HTML:

* HTML stands for HyperText Markup Language.
* HTML is used to create web pages and web applications.
* HTML is widely used language on the web.
* We can create a static website by HTML only.
* Technically, HTML is a Markup language rather than a programming language.

Example:1

<!DOCTYPE>

<html>

<head>

<title>Web page title</title>

</head>

<body>

<h1>Write Your First Heading</h1>

<p>Write Your First Paragraph.</p>

</body>

</html>

Example Explained

* The <!DOCTYPE html> declaration defines that this document is an HTML5 document
* The <html> element is the root element of an HTML page
* The <head> element contains meta information about the HTML page
* The <title> element specifies a title for the HTML page (which is shown in the browser's title bar or in the page's tab)
* The <body> element defines the document's body, and is a container for all the visible contents, such as headings, paragraphs, images, hyperlinks, tables, lists, etc.
* The <h1> element defines a large heading
* The <p> element defines a paragraph

## Features of HTML

1) It is a very **easy and simple language**. It can be easily understood and modified.

2) It is very easy to make an **effective presentation** with HTML because it has a lot of formatting tags.

3) It is a **markup language**, so it provides a flexible way to design web pages along with the text.

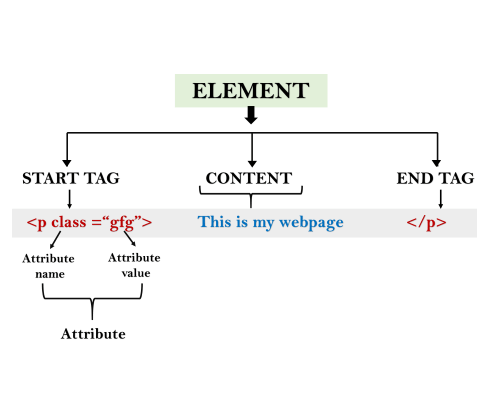
4) It facilitates programmers to add a **link** on the web pages (by html anchor tag), so it enhances the interest of browsing of the user.

5) It is **platform-independent** because it can be displayed on any platform like Windows, Linux, and Macintosh, etc.

6) It facilitates the programmer to add **Graphics, Videos, and Sound** to the web pages which makes it more attractive and interactive.

7) HTML is a case-insensitive language, which means we can use tags either in lower-case or upper-case.

* **Elements:** An HTML element is an individual component of an HTML file. In an HTML file, everything written within tags are termed as HTML elements.

Example:

<!DOCTYPE html**>**

**<html>**

**<head>**

**<title>**The basic building blocks of HTML**</title>**

**</head>**

**<body>**

**<h2>**The building blocks**</h2>**

**<p>**This is a paragraph tag**</p>**

**<p** style="color: red"**>**The style is attribute of paragraph tag**</p>**

**<span>**The element contains tag, attribute and content**</span>**

**</body>**

**</html>**

## HTML Meta Tags

DOCTYPE, title, link, meta and style

## HTML Text Tags

<p>, <h1>, <h2>, <h3>, <h4>, <h5>, <h6>, <strong>, <em>, <abbr>, <acronym>, <address>, <bdo>, <blockquote>, <cite>, <q>, <code>, <ins>, <del>, <dfn>, <kbd>, <pre>, <samp>, <var> and <br>

## HTML Image and Object Tags

<img>, <area>, <map>, <param> and <object>

## HTML List Tags

<ul>, <ol>, <li>, <dl>, <dt> and <dd>

## HTML Table Tags

table, tr, td, th, tbody, thead, tfoot, col, colgroup and caption

## HTML Form Tags

form, input, textarea, select, option, optgroup, button, label, fieldset and legend

|  |  |
| --- | --- |
| **Tag name** | **Description** |
| [<!-- -->](https://www.javatpoint.com/html-comments) | This tag is used to apply comment in an HTML document. |
| [<!DOCTYPE>](https://www.javatpoint.com/doctype-html) | This tag is used to specify the version of HTML |
| [<a>](https://www.javatpoint.com/html-anchor) | It is termed as anchor tag and it creates a hyperlink or link. |
| [<abbr>](https://www.javatpoint.com/html-abbr-tag) | It defines an abbreviation for a phrase or longer word. |
| [<acronym>](https://www.javatpoint.com/html-acronym-tag) | It defines acronym for a word. (Not supported in HTML5) |
| [<address>](https://www.javatpoint.com/html-address-tag) | It defines the author's contact information of the HTML article |
| [<applet>](https://www.javatpoint.com/html-applet-tag) | It defines an embedded Java applet. (Not supported in HTML5) |
| [<area>](https://www.javatpoint.com/html-area-tag) | It defines the area of an image map. |
| [<article>](https://www.javatpoint.com/html-article-tag)HTML Tags List | It defines the self-contained content. |
| [<aside>](https://www.javatpoint.com/html-aside-tag)HTML Tags List | It defines content aside from main content. Mainly represented as sidebar. |
| [<audio>](https://www.javatpoint.com/html-audio)HTML Tags List | It is used to embed sound content in HTML document. |
|  | |
| [<b>](https://www.javatpoint.com/html-bold-tag) | It is used to make a text bold. |
| [<base>](https://www.javatpoint.com/html-base-tag) | This tag defines the base URL for all relative URL within the document. |
| [<basefont>](https://www.javatpoint.com/html-basefont-tag) | This tag is used to set default font, size and color for all elements of document. **(Not supported in HTML5)** |
| [<bdo>](https://www.javatpoint.com/html-bdo-tag) | It is used to override the current text direction. |
| [<big>](https://www.javatpoint.com/html-big-tag) | This tag is used to make font size one level larger than its surrounding content. (Not supported in HTML5) |
| [<blockquote>](https://www.javatpoint.com/html-blockquote-tag) | It is used to define a content which is taken from another source. |
| [<body>](https://www.javatpoint.com/html-body-tag) | It is used to define the body section of an HTML document. |
| [<br>](https://www.javatpoint.com/html-br-tag) | It is used to apply single line break. |
| [<button>](https://www.javatpoint.com/html-button-tag) | It is used to represent a clickable button |
| [<canvas>](https://www.javatpoint.com/html-canvas)HTML Tags List | It is used to provide a graphics space within a web document. |
| [<caption>](https://www.javatpoint.com/html-caption-tag) | It is used to define a caption for a table. |
| [<center>](https://www.javatpoint.com/html-center-tag) | It is used to align the content in center. (Not supported in HTML5) |
| [<cite>](https://www.javatpoint.com/html-cite-tag) | It is used to define the title of the work, book, website, etc. |
| [<code>](https://www.javatpoint.com/html-code-tag) | It is used to display a part of programming code in an HTML document. |
| [<col>](https://www.javatpoint.com/html-col-tag) | It defines a column within a table which represent common properties of columns and used with the <colgroup> element. |
| [<colgroup>](https://www.javatpoint.com/html-colgroup-tag) | It is used to define group of columns in a table. |
| [<data>](https://www.javatpoint.com/html-data-tag)HTML Tags List | It is used to link the content with the machine-readable translation. |
| [<datalist>](https://www.javatpoint.com/html-datalist-tag)HTML Tags List | It is used to provide a predefined list for input option. |
| [<dd>](https://www.javatpoint.com/html-description-list) | It is used to provide definition/description of a term in description list. |
| [<del>](https://www.javatpoint.com/html-del-tag) | It defines a text which has been deleted from the document. |
| [<details>](https://www.javatpoint.com/html-details-tag)HTML Tags List | It defines additional details which user can either view or hide. |
| [<dfn>](https://www.javatpoint.com/html-dfn-tag) | It is used to indicate a term which is defined within a sentence/phrase. |
| [<dialog>](https://www.javatpoint.com/html-dialog-tag)HTML Tags List | It defines a dialog box or other interactive components. |
| [<dir>](https://www.javatpoint.com/html-dir-tag) | It is used as container for directory list of files. (Not supported in HTML5) |
| [<div>](https://www.javatpoint.com/html-div-tag) | It defines a division or section within HTML document. |
| [<dl>](https://www.javatpoint.com/html-description-list) | It is sued to define a description list. |
| [<dt>](https://www.javatpoint.com/html-description-list) | It is used to define a term in description list. |
| [<em>](https://www.javatpoint.com/html-em-tag) | It is used to emphasis the content applied within this element. |
| [<embed>](https://www.javatpoint.com/html-embed-tag)HTML Tags List | It is used as embedded container for external file/application/media, etc. |
| [<fieldset>](https://www.javatpoint.com/html-fieldset-tag) | It is used to group related elements/labels within a web form. |
| [<figure>](https://www.javatpoint.com/html-figure-tag)HTML Tags List | It is used to define the self-contained content, and s mostly refer as single unit. |
| [<font>](https://www.javatpoint.com/html-font-tag) | It defines the font, size, color, and face for the content. (Not supported in HTML5) |
| [<footer>](https://www.javatpoint.com/html-footer-tag)HTML Tags List | It defines the footer section of a webpage. |
| [<form>](https://www.javatpoint.com/html-form) | It is used to define an HTML form. |
| [<h1> to <h6>](https://www.javatpoint.com/html-heading) | It defines headings for an HTML document from level 1 to level 6. |
| [<head>](https://www.javatpoint.com/html-head) | It defines the head section of an HTML document. |
| [<header>](https://www.javatpoint.com/html-header-tag)HTML Tags List | It defines the header of a section or webpage. |
| [<hr>](https://www.javatpoint.com/html-hr-tag) | It is used to apply thematic break between paragraph-level elements. |
| [<html>](https://www.javatpoint.com/html-html-tag) | It represents root of an HTML document. |
| [<i>](https://www.javatpoint.com/html-i-tag) | It is used to represent a text in some different voice. |
| [<iframe>](https://www.javatpoint.com/html-iframes) | It defines an inline frame which can embed other content. |
| [<img>](https://www.javatpoint.com/html-image) | It is used to insert an image within an HTML document. |
| [<input>](https://www.javatpoint.com/html-input-tag) | It defines an input field within an HTML form. |
| [<ins>](https://www.javatpoint.com/html-ins-tag) | It represent text that has been inserted within an HTML document. |
| [<kbd>](https://www.javatpoint.com/html-kbd-tag) | It is used to define keyboard input. |
| [<label>](https://www.javatpoint.com/html-label-tag) | It defines a text label for the input field of form. |
| [<legend>](https://www.javatpoint.com/html-legend-tag) | It defines a caption for content of <fieldset> |
| [<li>](https://www.javatpoint.com/html-lists) | It is used to represent items in list. |
| [<link>](https://www.javatpoint.com/html-link-tag) | It represents a relationship between current document and an external resource. |
| [<main>](https://www.javatpoint.com/html-main-tag)HTML Tags List | It represents the main content of an HTML document. |
| [<map>](https://www.javatpoint.com/html-map-tag) | It defines an image map with active areas. |
| [<mark>](https://www.javatpoint.com/html-mark-tag)HTML Tags List | It represents a highlighted text. |
| [<menu>](https://www.javatpoint.com/html-menu-tag) | It is used for creating a menu list of commands. |
| [<meta>](https://www.javatpoint.com/html-meta-tag) | It defines metadata of an HTML document. |
| [<meter>](https://www.javatpoint.com/html-meter-tag)HTML Tags List | It defines scalar measurement with known range or fractional value. |
| [<nav>](https://www.javatpoint.com/html-nav-tag)HTML Tags List | It represents section of page to represent navigation links. |
| [<noframes>](https://www.javatpoint.com/html-noframes-tag) | It provides alternate content to represent in browser which does not support the <frame> elements. (Not supported in HTML5) |
| [<noscript>](https://www.javatpoint.com/html-noscript-tag) | It provides an alternative content if a script type is not supported in browser. |
| [<object>](https://www.javatpoint.com/html-object-tag) | It is used to embed an object in HTML file. |
| [<ol>](https://www.javatpoint.com/html-ordered-list) | It defines an ordered list of items. |
| [<optgroup>](https://www.javatpoint.com/html-optgroup-tag) | It is used to group the options of a drop-down list. |
| [<option>](https://www.javatpoint.com/html-option-tag) | It is used to define options or items in a drop-down list. |
| [<output>](https://www.javatpoint.com/html-output-tag)HTML Tags List | It is used as container element which can show result of a calculation. |
| [<p>](https://www.javatpoint.com/html-paragraph) | It represents a paragraph in an HTML document. |
| [<param>](https://www.javatpoint.com/html-param-tag) | It defines parameter for an <object> element |
| [<picture>](https://www.javatpoint.com/html-picture-tag)HTML Tags List | It defines more than one source element and one image element. |
| [<pre>](https://www.javatpoint.com/html-pre-tag) | It defines preformatted text in an HTML document. |
| [<progress>](https://www.javatpoint.com/html-progress-tag)HTML Tags List | It defines the progress of a task within HTML document. |
| [<q>](https://www.javatpoint.com/html-quotes) | It defines short inline quotation. |
| [<rp>](https://www.javatpoint.com/html-rp-tag)HTML Tags List | It defines an alternative content if browser does not supports ruby annotations. |
| [<rt>](https://www.javatpoint.com/html-rt-tag) | It defines explanations and pronunciations in ruby annotations. |
| [<ruby>](https://www.javatpoint.com/html-ruby-tag) | It is used to represent ruby annotations. |
| [<s>](https://www.javatpoint.com/html-s-tag) | It render text which is no longer correct or relevant. |
| [<samp>](https://www.javatpoint.com/html-samp-tag) | It is used to represent sample output of a computer program. |
| [<script>](https://www.javatpoint.com/html-script-tag) | It is used to declare the JavaScript within HTML document. |
| [<section>](https://www.javatpoint.com/html-section-tag)HTML Tags List | It defines a generic section for a document. |
| [<select>](https://www.javatpoint.com/html-select-tag) | It represents a control which provides a menu of options. |
| [<small>](https://www.javatpoint.com/html-small-tag) | It is used to make text font one size smaller than document?s base font size. |
| [<source>>[HTML Tags List](https://www.javatpoint.com/html-source-tag)](https://www.javatpoint.com/html-source-tag) | It defines multiple media recourses for different media element such as <picture>, <video>, and <audio> element. |
| [<span>](https://www.javatpoint.com/html-span-tag) | It is used for styling and grouping inline. |
| [<strong>](https://www.javatpoint.com/html-strong-tag) | It is used to define important text. |
| [<style>](https://www.javatpoint.com/html-style) | It is used to contain style information for an HTML document. |
| [<sub>](https://www.javatpoint.com/html-sub-tag) | It defines a text which displays as a subscript text. |
| [<summary>](https://www.javatpoint.com/html-summary-tag)HTML Tags List | It defines summary which can be used with <details> tag. |
| [<sup>](https://www.javatpoint.com/html-sup-tag) | It defines a text which represent as superscript text. |
| [<svg>](https://www.javatpoint.com/html-svg) | It is used as container of SVG (Scalable Vector Graphics). |
| [<table>](https://www.javatpoint.com/html-table) | It is used to present data in tabular form or to create a table within HTML document. |
| [<tbody>](https://www.javatpoint.com/html-tbody-tag) | It represents the body content of an HTML table and used along with <thead> and <tfoot>. |
| [<td>](https://www.javatpoint.com/html-td-tag) | It is used to define cells of an HTML table which contains table data |
| [<template>](https://www.javatpoint.com/html-template-tag) | It is used to contain the client side content which will not display at time of page load and may render later using JavaScript. |
| [<textarea>](https://www.javatpoint.com/html-textarea) | It is used to define multiple line input, such as comment, feedback, and review, etc. |
| [<tfoot>](https://www.javatpoint.com/html-tfoot-tag) | It defines the footer content of an HTML table. |
| [<th>](https://www.javatpoint.com/html-th-tag) | It defines the head cell of an HTML table. |
| [<thead>](https://www.javatpoint.com/html-thead-tag) | It defines the header of an HTML table. It is used along with <tbody> and <tfoot> tags. |
| [<time>](https://www.javatpoint.com/html-time-tag)HTML Tags List | It is used to define data/time within an HTML document. |
| [<title>](https://www.javatpoint.com/html-title) | It defines the title or name of an HTML document. |
| [<tr>](https://www.javatpoint.com/html-tr-tag) | It defines the row cells in an HTML table |
| [<track>](https://www.javatpoint.com/html-track-tag) | It is used to define text tracks for <audio> and <video> elements. |
| [<u>](https://www.javatpoint.com/html-u-tag) | It is used to render enclosed text with an underline. |
| [<ul>](https://www.javatpoint.com/html-unordered-list) | It defines unordered list of items. |
| [<var>](https://www.javatpoint.com/html-var-list) | It defines variable name used in mathematical or programming context. |
| [<video>](https://www.javatpoint.com/html-video)HTML Tags List | It is used to embed a video content with an HTML document |
| [<wbr>](https://www.javatpoint.com/html-wbr-tag)HTML Tags List | It defines a position within text where break line is possible. |

14 HTML formatting tags. Following is the list of HTML formatting text.

|  |  |
| --- | --- |
| **Element name** | **Description** |
| <b> | This is a physical tag, which is used to bold the text written between it. |
| <strong> | This is a logical tag, which tells the browser that the text is important. |
| <i> | This is a physical tag which is used to make text italic. |
| <em> | This is a logical tag which is used to display content in italic. |
| <mark> | This tag is used to highlight text. |
| <u> | This tag is used to underline text written between it. |
| <tt> | This tag is used to appear a text in teletype. (not supported in HTML5) |
| <strike> | This tag is used to draw a strikethrough on a section of text. (Not supported in HTML5) |
| <sup> | It displays the content slightly above the normal line. |
| <sub> | It displays the content slightly below the normal line. |
| <del> | This tag is used to display the deleted content. |
| <ins> | This tag displays the content which is added |
| <big> | This tag is used to increase the font size by one conventional unit. |
| <small> | This tag is used to decrease the font size by one unit from base font size. |

**<body>**

**<h1>**Explanation of formatting element**</h1>**

**<p><strong>**This is an important content**</strong>**, and this is normal content**</p>**

**</body>**

**<p>** **<i>**Write Your First Paragraph in italic text.**</i></p>**

**<p><em>**This is an important content**</em>**, which displayed in italic font.**</p>**

## HTML Marked formatting

If you want to mark or highlight a text

**<h2>**  I want to put a **<mark>** Mark**</mark>** on your face**</h2>**

**Strike text  :**

**<p>** **<strike>**Write Your First Paragraph with strikethrough**</strike>**.**</p>**

## How to Use <br> and <hr> tag with paragraph?

**<p><br>**Papa and mama, and baby and Dot,

**<br>**Willie and me?the whole of the lot

**<br>**Of us all went over in Bimberlie's sleigh,

**<br>**To grandmama's house on Christmas day.

**</p>**

**<p>** An HTML hr tag draw a horizontal line and separate two paragraphs with that line.**<hr>** it will start a new paragraph.

**</p>**

**<p>**An **<abbr** title = "Hypertext Markup language"**>**HTML **</abbr>**language is used to create web pages. **</p>**

**<p>**This tag will **<mark>**highlight**</mark>** the text.**</p>**

**<p>**In HTML it is recommended to use **<strong>**lower-case**</strong>**, while writing a code. **</p>**

**<p>**HTML is an **<em>**easy **</em>**to learn language.**</p>**

**Quoting Text:**

**<blockquote** cite="https://www.keepinspiring.me/famous-quotes/"**><p>**?The first step toward success is taken when you refuse to be a captive of the environment in which you first find yourself.?**</p></blockquote>**

**<cite>**-Mark Caine**</cite>**

**Code Tag:**

**<p>**First Java program**</p>**

**<p><code>**class Simple{ public static void main(String args[]){

       System.out.println("Hello Java"); }} **</code>**

**</p>**

**Keyboard Tag:**

**<p>**Please press **<kbd>**Ctrl**</kbd>** + **<kbd>**Shift**</kbd>** + t**<kbd></kbd>** to restore page on chrome.**</p>**

**Address Tag:**

**<address>** You can ask your queries by contact us on **<a** href=""**>**example123@newdomain.com**</a>**

**<br>** You can also visit at: **<br>**Lakeside Palava City Mumbai.

**</address>**

**Anchor Tag:**

**<a** href="second.html"**>**Click for Second Page**</a>**

**Image Tag:**

**<h2>**HTML Image Example**</h2>**

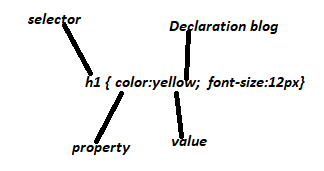
**<img** src="good\_morning.jpg" alt="Good Morning Friends"**/>**

**<img** src="animal.jpg" height="180" width="300" alt="animal image"**>**

**CSS :** It is stand for cascading style sheet.

* **CSS is used for design HTML pages**
* **CSS is widely used language on the web**
* **HTML ,CSS, and JavaScript are used for web designing.**

**CSS Syntax:**

****

**CSS have several different types of selector .**

* **CSS Element Selector**
* **CSS id Selector**
* **CSS Class selector**
* **CSS Universal selector**
* **CSS Group Selector**
* **CSS Element Selector**

**<style>**

p{

    text-align: center;

    color: blue;

}

* **CSS id Selector**

<style>

#para1 {

text-align: center;

color: blue;

}

</style>

* **CSS Class selector**

<style>

.center {

text-align: center;

color: blue;

}

</style>

* **CSS Universal selector**

**<style>**

**p.center {**

**text-align: center;**

**color: blue;**

**}**

* **CSS Group Selector**

**<style>**

**\* {**

**color: green;**

**font-size: 20px;**

**}**

**</style>**

**How to Add CSS**

1. Inline CSS
2. Internal CSS
3. External CSS

**Inline CSS**

**<p** style="color:blue"**>**Hello CSS**</p>**

**Internal CSS**

**<style>**

p{color:blue}

**</style>**

**External CSS**

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

**CSS Background**

1. background-color
2. background-image
3. background-repeat
4. background-attachment
5. background-position

<style>

h2,p{

background-color: rebeccapurple;

}

body{

background-image:url("whitepeacock.jpg") ;

background-repeat: repeat;

background-attachment: fixed;

background-position: center;

}

</style>

***CSS Border***

Border-style

Border-color

Border-width

Border-radius

**Border-style:There are some border style values whch are used with border-style property tp define a border.**

|  |  |
| --- | --- |
| **Value** | **Description** |
| none | It does not define any border |
| dotted | It is used for dashed border |
| dashed | It is used to define dashed border |
| solid | We can create solid border |
| inset | It define 3D inset border |
| double | It define |
| groove | 3D groove border |
| outset | 3D outset border it is depend on border value |

**Java Script Data Type:**

**Java script has two type of data type.**

1. Primitive data type
2. Non-primitive data type

**Primitive Data Type:** String,Number,Boolean,Null,Undefined

Non-primitive Data Type: Object, Array, RegExp

**Java Script Arithmetical operator:**

+ , - , \* , / , % , ++ (incremental), -- (decremental)

**Java Script Comparision:**

**== , === , != , !==, > , < , >= , <= ,**

**Logical operator:**

**&& , || , !**

**If else statement:**

1. **If statement**
2. **If else statement**
3. **If else if statement**

**If (a >5 )**

**{ alert(value greater than 5)}**

**else**

**{**

**alert (“else”)**

**}**

**2 .**

If (a >5 )

{ alert(value greater than 5)}

else If (a <30 )

{ alert(value greater than 5)}

else

{

alert (“else”)

}

**Java Script method**

apply(), bind (), call (), toString()