## 70. <STYLE>:-

The <style> tag is used to define style information for an HTML document. Inside the <style> element you specify how HTML elements should render in a browser. The required type attribute defines the content of the <style> element. The only possible value is "text/css". The <style> element always goes inside the head section.

**Attributes:-**

1. type:- Specifies the MIME type of the style sheet(text/css).

**Example:-**

<html>

<head>

<style type="text/css">

h1 {color:red;}

p {color:blue;}

</style>

</head>

<body>

<h1>Header 1</h1>

<p>A paragraph.</p>

</body>

</html>

## 71. <PRE>:-

The <pre> tag defines preformatted text. Text in a <pre> element is displayed as it is and it preserves both spaces and line breaks.

**Example:-**

<pre>

#include<stdio.h>

main()

{

int a=5,b=6,sum=a+b;

printf("Sum is %d",sum);

}

</pre>

## 72. <SCRIPT>:-

The <script> tag is used to define a client-side script, such as a JavaScript. The <script> element either contains scripting statements, or it points to an external script file through the src attribute. The required type attribute specifies the MIME type of the script. Common uses for JavaScript are image manipulation, form validation, and dynamic changes of content.

**Attributes:-**

1. type:- Specifies the MIME type of the script
2. src:- Specifies the name of external script file.

## 73. <NOSCRIPT>:-

The <noscript> tag is used to provide an alternate content for users that have disabled scripts in their browser or have a browser that doesn’t support client-side scripting. The <noscript> element can contain all the elements that you can find inside the <body> element of a normal HTML page. The content inside the <noscript> element will only be displayed if scripts are not supported, or are disabled in the user’s browser.

**Example:-**

<html>

<head>

<script type=”text/javascript”>

function f1()

{

for(i=1;i<=10;i++)

alert("Hello");

}

</script>

<noscript>Your browser has disabled the javascript</noscript>

</head>

<body onload="f1()">

</body>

</html>

**74. <MARQUEE>:-**

This tag is to show scrolling text.

**Attributes:-**

* 1. direction:-This attribute changes the direction of scrolling left, right, up, down
  2. loop:-How many times it should scroll. If not mentioned then infinite times.
  3. scrollamount:- Controls the speed.
  4. behavior:- slide,scroll or alternate.

<marquee behavior="scroll" direction="left" onMouseOver="this.stop()" onMouseOut="this.start()" scrollamount="2" onMouseDown="this.setAttribute('scrollamount',20)">Matrix</marquee>

## 75. <FORM>:-

The <form> tag is used to create an HTML form for user input. The <form> element can contain one or more of the following form elements:

* <input>
* <textarea>
* <button>
* <select>
* <option>
* <optgroup>
* <fieldset>
* <legend>
* <label>

An HTML form is used to pass data to a server.

* 1. method:= {get, post…..} Tells the browser how to send the data to the server, with either the post method or the get method.

2. action:="…" Indicates the program (Typically url) on the HTTP server that will process the form data.

3. name

In general, after visitor clicks the Submit button on a form, the information is sent to the web server and to the program indicated by the action attribute in the form. You should include specific attributes in the opening <form> tag to process a form. The action and method attributes depends on the server-side program that process the form.

**Example:-**

<form action="form\_action.jsp" method="get">

First name: <input type="text" name="fname" /><br />

Last name: <input type="text" name="lname" /><br />

<input type="submit" value="Submit" />

</form>

## 76. <INPUT>:-

The <input> tag is used to select user information. <input> elements are used within a <form> element to declare input controls that allow users to input data. An input field can vary in many ways, depending on the type attribute.

**Attributes:-**

1. type:- Specifies the type of <input> element (button, checkbox, file, hidden, image, password, radio, reset, submit, text, time, date, color, datetime, email, month, number, range, tel, url, week).
2. value:- Specifies the value of an <input> element.
3. name:- Specifies the name of an <input> element
4. disabled:- true or false
5. placeholder:-To show text in background
6. checked:-Checked
7. maxlength:-To limit the length of a textbox.
8. accept:- "application/pdf,application/vnd.ms-excel,image/\*"
9. readonly:- ”readonly”
10. multiple:-To Convert Dropdown combo to listbox

**Example:-**

<form action="form\_action.asp" method="get">

First name: <input type="text" name="fname" /><br />

Last name: <input type="text" name="lname" /><br />

<input type="submit" value="Submit" />

</form>

The input types are described below.

**Text Fields**

Text fields are commonly used for a name, an e-mail address, and so on.

<input type=“text” /> defines a one-line input field that a user can enter text into:

<form>  
First name: <input type=“text” name=“firstname” /><br />  
Last name: <input type=“text” name=“lastname” />  
</form>

Note: The form itself is not visible. Also note that the default width of a text field is 20 characters.

**Password Field**

Password fields are similar to text fields, except the contents of the field are not visible on the screen. Password fields are appropriate whenever the content of the field might be confidential. <input type=“password” /> defines a password field:

<form>  
Password: <input type=“password” name=“pwd” />  
</form>

Note: The characters in a password field are masked (shown as asterisks or circles).

**Radio Buttons**

A radio button is a type of input field that allows visitors to choose one option from a list. Radio buttons are so named because you can choose only one of them. <input type=“radio” /> defines a radio button.

<form>  
<input type=“radio” name=“sex” value=“male” /> Male<br />  
<input type=“radio” name=“sex” value=“female” /> Female  
</form>

**Checkboxes**

Visitors can use check boxes to select an item from a list. Each check box works independently from the others; visitors can select or deselect any combination of check boxes.

<input type=“checkbox” /> defines a checkbox. Checkboxes let a user select ONE or MORE options of a limited number of choices.

<form>  
<input type=“checkbox” name=“vehicle” value=“Bike” /> I have a bike<br />  
<input type=“checkbox” name=“vehicle” value=“Car” /> I have a car   
</form>

**Hidden Fields**

Hidden Fields are –obviously –not visible to your visitor.

<input type="hidden" name="stock" value="200">

**File Fields**

HTML also supports a special input field, a file field, to allow visitors to upload files. For example, if you want visitors to submit information –say, a picture, photos, and resumes etc. They can use this field to simply upload the file without the hassle of using FTP or e-mailing the file.

<input type="file" name="resume" size="20"><br />

<input type="time" name="t1"/><br />

<input type="date" /><br />

<input type="color" name="col"/><br />

<input type="datetime" /><br />

<input type="datetime-local" /><br />

<input type="email" /><br />

<input type="month" /><br />

<input type="number" /><br />

<input type="range" /><br />

<input type="search" /><br />

<input type="tel" /><br />

<input type="url" /><br />

<input type="week" /><br />

## 77. <TEXTAREA>:-

The <textarea> tag defines a multi-line text input control. A text area can hold an unlimited number of characters, and the text renders in a fixed-width font (usually Courier). The size of a text area is specified by the cols and rows attributes.

**Attributes:-**

1. cols:- Specifies the visible width of a text area.
2. rows:- Specifies the visible number of lines in a text area.

**Example:-**

<textarea rows="2" cols="20">At matrix you will find all the Web-building tutorials you need, from basic

HTML to advanced XML, SQL, ASP, and PHP. </textarea>

## 78. <BUTTON>:-

The <button> tag defines a push button. Inside a <button> element you can put content, like text or images. This is the difference between this element and buttons created with the < input> element.

**Attributes:-**

1. type:- Specifies the type of button (button, reset, submit)

**Example:-**

<button type="button">Click Me!</button>

## 79. <SELECT>:-

The <select> tag is used to create a drop-down list. The <option> tags inside the <select> element define the available options in the list.

## 80. <OPTION>:-

The <option> tag defines an option in a select list. <option> elements go inside a <select> element.

**Example:-**

<select>

<option value="volvo">Volvo</option>

<option value="saab">Saab</option>

<option value="mercedes">Mercedes</option>

<option value="audi">Audi</option>

</select>

## 81. <OPTGROUP>:-

The <optgroup> is used to group related options in a drop-down list. If you have a long list of options, groups of related options are easier to handle for a user.

**Attributes:-**

1. label:- Specifies a label for an option-group.

**Example:-**

<select>

<optgroup label="Swedish Cars">

<option value="volvo">Volvo</option>

<option value="saab">Saab</option>

</optgroup>

<optgroup label="German Cars">

<option value="mercedes">Mercedes</option>

<option value="audi">Audi</option>

</optgroup>

</select>

## 82. <FIELDSET>:-

The <fieldset> tag is used to group related elements in a form. The <fieldset> tag draws a box around the related elements.

## 83. <LEGEND>:-

The <legend> tag defines a caption for the <fieldset> element.

**Example:-**

<form>

<fieldset>

<legend>Personalia:</legend>

Name: <input type="text" /><br />

Email: <input type="text" /><br />

Date of birth: <input type="text" />

</fieldset>

</form>

## 84. <LABEL>:-

The <label> tag defines a label for an <input> element. The <label> element does not render as anything special for the user. However, it provides a usability improvement for mouse users, because if the user clicks on the text within the <label> element, it toggles the control. The for attribute of the <label> tag should be equal to the id attribute of the related element to bind them together.

**Attributes:-**

1. for:- Specifies which form element a label is bound to.

**Example:-**

<form>

<label for="male">Male</label>

<input type="radio" name="gender" id="male" /><br />

<label for="female">Female</label>

<input type="radio" name="gender" id="female" />

</form>

**Form Example:-**

<!doctype html public "-//w3c//dtd html 4.0 transitional//en">

<html>

<head>

<title>Matrix Online Recruitment</title>

</head>

<body>

<center>

<h1>Matrix Computers</h1>

<h2>Registration for Faculty Position</h2>

<form action="online registration1.html">

<table border=1>

<tr>

<td align="right"><label>First Name \* </label></td>

<td><input type="text"></td>

</tr>

<tr>

<td align="right"><label>Middle Name</label></td>

<td><input type="text"></td>

</tr>

<tr>

<td align="right"><label>Last Name \*</label></td>

<td><input type="text"></td>

</tr>

<tr>

<td><label>Father's Name \*</label></td>

<td><input type="text"></td>

</tr>

<tr>

<td><label align="right">Date of Birth \*</td>

<td><select name="date">

<option value="1">1</option>

<option value="2">2</option>

<option value="3">3</option>

<option value="4">4</option>

<option value="5">5</option>

<option value="6">6</option>

<option value="7">7</option>

<option value="8">8</option>

<option value="9">9</option>

<option value="10">10</option>

<option value="11">11</option>

<option value="12">12</option>

<option value="13">13</option>

<option value="14">14</option>

<option value="15">15</option>

<option value="16">16</option>

<option value="17">17</option>

<option value="18">18</option>

<option value="19">19</option>

<option value="20">20</option>

<option value="21">21</option>

<option value="22">22</option>

<option value="23">23</option>

<option value="24">24</option>

<option value="25">25</option>

<option value="26">26</option>

<option value="27">27</option>

<option value="28">28</option>

<option value="29">29</option>

<option value="30">30</option>

<option value="31">31</option>

</select>

<select name="month">

<option value="1">January</option>

<option value="2">February</option>

<option value="3">March</option>

<option value="4">April</option>

<option value="5">May</option>

<option value="6">June</option>

<option value="7">July</option>

<option value="8">August</option>

<option value="9">September</option>

<option value="10">October</option>

<option value="11">November</option>

<option value="12">December</option>

</select>

<select name="year">

<option value="1980">1980</option>

<option value="1981">1981</option>

<option value="1982">1982</option>

<option value="1983">1983</option>

<option value="1984">1984</option>

<option value="1985">1985</option>

<option value="1986">1986</option>

<option value="1987">1987</option>

<option value="1988">1988</option>

<option value="1989">1989</option>

<option value="1990">1990</option>

<option value="1991">1991</option>

<option value="1992">1992</option>

</select>

</td>

</tr>

<tr>

<td align="right"><label>Category \*</label></td>

<td>

<select name="category">

<option value="gen">General</option>

<option value="obc">OBC</option>

<option value="sc">SC</option>

<option value="st">ST</option>

<option value="ph">PH</option>

</select>

</td>

</tr>

<tr>

<td align="right"><label>Gender \*</label></td>

<td><input type="radio" name="gender" value="male">Male

<input type="radio" name="gender" value="female">Female

</td>

</tr>

<tr>

<td align="right"><label>Address \*</label></td>

<td><textarea cols="16" rows="4"></textarea></td>

</tr>

<tr>

<td align="right">City \*</td>

<td><input type="text"></td>

</tr>

<tr>

<td align="right">State \*</td>

<td><input type="text"></td>

</tr>

<tr>

<td align="right">Pin Code \*</td>

<td><input type="text"></td>

</tr>

<tr>

<td colspan=2 align="center"><input type="submit" value="Next >>"></td>

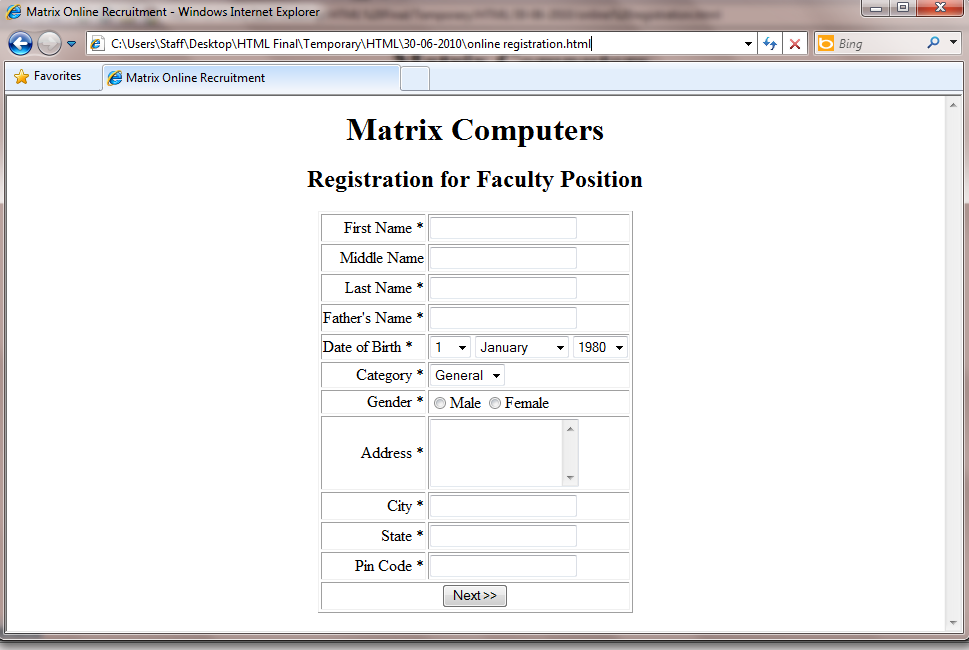
</tr>

</table>

</center>

</body>

</html>



<!doctype html public "-//w3c//dtd html 4.0 transitional//en">

<html>

<head>

<title>Matrix Online Recruitment</title>

</head>

<body>

<center>

<h1>Matrix Computers</h1>

<h2>Registration for Faculty Position</h2>

<form action="online registration2.html">

<table border=1 width=300>

<tr>

<td align="right"><label>Mobile No.</label></td>

<td><input type="text"></td>

</tr>

<tr>

<td align="right"><label>Email<label></td>

<td><input type="text"></td>

</tr>

</tr>

<tr>

<td><label>DD Number#</label></td>

<td><input type="text"></td>

</tr>

<tr>

<td><label>Issuing Bank :</label></td>

<td><input type="text"></td>

</tr>

<tr>

<td>Amount :</td>

<td><input type="text"></td>

</tr>

<tr>

<td>Issued On :</td>

<td>

<select name="date">

<option value="1">1</option>

<option value="2">2</option>

<option value="3">3</option>

<option value="4">4</option>

<option value="5">5</option>

<option value="6">6</option>

<option value="7">7</option>

<option value="8">8</option>

<option value="9">9</option>

<option value="10">10</option>

<option value="11">11</option>

<option value="12">12</option>

<option value="13">13</option>

<option value="14">14</option>

<option value="15">15</option>

<option value="16">16</option>

<option value="17">17</option>

<option value="18">18</option>

<option value="19">19</option>

<option value="20">20</option>

<option value="21">21</option>

<option value="22">22</option>

<option value="23">23</option>

<option value="24">24</option>

<option value="25">25</option>

<option value="26">26</option>

<option value="27">27</option>

<option value="28">28</option>

<option value="29">29</option>

<option value="30">30</option>

<option value="31">31</option>

</select>

<select name="month">

<option value="5">May</option>

<option value="6">June</option>

</select>

<select name="year">

<option value="2010">2010</option>

</select>

</td>

</tr>

<tr>

<td colspan=2 align="center"><input type="submit" value="Next >>"></td>

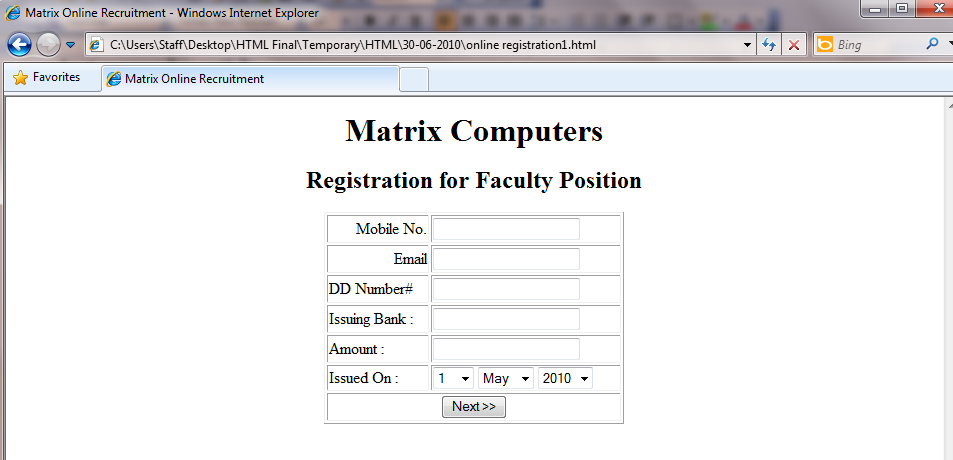
</tr>

</table>

<form>

</body>

</html>



<html>

<head>

<title>Matrix Online Recruitment</title>

</head>

<body>

<center>

<h1>Matrix Computers</h1>

<h2>Registration for Faculty Position</h2>

<form action="online registration4.html">

<table border=1 width=300>

<tr><td colspan=2><font size=4>Qualification</td></tr>

<tr>

<td align="right"><label>10<sup>th</sup> %</label></td>

<td><input type="text"></td>

</tr>

<tr>

<td align="right"><label>12<sup>th</sup> %</label></td>

<td><input type="text"></td>

</tr>

<tr>

<td align="right"><label>Graduation %</label></td>

<td><input type="text"></td>

</tr>

<tr>

<td align="right"><label>Post Graduation %</label></td>

<td><input type="text"></td>

</tr>

<tr>

<td align="right">Technologies Known:</td>

<td>

<input type="checkbox" name="tech" value="c">C

<input type="checkbox" name="tech" value="cplus">C++

<input type="checkbox" name="tech" value="java">Java

<input type="checkbox" name="tech" value="net">.Net

<input type="checkbox" name="tech" value="tally">Tally

<input type="checkbox" name="tech" value="csharp">C#

</td>

</tr>

<tr>

<td>Expert In:</td>

<td><input type="checkbox" name="tech" value="c">C

<input type="checkbox" name="tech" value="cplus">C++

<input type="checkbox" name="tech" value="java">Java

<input type="checkbox" name="tech" value="net">.Net

<input type="checkbox" name="tech" value="tally">Tally

<input type="checkbox" name="tech" value="csharp">C#

<input type="checkbox" name="tech" value="basic">Basic

</td>

</tr>

<tr>

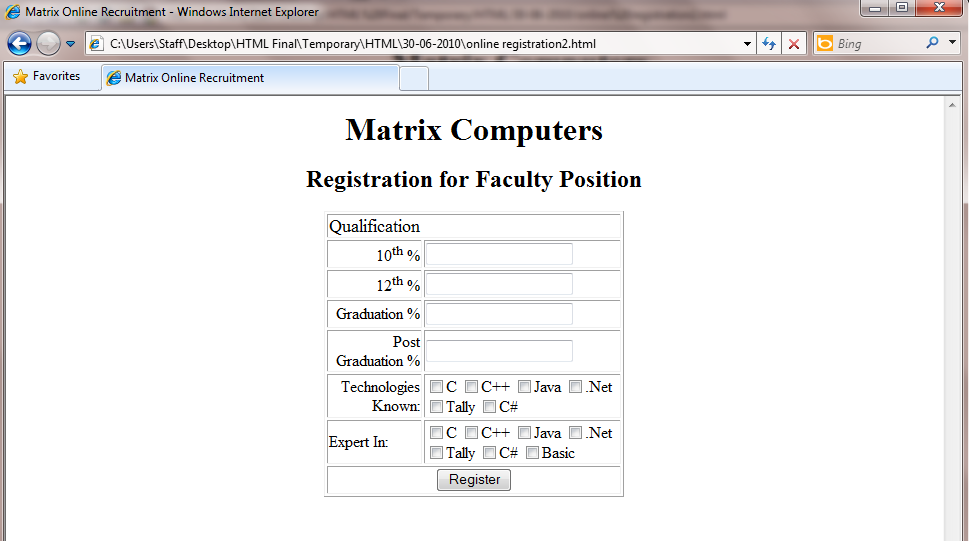
<td colspan=2 align="center"><input type="submit" value="Register"></td>

</tr>

</table>

</body>

</html>



<!DOCTYPE HTML PUBLIC "-//W3C//DTD HTML 4.0 Transitional//EN">

<HTML>

<HEAD>

<TITLE>Matrix Online Recruitment</TITLE>

</HEAD>

<BODY>

<center>

<h1>Matrix Computers</h1>

<h2>Registration for Faculty Position</h2>

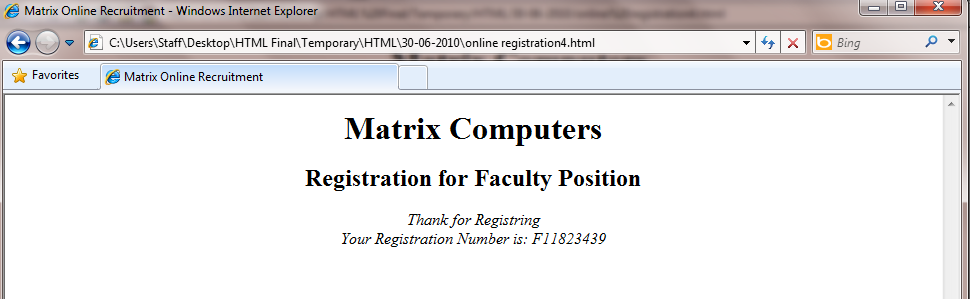
<i>Thank for Registring <br>

Your Registration Number is: F11823439 </i>

</center>

</BODY>

</HTML>



## 85. <LINK>:-

The <link> tag defines the relationship between a document and an external resource. The <link> tag is most used to link to style sheets.

**Attributes:-**

1. rel:- Specifies the relationship between the current document and the linked(stylesheet).
2. type:- Specifies the MIME type of the linked document.
3. href:- Specifies the location of the linked document.

**Example:-**

<head>

<link rel="stylesheet" type="text/css" href="theme.css" />

<link rel="shortcut icon" href="images/favicon.ico" />

</head>

## 86. <PARAM>:-

The <param> tag is used to define parameters for plugins embedded with an <object> element.

**Attributes:-**

1. name:- Specifies the name of a parameter
2. value:- Specifies the value of the parameter

**Example:-**

<object data="horse.wav">  
 <param name="autoplay" value="false" />

<param name="controls" value="true" />  
</object>

## 87. <IFRAME>:-

The <iframe> tag specifies an inline frame. An inline frame is used to embed another document within the current HTML document.

1. src:- Specifies the address of the document to embed in the <iframe>
2. frameborder:- Specifies whether or not to display a border around an <iframe> ( 0 or 1)
3. height Specifies the height of an <iframe> in pixels or percent.
4. width Specifies the width of an <iframe> in pixels or percent.
5. Scrolling Specifies whether or not to display scrollbars in an <iframe>
6. align left, right, top, middle, bottom

**Example:-**

<iframe src="http://www.matrixcomputers.in”></iframe>

## 88. <!DOCTYPE>:-

The <!DOCTYPE> declaration must be the very first thing in your HTML document, before the <html> tag. The <!DOCTYPE> declaration is not an HTML tag; it is an instruction to the web browser about what version of HTML the page is written in. The <!DOCTYPE> declaration refers to a Document Type Definition (DTD). The DTD specifies the rules for the markup language, so that the browsers render the content correctly.

**Example:-**

<!DOCTYPE html PUBLIC "-//W3C//DTD XHTML 1.0 Transitional//EN"  
"http://www.w3.org/TR/xhtml1/DTD/xhtml1-transitional.dtd">  
<html>  
<head>  
<title>Title of the document</title>  
</head>  
<body>  
The content of the document......  
</body>  
</html>

## Common DOCTYPE Declarations

### HTML 5

<!DOCTYPE html>

### HTML 4.01 Strict

This DTD contains all HTML elements and attributes, but does NOT INCLUDE presentational or deprecated elements (like font). Framesets are not allowed.

<!DOCTYPE HTML PUBLIC "-//W3C//DTD HTML 4.01//EN" "http://www.w3.org/TR/html4/strict.dtd">

### HTML 4.01 Transitional

This DTD contains all HTML elements and attributes, INCLUDING presentational and deprecated elements (like font). Framesets are not allowed.

<!DOCTYPE HTML PUBLIC "-//W3C//DTD HTML 4.01 Transitional//EN" "http://www.w3.org/TR/html4/loose.dtd">

### HTML 4.01 Frameset

This DTD is equal to HTML 4.01 Transitional, but allows the use of frameset content.

<!DOCTYPE HTML PUBLIC "-//W3C//DTD HTML 4.01 Frameset//EN" "http://www.w3.org/TR/html4/frameset.dtd">

### XHTML 1.0 Strict

This DTD contains all HTML elements and attributes, but does NOT INCLUDE presentational or deprecated elements (like font). Framesets are not allowed. The markup must also be written as well-formed XML.

<!DOCTYPE html PUBLIC "-//W3C//DTD XHTML 1.0 Strict//EN" "http://www.w3.org/TR/xhtml1/DTD/xhtml1-strict.dtd">

### XHTML 1.0 Transitional

This DTD contains all HTML elements and attributes, INCLUDING presentational and deprecated elements (like font). Framesets are not allowed. The markup must also be written as well-formed XML.

<!DOCTYPE html PUBLIC "-//W3C//DTD XHTML 1.0 Transitional//EN" "http://www.w3.org/TR/xhtml1/DTD/xhtml1-transitional.dtd">

### XHTML 1.0 Frameset

This DTD is equal to XHTML 1.0 Transitional, but allows the use of frameset content.

<!DOCTYPE html PUBLIC "-//W3C//DTD XHTML 1.0 Frameset//EN" "http://www.w3.org/TR/xhtml1/DTD/xhtml1-frameset.dtd">

### XHTML 1.1

This DTD is equal to XHTML 1.0 Strict, but allows you to add modules (for example to provide ruby support for East-Asian languages).

<!DOCTYPE html PUBLIC "-//W3C//DTD XHTML 1.1//EN" "http://www.w3.org/TR/xhtml11/DTD/xhtml11.dtd">

## 89. <META>:-

Metadata is data (information) about data. The <meta> tag provides metadata about the HTML document. Metadata will not be displayed on the page, but will be machine parsable. Meta elements are typically used to specify page description, keywords, author of the document, last modified, and other metadata. The <meta> tag always goes inside the <head> element. The metadata can be used by browsers (how to display content or reload page), search engines (keywords), or other web services.

**Attributes:-**

1. http-equip:- Provides an HTTP header for the STF information/value of the content

attribute.

|  |  |
| --- | --- |
| **Value** | **Description** |
| cache-control | Controls the caching mechanism to use for the document.  Available values:   * public - cached in public shared caches * private - cached in private cache * no-cache - not cached * no-store - cached but not archived   Example:  <meta http-equiv="cache-control" content="no-cache" /> |
| content-language | Specifies the natural language(s) of the document (used by search engines to categorize pages by language).  Example:  <meta http-equiv="content-language" content="en-US" /> |
| content-type | Specifies the character set for the contents of the document.  **Tip:** It is recommended to always specify the character set.  Example:  <meta http-equiv="content-type" content="text/html; charset=UTF-8" /> |
| Date | Specifies the date and time when the page was created.  Example:  <meta http-equiv="date" content="Wed, 16 Feb 2011 22:34:13 GMT" /> |
| Expires | Specifies the date and time when the page will expire.  Example:  <meta http-equiv="expires" content="Fri, 30 Dec 2011 12:00:00 GMT" /> |
| last-modified | Specifies the last modification date.  Example:  <meta http-equiv="last-modified" content="Mon, 03 Jan 2011 17:45:57 GMT" /> |
| Location | Redirects the visitor to another location.  Example:  <meta http-equiv="location" content="URL=http://www.matrixcomputers.co.in" /> |
| Refresh | Defines a time interval for the document to refresh itself.  Example:  <meta http-equiv="refresh" content="300" />  Note: The value "refresh" should be used carefully, as it takes the control of a page away from the user. Using "refresh" will cause a failure in [W3C's Web Content Accessibility Guidelines](http://www.w3.org/WAI/intro/wcag.php). |
| set-cookie | Creates a cookie with specified name,expires date and value.  Example:  <meta http-equiv="set-cookie" content="matrix=myContent;expires=Fri, 30 Dec 2011 12:00:00 GMT; path=http://www.matrixcomputers.co.in"> |
| window-target | Specifies the name of the frame where the current document must be loaded |

1. name:- Provides a name for the information in the content attribute.

|  |  |
| --- | --- |
| **Value** | **Description** |
| Abstract | Defines a secondary description |
| Author | Defines the author of the document.  Example: <meta name="author" content="Hege Refsnes" /> |
| Classification | Classifies the site into the correct category |
| Copyright | Defines copyright information of the document.  Example: <meta name="copyright" content="2011© W3Schools.com" /> |
| Description | Search engines can pick up this description to show with the results of searches.  Example: <meta name="description" content="Free web tutorials" /> |
| Distribution | Declares whether the document is available to the web or on an intranet.   * web - for the full internet * intranet - only for intranet   Example: <meta name="distribution" content="web" /> |
| doc-class | Specifies completion status of the document |
| doc-rights | Specifies copyright status of the document |
| doc-type | Specifies the type of the document |
| DownloadOptions | The associated content property determines what buttons are visible on the File Download dialog box |
| Expires | Specifies the date and time when the page expires.  Example: <meta name="expires" content="Fri, 10 Jun 2011 12:00:00 GMT" /> |
| Generator | Specifies the name of the program that generated the document |
| Googlebot | Informs the Google search engine about indexing, archiving and link-following rules.   * noarchive - Prevent Google search engine from archiving the page * nofollow - The page can be indexed, but links should not be followed * noindex - Google robots should follow links, but not index the page * nosnippet - Prevent Google search engine from saving snippets and archiving the document   Example: <meta name="googlebot" content="noarchive" /> |
| Keywords | Informs search engines what your site is about.  **Tip:** Always specify keywords (needed by search engines to catalogize the page).  Example: <meta name="keywords" content="HTML, HTML DOM, JavaScript" /> |
| MSSmartTagsPreventParsing | Prevents any Microsoft product from automatically generating smart tags |
| Name | Specifies the name of the document |
| Owner | Defines the owner of the page or site |
| Progid | Defines the id of a program used to generate the document |
| Rating | Defines webpage rating |
| Refresh | The document will display for a specified amount of time before refreshing or switch to a new URL.  Example: <meta name="refresh" content="10" /> <meta name="refresh" content="10;URL=http://www.matrixcomputers.co.in" /> |
| reply-to | Defines an email address of a contact for the document |
| resource-type | Defines the type of web resource |
| revisit-after | Defines how often search engine spiders should revisit the site |
| Robots | Defines page indexing mechanisms for robots, search engine indexing and link-following rules.  The content attribute should contain a comma separated list of the following values:   * ALL - Robots should follow links, index and archive this page * FOLLOW - Search engine robots should follow links from this page * INDEX - Robots should include and index this page * NOARCHIVE - Prevent search engines from archiving the page * NOINDEX - Robots should follow links, but should not index the page * NOFOLLOW - The page can be indexed, but links should not be followed * NONE - Search engine robots can ignore the page   Example: <meta name="robots" content="ALL" /> <meta name="robots" content="INDEX,NOFOLLOW" /> |
| Template | The content attribute should specify the location of the template used to edit the document |
| *Others* | You can define your own names in a schema |

1. content:- Provides the content for the variables mentioned in name or http-equip.

**Example:-**

<head>

<meta name="description" content="Free Web tutorials" />

<meta name="keywords" content="HTML,CSS,XML,JavaScript" />

<meta name="author" content="Hege Refsnes" />

<meta http-equiv="content-type" content="text/html;charset=UTF-8" />

<meta http-equiv="refresh" content="5"> (refresh web page in 5 sec interval.)

</head>

## 90. <OBJECT>:-

The <object> tag defines an embedded object within an HTML document. Use this element to embed multimedia (like audio, video, Java applets, ActiveX, PDF, and Flash) in your web pages. You can also use the <object> tag to embed another webpage into your HTML document. You can use the <param> tag to pass parameters to plugins that have been embedded with the <object> tag.

Attributes:-

1. height:- Specifies the height of the object in pixels.
2. width:- Specifies the width of the object in pixels.
3. data:- Specifies the URL of the resource to be used by the object.

**Example:-**

<object width="400" height="400" data="helloworld.swf"></object>

## 91. <AREA>:-

The <area> tag defines an area inside an image-map (an image-map is an image with clickable areas). The <area> element is always nested inside a <map> tag.

**Note:** The usemap attribute in the [<img>](http://www.w3schools.com/tags/tag_img.asp) tag is associated with the [<map>](http://www.w3schools.com/tags/tag_map.asp) element's name attribute, and creates a relationship between the image and the map.

## Attributes:-

## 1. alt text Specifies an alternate text for the area. Required if the href attribute

## is present

## 2. coords coordinates Specifies the coordinates of the area

## 3. href URL Specifies the hyperlink target for the area

## 4. shape default Specifies the shape of the area

## rect

## circle

## poly

## 5. target \_blank Specifies where to open the target URL

## \_parent

## \_self

## \_top

## framename

## 92. <MAP>:-

The <map> tag is used to define a client-side image-map. An image-map is an image with clickable areas.

The name attribute of the <map> element is required and it is associated with the <img>'s usemap attribute and creates a relationship between the image and the map. The <map> element contains a number of <area> elements, that defines the clickable areas in the image map.

**Attributes:-**

1. name mapname Required. Specifies the name of an image-map

**Example:-**

<img src ="planets.gif" width="145" height="126" alt="Planets" usemap ="#planetmap" />  
<map name="planetmap">

<area shape="rect" coords="0,0,82,126" href="sun.html" alt="Sun" />

  <area shape="circle" coords="90,58,3" href="mercury.html" alt="Mercury" />

<area shape="circle" coords="124,58,8" href="venus.html" alt="Venus" />

</map>

**93. <applet>:-** The <applet> tag defines an embedded applet. This tag is not supported in HTML 5.

**Attributes:-**

align Specifies the alignment of an applet according to surrounding elements

alt Specifies an alternate text for an applet

code Specifies the class name.

codebase Specifies a relative base URL for applets specified in the code attribute

height Specifies the height of an applet

hspace Defines the horizontal spacing around an applet

vspace Defines the vertical spacing around an applet

width Specifies the width of an applet

**Example:-**

<applet code="Bubbles.class" width="350" height="350">

Java applet that draws animated bubbles.

</applet>

**New Tags in HTML 5:-**

## 94. <audio>:-

This tag is used to play any audio. The src attribute specifies the location (URL) of the audio file. The example above uses an Ogg file, and will work in Firefox, Opera and Chrome. To play the audio file in Internet Explorer and Safari, we must use an MP3 file. To make it work in all browsers use [<source>](http://www.w3schools.com/tags/tag_source.asp) elements inside the <audio> element. <source> elements can link to different audio files. The browser will use the first recognized format:

## Attributes:-

## autoplay:- Specifies that the audio will start playing as soon as it is ready.

## controls:- Specifies that audio controls should be displayed (such as a play/pause button etc).

## loop:- Specifies that the audio will start over again, every time it is finished.

## src:- Specifies the URL of the audio file.

## Example:-

## <audio src="horse.ogg" controls>

## Your browser does not support the audio element.

## </audio>

## <audio controls loop autoplay>

## <source src="horse.ogg" type="audio/ogg">

## <source src="horse.mp3" type="audio/mpeg">

## <source src="horse.mp3" type="audio/wav">   Your browser does not support the audio tag. </audio>

## 95. <video>:-

The <video> tag specifies video, such as a movie clip or other video streams. Currently, there are 3 supported video formats for the <video> element: MP4, WebM, and Ogg:

## Example:-

## <video width="320" height="240" controls>

## <source src="movie.mp4" type="video/mp4">

## <source src="movie.ogg" type="video/ogg">

## Your browser does not support the video tag.

## </video>

## 96. <progress>:-

## The <progress> tag represents the progress of a task. Use the <progress> tag in conjunction with JavaScript to display the progress of a task.

## Attributes:-

## max:- Specifies how much work the task requires in total.

## value:- Specifies how much of the task has been completed.

## Example:-

<!DOCTYPE html>

<html>

<head>

<script>

function f1(){

setInterval(function(){

if(document.getElementById("p1").value<100)

document.getElementById("p1").value++;

}, 100);

}

</script>

</head>

<body onLoad="f1()">

<progress id="p1" value="0" max="100"></progress>

</body>

</html>

## 97. <EMBED>:-

## Places an embedded object into a document.

|  |  |
| --- | --- |
| **Attributes:-** |  |
| align="{left, right, center, absbottom, absmiddle, baseline, bottom, texttop, top) | Indicates how an embedded object is positioned relative to the document borders and surrounding contents. |
| height="n" | Specifies that vertical dimension of the embedded object. |
| Hidden | Indicates that the embedded object should not be visible. |
| name="…" | Gives the object a name by which other objects can refer to it. |
| optional param="…" | Specifies additional parameters. For example, an AVI movie accepts the autostart attribute. |
| src="URL" | Indicates the relative or absolute location of the file containing the object you want to embed. |
| width="n" | Indicates the horizontal dimension of the embedded object. |
| autostart="…" | Specifies whether the sound file opens when the web page is accessed or when a button is clicked. The value can be true (automatically starts) or false. |
| hidden="…" | Specifies whether the sound control box is visible in the web page. The values true and false specify whether the control box is visible. |
| <bgsound> | Embeds a background sound file within documents. Use in the document <head> of documents intended for visitors who use Internet Explorer. |
| loop="{n, infinite}" | Specifies the number of times a background sound file repeats. The value infinite is the default. |
| src="URL" | Indicates the absolute or relative location of sound file. |

**Example:-**

<embed src="MyOwnSound.mp3" autostart="false" height="100" width="150"></embed>

**Embedding Video:-**

<embed src="myfirstvideo.mpeg" width="260" height="300" autostart="true" loop="1" align="left"></embed>

## 98. <data>:- Links the given content with a machine-readable translation

**99. <datalist>:-** Specifies a list of pre-defined options for input controls

**Example:-**

<input list="browsers">

<datalist id="browsers">

<option value="Internet Explorer">

<option value="Firefox">

<option value="Chrome">

<option value="Opera">

<option value="Safari">

</datalist>

**100. <summary>:-** Defines a visible heading for a <details> element

**101. <details>:-** Defines additional details that the user can view or hide

**Example:-**

<details>

<summary>Matrix Computers</summary>

A coaching centre.

</details>

**102. <figcaption>:-** Defines a caption for a <figure> element

**103. <figure>:-** Specifies self-contained content

**Example:-**

<figure>

<img src="img\_pulpit.jpg" alt="The Pulpit Rock" width="304" height="228">

<figcaption>Fig1. - A view of the pulpit rock in Norway.</figcaption>

</figure>

**104. <mark>:-** Defines marked/highlighted text

**Example:-**

<p>Do not forget to buy <mark>milk</mark> today.</p>

**105. <nav>:-** Defines navigation links

**Example:-**

<nav>

<a href="/html/">HTML</a> |

<a href="/css/">CSS</a> |

<a href="/js/">JavaScript</a> |

<a href="/jquery/">jQuery</a>

</nav>

**106. <article>:-** Defines an article

**107. <aside>:-** Defines content aside from the page content

**108. <bdi>:-** Isolates a part of text that might be formatted in a different direction from other text outside it

**109. <canvas>:-** Used to draw graphics, on the fly, via scripting (usually JavaScript)

**110. <dialog>:-** Defines a dialog box or window

**111. <footer>:-** Defines a footer for a document or section

**112. <header>:-** Defines a header for a document or section

**113. <meter>:-** Defines a scalar measurement within a known range (a gauge)

**114. <output>:-** Defines the result of a calculation

**115. <rp>:-** Defines what to show in browsers that do not support ruby annotations

**116. <rt>:-** Defines an explanation/pronunciation of characters (for East Asian typography)

**117. <ruby>:-** Defines a ruby annotation (for East Asian typography)

**118. <section>:-** Defines a section in a document

**119. <source>:-** Defines multiple media resources for media elements (<video> and <audio>)

**120. <time>:-** Defines a date/time

**121. <track>:-** Defines text tracks for media elements (<video> and <audio>)

**122. <wbr>:-** Defines a possible line-break

**123. <main>:-** Specifies the main content of a document.

**124. <picture>:-** Defines a container for multiple image resources.

**125. <svg>:-** Defines a container for SVG graphics.

**126. <template>:-** Defines a template.

## HTML Common/Standard Attributes:-

The attributes listed below are standard, and are supported by all HTML and XHTML tags, with a few exceptions.

**Core Attributes**

|  |  |  |
| --- | --- | --- |
| **Attribute** | **Value** | **Description** |
| class | classname | Specifies a classname for an element |
| id | Id | Specifies a unique id for an element |
| style | style\_definition | Specifies an inline style for an element |
| title | tooltip\_text | Specifies extra information about an element (displayed as a tool tip) |

Not valid in base, head, html, meta, param, script, style, and title elements.

**Language Attributes**

|  |  |  |
| --- | --- | --- |
| **Attribute** | **Value** | **Description** |
| dir | ltr rtl | Specifies the text direction for the content in an element |
| lang | language\_ code | Specifies a language code for the content in an element |

Not valid in base, br, frame, frameset, hr, iframe, param, and script elements.

**Keyboard Attributes**

|  |  |  |
| --- | --- | --- |
| **Attribute** | **Value** | **Description** |
| accesskey | Character | Specifies a keyboard shortcut to access an element |
| tabindex | Number | Specifies the tab order of an element |

**HTML Standard Event Attributes**

HTML 4 added the ability to let events trigger actions in a browser, like starting a JavaScript when a user clicks on an element.

Below is the standard event attributes that can be inserted into HTML elements to define event actions.

<body> and <frameset> Events. The two attributes below can only be used in <body> or <frameset>:

|  |  |  |
| --- | --- | --- |
| **Attribute** | **Value** | **Description** |
| onload | script | Script to be run when a document load |
| onunload | script | Script to be run when a document unload |

**Form Events**

The attributes below can be used in form elements:

|  |  |  |
| --- | --- | --- |
| **Attribute** | **Value** | **Description** |
| onblur | script | Script to be run when an element loses focus |
| onchange | script | Script to be run when an element change |
| onfocus | script | Script to be run when an element gets focus |
| onreset | script | Script to be run when a form is reset |
| onselect | script | Script to be run when an element is selected |
| onsubmit | script | Script to be run when a form is submitted |

**Image Events**

The attribute below can be used with the img element:

|  |  |  |
| --- | --- | --- |
| **Attribute** | **Value** | **Description** |
| onabort | script | Script to be run when loading of an image is interrupted |

**Keyboard Events**

Valid in all elements except base, bdo, br, frame, frameset, head, html, iframe, meta, param, script, style, and title.

|  |  |  |
| --- | --- | --- |
| **Attribute** | **Value** | **Description** |
| onkeydown | script | Script to be run when a key is pressed |
| onkeypress | script | Script to be run when a key is pressed and released |
| onkeyup | script | Script to be run when a key is released |

**Mouse Events**

Valid in all elements except base, bdo, br, frame, frameset, head, html, iframe, meta, param, script, style, and title.

|  |  |  |
| --- | --- | --- |
| **Attribute** | **Value** | **Description** |
| onclick | script | Script to be run on a mouse click |
| ondblclick | script | Script to be run on a mouse double-click |
| onmousedown | script | Script to be run when mouse button is pressed |
| onmousemove | script | Script to be run when mouse pointer moves |
| onmouseout | script | Script to be run when mouse pointer moves out of an element |
| onmouseover | script | Script to be run when mouse pointer moves over an element |
| onmouseup | script | Script to be run when mouse button is released |

**Example:-**

<hr width="50%" onClick="this.setAttribute('width','70%')" onMouseOver="this.setAttribute('color','red')" onMouseOut="this.setAttribute('color','black')"/>