* 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.

1. <!DOCTYPE**>**
2. **<html>**
3. **<head>**
4. **<title>**Web page title**</title>**
5. **</head>**
6. **<body>**
7. **<h1>**Write Your First Heading**</h1>**
8. **<p>**Write Your First Paragraph.**</p>**
9. **</body>**
10. **</html>**

HTML Heading

A HTML heading or HTML h tag can be defined as a title or a subtitle which you want to display on the webpage. When you place the text within the heading tags <h1>.........</h1>, it is displayed on the browser in the bold format and size of the text depends on the number of heading.

There are six different HTML headings which are defined with the <h1> to <h6> tags, from highest level h1 (main heading) to the least level h6 (least important heading).

h1 is the largest heading tag and h6 is the smallest one. So h1 is used for most important heading and h6 is used for least important.

1. **<h1>**Heading no. 1**</h1>**
2. **<h2>**Heading no. 2**</h2>**
3. **<h3>**Heading no. 3**</h3>**
4. **<h4>**Heading no. 4**</h4>**
5. **<h5>**Heading no. 5**</h5>**
6. **<h6>**Heading no. 6**</h6>**

For eg,

1. <!DOCTYPE html**>**
2. **<html>**
3. **<head>**
4. **<title>**Heading elements**</title>**
5. **</head>**
6. **<body>**
7. **<h1>**This is main heading of page. **</h1>**
8. **<p>**h1 is the most important heading, which is used to display the keyword of page **</p>**
9. **<h2>**This is first sub-heading**</h2>**
10. **<p>**h2 describes the first sub heading of page. **</p>**
11. **<h3>**This is Second sub-heading**</h3>**
12. **<p>**h3 describes the second sub heading of page.**</p>**
13. **<p>**We can use h1 to h6 tag to use the different sub-heading with their paragraphs if
14. required.
15. **</p>**
16. **</body>**
17. **</html>**
18. <!DOCTYPE html**>**
19. **<html>**
20. **<head>**
21. **<title>**Heading elements**</title>**
22. **</head>**
23. **<body>**
24. **<h1>**This is main heading of page. **</h1>**
25. **<p>**h1 is the most important heading, which is used to display the keyword of page **</p>**
26. **<h2>**This is first sub-heading**</h2>**
27. **<p>**h2 describes the first sub heading of page. **</p>**
28. **<h3>**This is Second sub-heading**</h3>**
29. **<p>**h3 describes the second sub heading of page.**</p>**
30. **<p>**We can use h1 to h6 tag to use the different sub-heading with their paragraphs if
31. required.
32. **</p>**
33. **</body>**
34. **</html>**

# HTML Paragraph

HTML paragraph or HTML p tag is used to define a paragraph in a webpage. Let's take a simple example to see how it work. It is a notable point that a browser itself add an empty line before and after a paragraph. An HTML <p> tag indicates starting of new paragraph.

1. **<p>**This is first paragraph.**</p>**
2. **<p>**This is second paragraph.**</p>**
3. **<p>**This is third paragraph.**</p>**

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

An HTML <br> tag is used for line break and it can be used with paragraph elements. Following is the example to show how to use <br> with <p> element.

1. <!DOCTYPE html**>**
2. **<html>**
3. **<head>**
4. **</head>**
5. **<body>**
6. **<h2>** Use of line break with pragraph tag**</h2>**
7. **<p><br>**Papa and mama, and baby and Dot,
8. **<br>**Willie and me?the whole of the lot
9. **<br>**Of us all went over in Bimberlie's sleigh,
10. **<br>**To grandmama's house on Christmas day.
11. **</p>**
12. **</body>**
13. **</html>**

An HTML <hr> tag is used to apply a horizontal line between two statements or two paragraphs. Following is the example which is showing use of <hr> tag with paragraph.

1. <!DOCTYPE html**>**
2. **<html>**
3. **<head>**
4. **</head>**
5. **<body>**
6. **<h2>** Example to show a horizontal line with paragraphs**</h2>**
7. **<p>** An HTML hr tag draw a horizontal line and separate two paragraphs with that line.**<hr>** it will start a new paragraph.
8. **</p>**
9. **</body>**
10. **</html>**

HTML Phrase tag

The HTML phrase tags are special purpose tags, which defines the structural meaning of a block of text or semantics of text. Following is the list of phrase tags, some of which we have already discussed in HTML formatting.

* Abbreviation tag : <abbr>
* Acronym tag: <acronym> (not supported in HTML5)
* Marked tag: <mark>
* Strong tag: <strong>
* Emphasized tag : <em>
* Definition tag: <dfn>
* Quoting tag: <blockquote>
* Short quote tag : <q>
* Code tag: <code>
* Keyboard tag: <kbd>
* Address tag: <address>

## 1. Text Abbreviation tag

This tag is used to abbreviate a text. To abbreviate a text, write text between <abbr> and </abbr> tag.

## Example

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

## 2. Marked tag:

The content written between <mark> and </mark> tag will show as yellow mark on browser. This tag is used to highlight a particular text.

## Example

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

## 3. Strong text:

This tag is used to display the important text of the content. The text written between <strong> and </strong> will be displayed as important text.

## Example

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

## 4. Emphasized text

This tag is used to emphasize the text, and displayed the text in italic form. The text written between <em> and </em> tag will italicized the text.

## Example

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

## 5. Definition tag:

When you use the <dfn> and </dfn> tags, it allow to specify the keyword of the content. Following is the example to show how to definition element.

## Example

1. **<p><dfn>**HTML **</dfn>** is a markup language. **</p>**

## 6. Quoting text:

The HTML <blockquote> element shows that the enclosed content is quoted from another source. The Source URL can be given using the cite attribute, and text representation of source can display using **<cite> ..... </cite>element**.

## Example

1. **<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>**
2. **<cite>**-Mark Caine**</cite>**

## 7. Short Quotations:

## An HTML <q> ....... </q> element defines a short quotation. If you will put any content between <q> ....... </q>, then it will enclose the text in double quotes.

## Example:

1. **<p>**Steve Jobs said: **<q>**If You Are Working On Something That You Really Care About, You Don?t Have To Be Pushed. The Vision Pulls You.**</q>**?**</p>**

## 8. Code tags

The HTML <code> </code> element is used to display the part of computer code. It will display the content in monospaced font.

1. **<p>**First Java program**</p>**
2. **<p><code>**class Simple{ public static void main(String args[]){
3. System.out.println("Hello Java"); }} **</code>**
4. **</p>**

## 9. Keyboard Tag

In HTML the keyboard tag, <kbd>, indicates that a section of content is a user input from keyboard.

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

## 10. Address tag

An HTML <address> tag defines the contact information about the author of the content. The content written between <address> and </address> tag, then it will be displayed in italic font.

1. **<address>** You can ask your queries by contact us on **<a** href=""**>**example123@newdomain.com**</a>**
2. **<br>** You can also visit at: **<br>**58 S. Garfield Street. Villa Rica, GA 30187.
3. **</address>**

# HTML Anchor

The **HTML anchor tag** defines *a hyperlink that links one page to another page*. It can create hyperlink to other web page as well as files, location, or any URL. The "href" attribute is the most important attribute of the HTML a tag. and which links to destination page or URL.

The href attribute is used to define the address of the file to be linked. In other words, it points out the destination page.

The syntax of HTML anchor tag is given below.

<a href = "..........."> Link Text </a>

HTML Image

**HTML img tag** is used to display image on the web page. HTML img tag is an empty tag that contains attributes only, closing tags are not used in HTML image element.

Let's see an example of HTML image.

1. **<h2>**HTML Image Example**</h2>**
2. **<img** src="good\_morning.jpg" alt="Good Morning Friends"**/>**

## Attributes of HTML img tag

The src and alt are important attributes of HTML img tag. All attributes of HTML image tag are given below.

#### 1) src

It is a necessary attribute that describes the source or path of the image. It instructs the browser where to look for the image on the server.

The location of image may be on the same directory or another server.

#### 2) alt

The alt attribute defines an alternate text for the image, if it can't be displayed. The value of the alt attribute describe the image in words. The alt attribute is considered good for SEO prospective.

#### 3) width

It is an optional attribute which is used to specify the width to display the image. It is not recommended now. You should apply CSS in place of width attribute.

#### 4) height

It h3 the height of the image. The HTML height attribute also supports iframe, image and object elements. It is not recommended now. You should apply CSS in place of height attribute.

## Use of height and width attribute with img tag

You have learnt about how to insert an image in your web page, now if we want to give some height and width to display image according to our requirement, then we can set it with height and width attributes of image.

## Example:

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

## Use of alt attribute

We can use alt attribute with  tag. It will display an alternative text in case if image cannot be displayed on browser. Following is the example for alt attribute:

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

## How to get image from another directory/folder?

To insert an image in your web, that image must be present in your same folder where you have put the HTML file. But if in some case image is available in some other directory then you can access the image like this:

1. **<img** src="E:/images/animal.png" height="180" width="300" alt="animal image"**>**

In above statement we have put image in local disk E------>images folder------>animal.png.

## Use <img> tag as a link

We can also link an image with other page or we can use an image as a link. To do this, put <img> tag inside the <a> tag.

## Example:

1. **<a** href="link "**><img** src="img.jpg" height="100" width="100"**></a>**

# HTML Table

**HTML table tag** is used to display data in tabular form (row \* column). There can be many columns in a row.

We can create a table to display data in tabular form, using <table> element, with the help of <tr> , <td>, and <th> elements.

In Each table, table row is defined by <tr> tag, table header is defined by <th>, and table data is defined by <td> tags.

HTML tables are used to manage the layout of the page e.g. header section, navigation bar, body content, footer section etc. But it is recommended to use div tag over table to manage the layout of the page .

## HTML Table Tags

|  |  |
| --- | --- |
| **Tag** | **Description** |
| <table> | It defines a table. |
| <tr> | It defines a row in a table. |
| <th> | It defines a header cell in a table. |
| <td> | It defines a cell in a table. |
| <caption> | It defines the table caption. |
| <colgroup> | It specifies a group of one or more columns in a table for formatting. |
| <col> | It is used with <colgroup> element to specify column properties for each column. |
| <tbody> | It is used to group the body content in a table. |
| <thead> | It is used to group the header content in a table. |
| <tfooter> | It is used to group the footer content in a table. |

1. **<table>**
2. **<tr><th>**First\_Name**</th><th>**Last\_Name**</th><th>**Marks**</th></tr>**
3. **<tr><td>**Sonoo**</td><td>**Jaiswal**</td><td>**60**</td></tr>**
4. **<tr><td>**James**</td><td>**William**</td><td>**80**</td></tr>**
5. **</table>**

## HTML Table with Border

There are two ways to specify border for HTML tables.

1. By border attribute of table in HTML
2. **<table** border="1"**>**
3. **<tr><th>**First\_Name**</th><th>**Last\_Name**</th><th>**Marks**</th></tr>**
4. **<tr><td>**Sonoo**</td><td>**Jaiswal**</td><td>**60**</td></tr>**
5. **</table>**

## 2) CSS Border property

It is now recommended to use border property of CSS to specify border in table.

## <!DOCTYPE>

## <html>

## <head>

## <style>

## table, th, td {

## border: 1px solid black;

## }

## </style>

## </head>

## <body>

## <table>

## <tr><th>First\_Name</th><th>Last\_Name</th><th>Marks</th></tr>

## <tr><td>Sonoo</td><td>Jaiswal</td><td>60</td></tr>

## <tr><td>James</td><td>William</td><td>80</td></tr>

## <tr><td>Swati</td><td>Sironi</td><td>82</td></tr>

## <tr><td>Chetna</td><td>Singh</td><td>72</td></tr>

## </table>

## </body>

## </html>

## HTML Table with cell padding

You can specify padding for table header and table data by two ways:

1. By cellpadding attribute of table in HTML
2. By border property in CSS

HTML tables can adjust the padding inside the cells, and also the space between the cells.

|  |  |  |
| --- | --- | --- |
| With Padding | | |
| hello | hello | Hello |
| hello | hello | Hello |
| hello | hello | hello |

|  |  |  |
| --- | --- | --- |
| With Spacing | | |
| hello | hello | hello |
| hello | hello | hello |
| hello | hello | hello |

## HTML Table - Cell Padding

Cell padding is the space between the cell edges and the cell content.

By default the padding is set to 0.

To add padding on table cells, use the CSS padding property:

### Example

th, td {  
  padding: 15px;  
}

 th, td {  
  padding-top: 10px;  
  padding-bottom: 20px;  
  padding-left: 30px;  
  padding-right: 40px;  
}

<!DOCTYPE>

<html>

<head>

<style>

table, th, td {

border: 1px solid black;

border-collapse: collapse;

}

th, td {

padding: 10px;

}

</style>

</head>

<body>

<table>

<tr><th>First\_Name</th><th>Last\_Name</th><th>Marks</th></tr>

<tr><td>Sonoo</td><td>Jaiswal</td><td>60</td></tr>

<tr><td>James</td><td>William</td><td>80</td></tr>

<tr><td>Swati</td><td>Sironi</td><td>82</td></tr>

<tr><td>Chetna</td><td>Singh</td><td>72</td></tr>

</table>

</body>

</html>

## HTML Table width:

We can specify the HTML table width using the **CSS width** property. It can be specify in pixels or percentage.

1. <!DOCTYPE html**>**
2. **<html>**
3. **<head>**
4. **<title>**table**</title>**
5. **<style>**
6. table{
7. border-collapse: collapse;
8. width: 100%;
9. }
10. th,td{
11. border: 2px solid green;
12. padding: 15px;
13. }
15. **</style>**
16. **</head>**
17. **<body>**
18. **<table>**
19. **<tr>**
20. **<th>**1 header**</th>**
21. **<th>**1 header**</th>**
22. **<th>**1 header**</th>**
23. **</tr>**
24. **<tr>**
25. **<td>**1data**</td>**
26. **<td>**1data**</td>**
27. **<td>**1data**</td>**
28. **</tr>**
29. **</table>**
30. **</body>**
31. **</html>**

## HTML Table with colspan

If you want to make a cell span more than one column, you can use the colspan attribute.

It will divide one cell/row into multiple columns, and the number of columns depend on the value of colspan attribute.

Let's see the example that span two columns.

1. **<table** style="width:100%"**>**
2. **<tr>**
3. **<th>**Name**</th>**
4. **<th** colspan="2"**>**Mobile No.**</th>**
5. **</tr>**
6. **<tr>**
7. **<td>**Ajeet Maurya**</td>**
8. **<td>**7503520801**</td>**
9. **<td>**9555879135**</td>**
10. **</tr>**
11. **</table>**

## HTML Table with rowspan

If you want to make a cell span more than one row, you can use the rowspan attribute.

It will divide a cell into multiple rows. The number of divided rows will depend on rowspan values.

Let's see the example that span two rows.

1. **<style>**
2. table, th, td {
3. border: 1px solid black;
4. border-collapse: collapse;
5. }
6. th, td {
7. padding: 10px;
8. }
9. **</style>**
10. **<table>**
11. **<tr><th>**Name**</th><td>**Ajeet Maurya**</td></tr>**
12. **<tr><th** rowspan="2"**>**Mobile No.**</th><td>**7503520801**</td></tr>**
13. **<tr><td>**9555879135**</td></tr>**
14. **</table>**

## HTML table with caption

HTML caption is diplayed above the table. It must be used after table tag only.

1. **<table>**
2. **<caption>**Student Records**</caption>**
3. **<tr><th>**First\_Name**</th><th>**Last\_Name**</th><th>**Marks**</th></tr>**
4. **<tr><td>**Vimal**</td><td>**Jaiswal**</td><td>**70**</td></tr>**
5. **<tr><td>**Mike**</td><td>**Warn**</td><td>**60**</td></tr>**
6. **<tr><td>**Shane**</td><td>**Warn**</td><td>**42**</td></tr>**
7. **<tr><td>**Jai**</td><td>**Malhotra**</td><td>**62**</td></tr>**
8. **</table>**

# HTML <tbody> tag

HTML <tbody> tag is used to group the table rows (<tr>) together, which indicates that this is body part of a table (<table>).

The <tbody> tag must be a child of <table> element.

The <tbody> is used along with <thead> and <tfoot> which shows the different part of the table that are table head, table body, and table footer, however, it does not affect the layout of the table.

These elements can be used for providing semantic information which can be helpful in accessibility purpose, or rendering the header at top and footer at the bottom while printing a large table.

1. **<tbody>**............**</tbody>**

**Following are some specifications about the HTML <tbody> tag**

|  |  |
| --- | --- |
| **Display** | **Inline** |
| **Start tag/End tag** | Both Start and End tag |
| **Usage** | Table body |

1. <!DOCTYPE html**>**
2. **<html>**
3. **<head>**
4. **<title>**HTML tbody tag**</title>**
5. **<style>**
6. body{
7. margin-left: 195px;"
8. }
9. **</style>**
10. **</head>**
11. **<body>**
12. **<h2>**Example of the tbody tag**</h2>**
13. **<table** border="1" bgcolor="#98f5ff"**>**
14. **<thead>**
15. **<tr>**
16. **<th>**EmpId**</th>**
17. **<th>**Name**</th>**
18. **<th>**Email-Id**</th>**
19. **</tr>**
20. **</thead>**
21. **<tbody>**
22. **<tr>**
23. **<td>**121**</td>**
24. **<td>**John**</td>**
25. **<td>**john123@gmail.com**</td>**
26. **</tr>**
28. **<tr>**
29. **<td>**122**</td>**
30. **<td>**William **</td>**
31. **<td>**william56@gmail.com**</td>**
32. **</tr>**
34. **<tr>**
35. **<td>**123**</td>**
36. **<td>**Amit**</td>**
37. **<td>**amitk98@gmail.com**</td>**
38. **</tr>**
39. **</tbody>**
40. **</table>**
41. **</body>**
42. **</html>**

|  |  |  |
| --- | --- | --- |
| **Attribute** | **Value** | **Description** |
| align | right left center justify char | It determines the alignment of the content inside the <tbody> element. **(Not Supported in HTML5)** |
| char | character | It specifies the alignment of the <tbody> content to the character. **(Not Supported in HTML5)** |
| charoff | Number | It specifies the number of characters the content will be aligned from the character specified by the char attribute. **(Not Supported in HTML5)** |
| valign | top middle bottom baseline | It determines the vertical alignment of the content inside the <tbody> element. **(Not Supported in HTML5)** |

HTML Lists

HTML Lists are used to specify lists of information. All lists may contain one or more list elements. There are three different types of HTML lists:

1. Ordered List or Numbered List (ol)
2. Unordered List or Bulleted List (ul)
3. Description List or Definition List (dl)

## HTML Ordered List or Numbered List

In the ordered HTML lists, all the list items are marked with numbers by default. It is known as numbered list also. The ordered list starts with <ol> tag and the list items start with <li> tag.

1. **<ol>**
2. **<li>**Apple **</li>**
3. **<li>**Mango **</li>**
4. **<li>**Pappya **</li>**
5. **<li>**kiwi**</li>**
6. **</ol>**

## HTML Unordered List or Bulleted List

In HTML Unordered list, all the list items are marked with bullets. It is also known as bulleted list also. The Unordered list starts with <ul> tag and list items start with the <li> tag.

**<ul>**

**<li>**Apple **</li>**

**<li>**Mango **</li>**

**<li>**Pappya **</li>**

**<li>**kiwi**</li>**

**</ul>**

## HTML Description List or Definition List

HTML Description list is also a list style which is supported by HTML and XHTML. It is also known as definition list where entries are listed like a dictionary or encyclopedia.

The definition list is very appropriate when you want to present glossary, list of terms or other name-value list.

The HTML definition list contains following three tags:

1. **<dl> tag** defines the start of the list.
2. **<dt> tag** defines a term.
3. **<dd> tag** defines the term definition (description).
4. **<dl>**
5. **<dt>**Aries**</dt>**
6. **<dd>**-One of the 12 horoscope sign.**</dd>**
7. **<dt>**Bingo**</dt>**
8. **<dd>**-One of my evening snacks**</dd>**
9. **<dt>**Leo**</dt>**
10. **<dd>**-It is also an one of the 12 horoscope sign.**</dd>**
11. **<dt>**Oracle**</dt>**
12. **<dd>**-It is a multinational technology corporation.**</dd>**
13. **</dl>**