The comment tag (<!-- Comment-->) is used to insert comments in the HTML code. It is a good practice of coding, so that coder and the reader can get help to understand the code. It is useful to understand steps of the complex code. The comment tag is helpful while the debugging of codes.
It is a simple piece of code that is wiped off (ignore) by web browsers i.e. , not displayed by the browser.
It helps the coder and reader to understand the piece of code used for especially in complex source code.

* Pre tags

The <pre> tag in HTML is used to define the block of preformatted text which preserves the text spaces, line breaks, tabs, and other formatting characters which are ignored by web browsers. Text in the <pre> element is displayed in a fixed-width font, but it can be changed using CSS. The <pre> tag requires a starting and end tag.

Note: If you remove pre tag, all the text will be displayed in a single line.

Syntax:

```
<pre> Contents... </pre>
```

Types of HTML Comments: There are two types of comments in HTML which are:
* Single-line comment
* Multi-lines comment

Single-line comment:Single line comment is given inside the (<!– comment –>) tag.

Multi-line comment: Multiple lines can be given by the syntax (<!– –>), Basically it's the same as we used in single line comment, difference is half part of the comment (" –> "), is appended where the intended comment line ends.

Examples

```
<html>
  <body>
    <!-- html pre tag starts here-->
    <pre>
      GeeksforGeeks
      A Computer  Science Portal  For Geeks
    </pre>
    <!-- html pre tag ends here-->
  </body>
</html>
```

* Background images

The <background> attribute in the HTML document is used to specify the background image on a HTML page or a table. You can pass the path of an image as a value of background attribute to set the image of your HTML page or table.

Syntax:

```
<tag background="Path_of_an_image">
```

1. <tag style="background-image:Path_of_an_image)">

Definition and Usage

The <a> tag defines a hyperlink, which is used to link from one page to another.
The most important attribute of the <a> element is the href attribute, which indicates the link's destination.
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

Tips and Notes

Tip: If the <a> tag has no href attribute, it is only a placeholder for a hyperlink.
Tip: A linked page is normally displayed in the current browser window, unless you specify another target.

```
<a href="https://www.w3schools.com">
<img border="0" alt="W3Schools" src="logo_w3s.gif" width="100" height="100">
</a>
```

Div tag

* The tag defines a division or a section in an HTML document.
* The tag is used as a container for HTML elements- which is then styled with CSS or manipulated with JavaScript.
* The tag is easily styled by using the class or id attribute.
* Any sort of content can be put inside the tag!

seperate = alag karna

Note: By default, browsers always place a line break before and after the element
* The tag also supports the Global Attributes in HTML.

* The div tag is known as Division tag. The div tag is used in HTML to make divisions of content in the web page like (text, images, header, footer, navigation bar, etc). Div tag has both open ( ) and closing ( ) tag and it is mandatory to close the tag. The Div is the most usable tag in web development because it helps us to separate out data in the web page and we can create a particular section for particular data or function in the web pages.

* Div tag is Block level tag
1. It is a generic container tag
2. It is used to group various tags of HTML so that sections can be created and styles can be applied to them.
3. As we know Div tag is block-level tag, the div tag contains entire width. Hence, every div tag will start from a new line, and not the same line.

HTML Div Tag

The **HTML tag** is used *to group the large section of HTML elements together*.

We know that every tag has a specific purpose e.g. p tag is used to specify paragraph, <h1> to <h6> tag are used to specify headings but the tag is just like a container unit which is used to encapsulate other page elements and divides the HTML documents into sections.

The div tag is generally used by web developers to group HTML elements together and apply CSS styles to many elements at once. For example: If you wrap a set of paragraph elements into a div element so you can take the advantage of CSS styles and apply font style to all paragraphs at once instead of coding the same style for each paragraph element.

```
1. <div style="border:1px solid pink;padding:20px;font-size:20px">
2. <p>Welcome to Javatpoint.com, Here you get tutorials on latest technologies.</p>
3. <p>This is second paragraph</p>
4. </div>
```

Output:

Welcome to Javatpoint.com, Here you get tutorials on latest technologies.

This is second paragraph.

Difference between HTML div tag and span tag

div tag	span tag
HTML div is a **block** element.	HTML span is an **inline** element
HTML div element is used to **wrap large sections of elements**.	HTML span element is used to **wrap small portion of texts, image** etc.

Example 1:

```
<html>
  <head>
    <title>gfg</title>
<style type=text/css>

p{
 background-color:gray;
 margin: 10px;
}

div
{
 color: white;
 background-color: 009900;
 margin: 2px;
 font-size: 25px;
}
</style>

</head>

 <body>
  <div > div tag  </div>
  <div > div tag  </div>
  <div > div tag  </div>
  <div > div tag  </div>

  </body>
</html>
Out
```

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.

Headings in HTML helps the search engine to understand and index the structure of web page.

heading elements (h1....h6) should be used for headings only. They should not be used just to make text bold or big.

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.

Note: If we are using various <p> tags in one HTML file then browser automatically adds a single blank line between the two paragraphs.

Space inside HTML Paragraph

If you put a lot of spaces inside the HTML p tag, browser removes extra spaces and extra line while displaying the page. The browser counts number of spaces and lines as a single one.

Look, I put here a lot of spaces but I know, Browser will ignore it.

As you can see, all the extra lines and unnecessary spaces are removed by the browser.

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.

HTML Paragraph

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.

* Creating Web Layout using Div Tag The div tag is a container tag. Inside div tag, we can put more than one HTML element and can group them together and apply CSS for them. Div tag can be used for creating a layout of web pages. In the below example we had created a web layout using the div tag. We can also create web layouts using table tag but table tags are very complex to modify the layout. The div tag is very flexible in creating web layouts and easy to modify. The below example will show grouping of HTML element using div tag and create block-wise web layout.

HTML Lists

list can be use for marked with number or bullet into a items list.

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)

Note: We can create a list inside another list, which will be termed as nested List.

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>Aries</li>
3.  <li>Bingo</li>
4.  <li>Leo</li>
5.  <li>Oracle</li>
6. </ol>
```

Output:Next

1. Aries
2. Bingo
3. Leo
4. Oracle

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.

```
1. <ul>
2.  <li>Aries</li>
3.  <li>Bingo</li>
4.  <li>Leo</li>
5.  <li>Oracle</li>
6. </ul>
```

Output:

o Aries
o Bingo
o Leo
o Oracle

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).

```
1. <dl>
2.   <dt>Aries</dt>
3.   <dd>-One of the 12 horoscope sign.</dd>
4.   <dt>Bingo</dt>
5.   <dd>-One of my evening snacks</dd>
6.  <dt>Leo</dt>
7.  <dd>-It is also an one of the 12 horoscope sign.</dd>
8.   <dt>Oracle</dt>
9.   <dd>-It is a multinational technology corporation.</dd>
```

```
10. </dl>
```

Output:

Aries
-One of the 12 horoscope sign.
Bingo
-One of my evening snacks
Leo
-It is also an one of the 12 horoscope sign.
Oracle
-It is a multinational technology corporation.

HTML Nested List

A list within another list is termed as nested list. If you want a bullet list inside a numbered list then such type of list will called as nested list.

Code:

```
1. <!DOCTYPE html>
2. <html>
3. <head>
4.    <title>Nested list</title>
5. </head>
6. <body>
7.    <p>List of Indian States with thier capital</p>
8. <ol>
9.    <li>Delhi
10.       <ul>
11.          <li>NewDelhi</li>
12.       </ul>
13.    </li>
14.    <li>Haryana
15.       <ul>
16.          <li>Chandigarh</li>
17.       </ul>
18.    </li>
19. </ol>
20. </body>
21. </html>
```

Output:

HTML tag

HTML tag is used as a generic container of inline elements. It is used for styling purpose to the grouped inline elements (using class and id attribute or inline style).

The tag does not have any default meaning or rendering.

The tag can be useful for the following task:

To change the language of a part of the text.
To change the color, font, background of a part of text using CSS
To apply the scripts to the particular part of the text.

Note: HTML is much similar as tag, but is used for block-level elements and tag is used for inline elements.

Syntax

```
<span>Write your content here.....</span>
```

Display	Inline
Start tag/End tag	Both Start and End tag
Usage	Styles and semantics

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.

HTML Table Example

Let's see the example of HTML table tag. It output is shown above.

```
<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>
```

Output:

First_Name	Last_Name	Marks

Sonoo	Jaiswal	60
James	William	80
Swati	Sironi	82
Chetna	Singh	72

In the above html table, there are 5 rows and 3 columns = 5 * 3 = 15 values.

HTML Table with Border

There are two ways to specify border for HTML tables.

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

1) HTML Border attribute

You can use border attribute of table tag in HTML to specify border. But it is not recommended now.

```
<table border="1">
<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>
```

Output:

First_Name	Last_Name	Marks
Sonoo	Jaiswal	60
James	William	80
Swati	Sironi	82
Chetna	Singh	72

2) CSS Border property

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

```
<style>
table, th, td {
  border: 1px solid black;
}
</style>
```

You can collapse all the borders in one border by border-collapse property. It will collapse the border into one.

```
<style>
table, th, td {
  border: 2px solid black;
  border-collapse: collapse;
}
</style>
```

Name	Last Name	Marks
Sonoo	Jaiswal	60
James	William	80
Swati	Sironi	82
Chetna	Singh	72

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 padding property in CSS

The cellpadding attribute of HTML table tag is obselete now. It is recommended to use CSS. So let's see the code of CSS.

```
<style>
table, th, td {
  border: 1px solid pink;
  border-collapse: collapse;
}
th, td {
```

```
    padding: 10px;
}
</style>
```

Output:

Name	Last Name	Marks
Sonoo	Jaiswal	60
James	William	80
Swati	Sironi	82
Chetna	Singh	72

HTML Table width:

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

We can adjust our table width as per our requirement. Following is the example to display table with width.

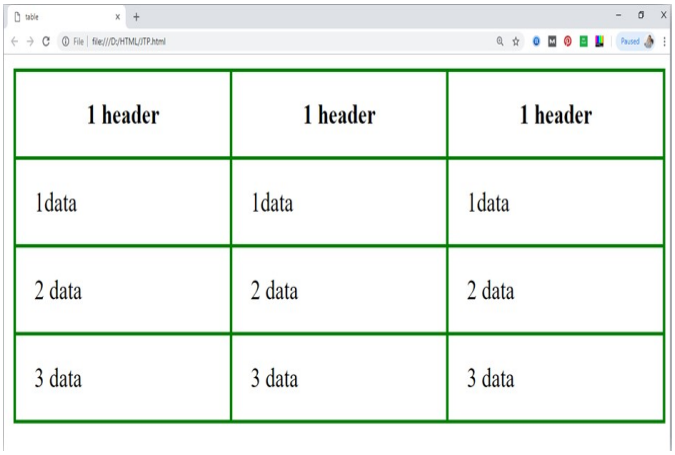
```
table{
    width: 100%;
}
```

Example:

```
<!DOCTYPE html>
<html>
<head>
    <title>table</title>
    <style>
        table{
            border-collapse: collapse;
            width: 100%;
        }
    th,td{
```

```
        border: 2px solid green;
        padding: 15px;
    }
    </style>
  </head>
<body>
  <table>
    <tr>
      <th>1 header</th>
      <th>1 header</th>
      <th>1 header</th>
    </tr>
    <tr>
      <td>1data</td>
      <td>1data</td>
      <td>1data</td>
    </tr>
    <tr>
      <td>2 data</td>
      <td>2 data</td>
      <td>2 data</td>
    </tr>
    <tr>
      <td>3 data</td>
      <td>3 data</td>
      <td>3 data</td>
    </tr>
</table>
</body>
</html>
```

Output:



1 header	1 header	1 header
1data	1data	1data
2 data	2 data	2 data
3 data	3 data	3 data

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.

CSS code:

```
<style>
table, th, td {
  border: 1px solid black;
  border-collapse: collapse;
}
th, td {
  padding: 5px;
}
</style>
```

HTML code:

```
<table style="width:100%">
  <tr>
  <th>Name</th>
  <th colspan="2">Mobile No.</th>
  </tr>
  <tr>
  <td>Ajeet Maurya</td>
```

```
    <td>7503520801</td>
    <td>9555879135</td>
  </tr>
</table>
```

Output:

Name	Mobile No.	
Ajeet Maurya	7503520801	9555879135

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.

CSS code:

```
<style>
table, th, td {
  border: 1px solid black;
  border-collapse: collapse;
}
th, td {
  padding: 10px;
}
</style>
```

HTML code:

```
<table>
<tr><th>Name</th><td>Ajeet Maurya</td></tr>
<tr><th rowspan="2">Mobile No.</th><td>7503520801</td></tr>
<tr><td>9555879135</td></tr>
</table>
```

Output:

Name	Ajeet Maurya
Mobile No.	7503520801
	9555879135

HTML table with caption

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

```
<table>
<caption>Student Records</caption>
<tr><th>First_Name</th><th>Last_Name</th><th>Marks</th></tr>
<tr><td>Vimal</td><td>Jaiswal</td><td>70</td></tr>
<tr><td>Mike</td><td>Warn</td><td>60</td></tr>
<tr><td>Shane</td><td>Warn</td><td>42</td></tr>
<tr><td>Jai</td><td>Malhotra</td><td>62</td></tr>
</table>
```

Styling HTML table even and odd cells

CSS code:

```
<style>
table, th, td {
  border: 1px solid black;
  border-collapse: collapse;
}
th, td {
  padding: 10px;
}
table#alter tr:nth-child(even) {
  background-color: #eee;
}
table#alter tr:nth-child(odd) {
  background-color: #fff;
```

A caption functions like a heading for a table. Most screen readers announce the content of captions. Captions help users to find a table and understand what it's about and decide if they want to read it. If the user uses “Tables Mode”, captions are the primary mechanism to identify tables.
The <caption> tag defines a table caption.

The <caption> tag must be inserted immediately after the <table> tag.

Tip: By default, a 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.

```
14. }
15. table#alter th {
16.   color: white;
17.   background-color: gray;
18. }
19. </style>
```

Output:

Student list ya caption ha

First_Name	Last_Name	Marks
Sonoo	Jaiswal	60
James	William	80
Swati	Sironi	82
Chetna	Singh	72

NOTE: You can also create various types of tables using different CSS properties in your table.

HTML Formatting

HTML Formatting is a process of formatting text for better look and feel. HTML provides us ability to format text without using CSS. There are many formatting tags in HTML. These tags are used to make text bold, italicized, or underlined. There are almost 14 options available that how text appears in HTML and XHTML.

In HTML the formatting tags are divided into two categories:

- Physical tag: These tags are used to provide the visual appearance to the text.
- Logical tag: These tags are used to add some logical or semantic value to the text.

NOTE: There are some physical and logical tags which may give same visual appearance, but they will be different in semantics.

Here, we are going to learn 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.
	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.
	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. thoda
<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.

1) Bold Text

HTML and formatting elements

The HTML element is a physical tag which display text in bold font, without any logical importance. If you write anything within ..... element, is shown in bold letters.

See this example:

```
<p> <b>Write Your First Paragraph in bold text.</b></p>
```

Output:

Write Your First Paragraph in bold text.

The HTML tag is a logical tag, which displays the content in bold font and informs the browser about its logical importance. If you write anything between ???????. , is shown important text.

See this example:

```
<p><strong>This is an important content</strong>, and this is normal conten
t</p>
```

Output:

This is an important content, and this is normal content

Example

```
<!DOCTYPE html>
<html>
<head>
   <title>formatting elements</title>
</head>
<body>
<h1>Explanation of formatting element</h1>
<p><strong>This is an important content</strong>, and this is normal conten
t</p>
</body>
</html>
```

2) Italic Text

HTML and formatting elements

The HTML element is physical element, which display the enclosed content in italic font, without any added importance. If you write anything within ..... element, is shown in italic letters.

See this example:

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

Output:

Write Your First Paragraph in italic text.

The HTML tag is a logical element, which will display the enclosed content in italic font, with added semantics importance.

See this example:

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

Output:

This is an important content, which displayed in italic font.

```
<!DOCTYPE html>
<html>
<head>
   <title>formatting elements</title>
</head>
<body>
<h1>Explanation of italic formatting element</h1>
<p><em>This is an important content</em>, which displayed in italic font.</p>
</body>
</html>
```

3) HTML Marked formatting

If you want to mark or highlight a text, you should write the content within <mark>.....</mark>.

See this example:

```
1. <h2> I want to put a <mark> Mark</mark> on your face</h2>
```

Output:

I want to put a Mark on your face

4) Underlined Text

If you write anything within <u>.....</u> element, is shown in underlined text.

See this example:

```
1. <p> <u>Write Your First Paragraph in underlined text.</u></p>
```

Output:

Write Your First Paragraph in underlined text.

5) Strike Text

Anything written within <strike>.....</strike> element is displayed with strikethrough. It is a thin line which cross the statement.

See this example:

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

Output:

~~Write Your First Paragraph with strikethrough.~~

6) Monospaced Font

If you want that each letter has the same width then you should write the content within <tt>.....</tt> element.

Note: We know that most of the fonts are known as variable-width fonts because different letters have different width. (for example: 'w' is wider than 'i'). Monospaced Font provides similar space among every letter.

See this example:

1. ** **Hello **<tt>**Write Your First Paragraph in monospaced font.**</tt> **

Output:

Hello `Write Your First Paragraph in monospaced font.`

7) Superscript Text

If you put the content within ^{.....} element, is shown in superscript; means it is displayed half a character's height above the other characters.

See this example:

** **Hello **^{**Write Your First Paragraph in superscript.**} **

Output:

Hello Write Your First Paragraph in superscript.

8) Subscript Text

If you put the content within _{.....} element, is shown in subscript ; means it is displayed half a character's height below the other characters.

See this example:

1. ** **Hello **_{**Write Your First Paragraph in subscript.**} **

Output:

Hello Write Your First Paragraph in subscript.

9) Deleted Text

Anything that puts within <del>.....</del> is displayed as deleted text.

See this example:

1. ** **Hello **<del>**Delete your first paragraph.**</del> **

Output:

Hello

10) Inserted Text

Anything that puts within <ins>.....</ins> is displayed as inserted text.

See this example:

1. ** <del>**Delete your first paragraph.**</del><ins>**Write another paragraph.**</ins> **

Output:

~~Delete your first paragraph.~~Write another paragraph.

11) Larger Text

If you want to put your font size larger than the rest of the text then put the content within <big>.....</big>. It increase one font size larger than the previous one.

See this example:

1. ** **Hello **<big>**Write the paragraph in larger font.**</big> **
2. **Output:**

Hello Write the paragraph in larger font.

12) Smaller Text

If you want to put your font size smaller than the rest of the text then put the content within <small>.....</small>tag. It reduces one font size than the previous one.

See this example:

1. ** **Hello **<small>**Write the paragraph in smaller font.**</small> **

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">
```

Output:

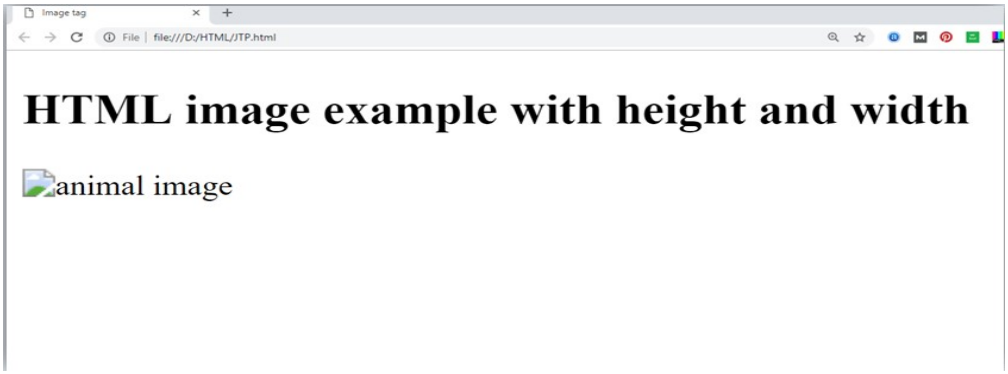
Note: Always try to insert the image with height and width, else it may flicker while displaying on webpage.

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">
```

Output:



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.

Note: If src URL will be incorrect or misspell then it will not display your image on web page, so try to put correct URL.

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:

```
<a href="https://www.javatpoint.com/what-is-robotics"><img src="robot.jpg" height="100" width="100"></a>
```

HTML Anchor (Hyperlink)

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.

href attribute of HTML anchor tag

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>
```

Let's see an example of HTML anchor tag.

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

Specify a location for Link using target attribute

If we want to open that link to another page then we can use target attribute of <a> tag. With the help of this link will be open in next page.

Example:

```
<!DOCTYPE html>
<html>
<head>
  <title></title>
</head>
<body>
<p>Click on <a href="https://www.javatpoint.com/" target="_blank"> this-link </a>to go on home page of JavaTpoint.</p>
</body>
</html>
```

Output:

Note:

- The **target** attribute can only use with href attribute in anchor tag.
- If we will not use target attribute then link will open in same page.

Appearance of HTML anchor tag

An **unvisited link** is displayed underlined and blue.

A **visited link** displayed underlined and purple.

An **active link** is underlined and red.

HTML Form

An **HTML form** is *a section of a document* which contains controls such as text fields, password fields, checkboxes, radio buttons, submit button, menus etc.

An HTML form facilitates the user to enter data that is to be sent to the server for processing such as name, email address, password, phone number, etc. .

Why use HTML Form

HTML forms are required if you want to collect some data from of the site visitor.

For example: If a user want to purchase some items on internet, he/she must fill the form such as shipping address and credit/debit card details so that item can be sent to the given address.

HTML Form Syntax

```
<form action="server url" method="get|post">
 //input controls e.g. textfield, textarea, radiobutton, button
</form>
```

HTML Form Tags

Let's see the list of HTML 5 form tags.

Tag	Description
<form>	It defines an HTML form to enter inputs by the used side.
<input>	It defines an input control.
<textarea>	It defines a multi-line input control.
<label>	It defines a label for an input element.
<fieldset>	It groups the related element in a form.
<legend>	It defines a caption for a <fieldset> element.
<select>	It defines a drop-down list.
<optgroup>	It defines a group of related options in a drop-down list.
<option>	It defines an option in a drop-down list.
<button>	It defines a clickable button.

HTML 5 Form Tags

Let's see the list of HTML 5 form tags.

Tag	Description
<datalist>	It specifies a list of pre-defined options for input control.
<keygen>	It defines a key-pair generator field for forms.
<output>	It defines the result of a calculation.

HTML <form> element

The HTML <form> element provide a document section to take input from user. It provides various interactive controls for submitting information to web server such as text field, text area, password field, etc.

Note: The <form> element does not itself create a form but it is container to contain all required form elements, such as <input>, <label>, etc.

Syntax:

```
<form>
//Form elements
</form>
```

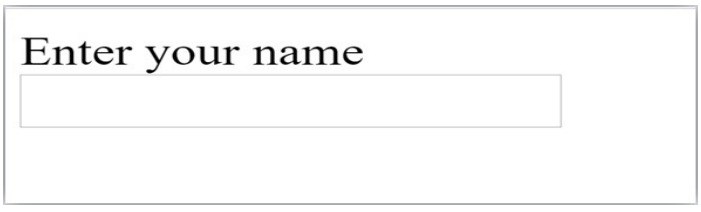
HTML <input> element

The HTML <input> element is fundamental form element. It is used to create form fields, to take input from user. We can apply different input filed to gather different information form user. Following is the example to show the simple text input.

Example:

```
<body>
  <form>
     Enter your name  <br>
    <input type="text" name="username">
  </form>
</body>
```

Output:

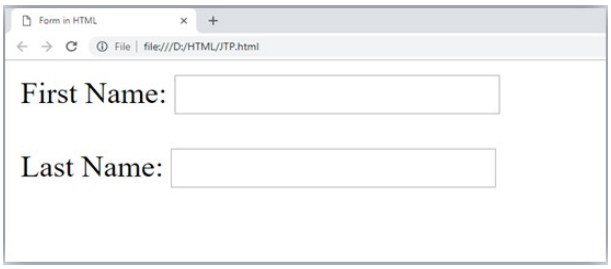


HTML TextField Control

The type="text" attribute of input tag creates textfield control also known as single line textfield control. The name attribute is optional, but it is required for the server side component such as JSP, ASP, PHP etc.

```
<form>
   First Name: <input type="text" name="firstname"/> <br/>
   Last Name:  <input type="text" name="lastname"/> <br/>
</form>
```

Output:



Note: If you will omit 'name' attribute then the text filed input will not be submitted to server.

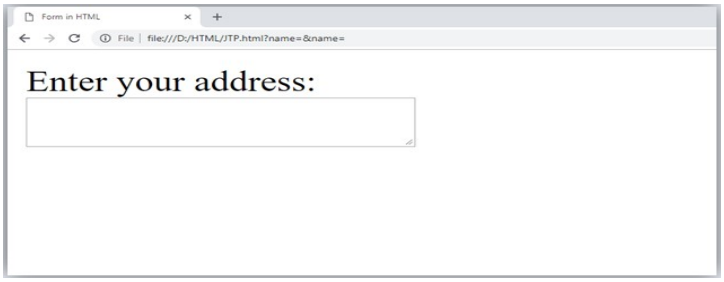
HTML <textarea> tag in form

The <textarea> tag in HTML is used to insert multiple-line text in a form. The size of <textarea> can be specify either using "rows" or "cols" attribute or by CSS.

Example:

```
<!DOCTYPE html>
<html>
<head>
   <title>Form in HTML</title>
</head>
<body>
  <form>
      Enter your address:<br>
     <textarea rows="2" cols="20"></textarea>
  </form>
</body>
</html>
```

Output:



Label Tag in Form

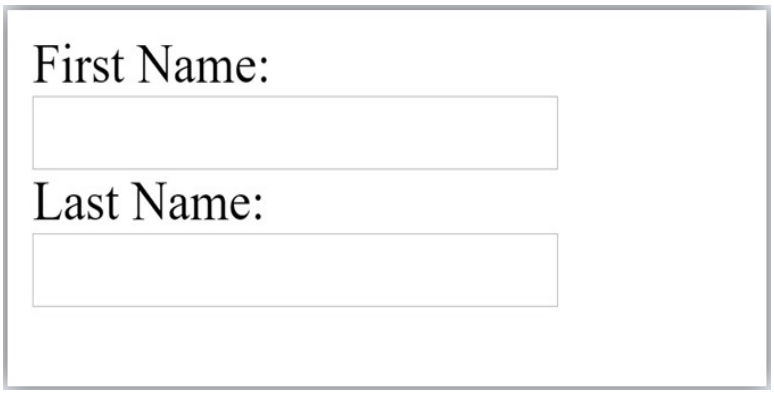
It is considered better to have label in form. As it makes the code parser/browser/user friendly.

If you click on the label tag, it will focus on the text control. To do so, you need to have for attribute in label tag that must be same as id attribute of input tag.

> NOTE: It is good to use <label> tag with form, although it is optional but if you will use it, then it will provide a focus when you tap or click on label tag. It is more worthy with touchscreens.

```
<form>
   <label for="firstname">First Name: </label> <br/>
         <input type="text" id="firstname" name="firstname"/> <br/>
  <label for="lastname">Last Name: </label>
         <input type="text" id="lastname" name="lastname"/> <br/>
</form>
```

Output:



HTML Password Field Control

The password is not visible to the user in password field control.

```
<form>
```

```
    <label for="password">Password: </label>
        <input type="password" id="password" name="password"/> <br/>
</form>
```

Output:

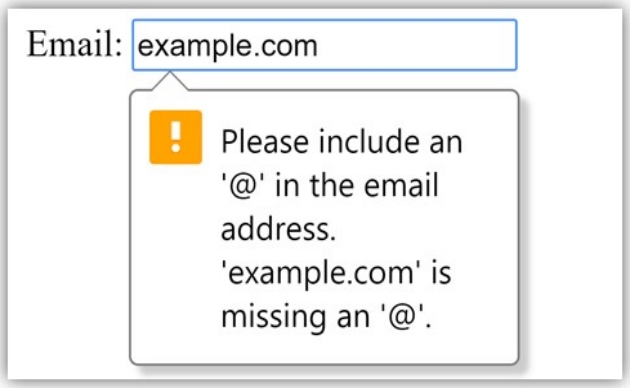
HTML 5 Email Field Control

The email field in new in HTML 5. It validates the text for correct email address. You must use @ and . in this field.

```
<form>
    <label for="email">Email: </label>
        <input type="email" id="email" name="email"/> <br/>
</form>
```

It will display in browser like below:

Note: If we will not enter the correct email, it will display error like:



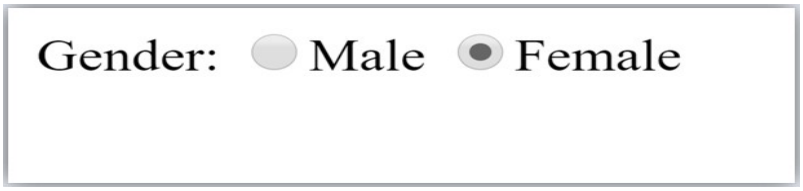
Radio Button Control

The radio button is used to select one option from multiple options. It is used for selection of gender, quiz questions etc.

If you use one name for all the radio buttons, only one radio button can be selected at a time.

Using radio buttons for multiple options, you can only choose a single option at a time.

```
<form>
  <label for="gender">Gender: </label>
        <input type="radio" id="gender" name="gender" value="male"/>Mal
e
        <input type="radio" id="gender" name="gender" value="female"/>Fe
male <br/>
</form>
```



Checkbox Control

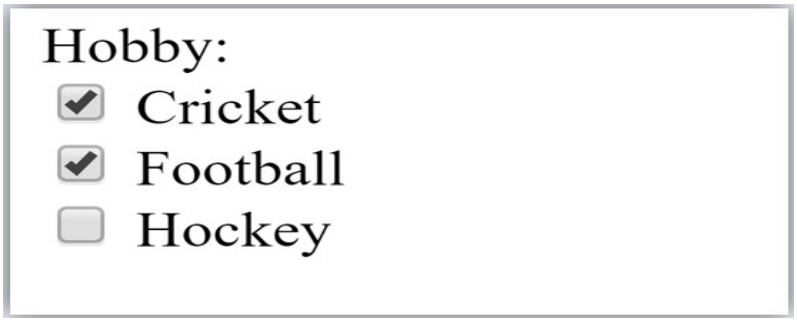
The checkbox control is used to check multiple options from given checkboxes.

```
<form>
Hobby:<br>
        <input type="checkbox" id="cricket" name="cricket" value="cricket"/>

          <label for="cricket">Cricket</label> <br>
        <input type="checkbox" id="football" name="football" value="footbal
l"/>
          <label for="football">Football</label> <br>
        <input type="checkbox" id="hockey" name="hockey" value="hockey"
/>
          <label for="hockey">Hockey</label>
</form>
```

Note: These are similar to radio button except it can choose multiple options at a time and radio button can select one button at a time, and its display.

Output:



Submit button control

HTML **<input type="submit">** are used to add a submit button on web page. When user clicks on submit button, then form get submit to the server.

Syntax:

```
<input type="submit" value="submit">
```

The type = submit , specifying that it is a submit button

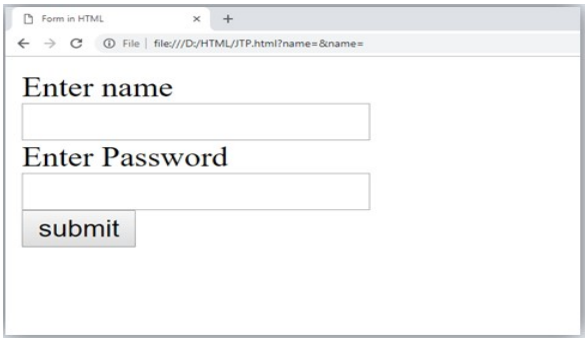
The value attribute can be anything which we write on button on web page.

The name attribute can be omit here.

Example:

```
<form>
    <label for="name">Enter name</label><br>
    <input type="text" id="name" name="name"><br>
    <label for="pass">Enter Password</label><br>
    <input type="Password" id="pass" name="pass"><br>
    <input type="submit" value="submit">
</form>
```

Output:



HTML <fieldset> element:

The <fieldset> element in HTML is used to group the related information of a form. This element is used with <legend> element which provide caption for the grouped elements.

Example:

```
1.  <form>
2.      <fieldset>
3.       <legend>User Information:</legend>
4.     <label for="name">Enter name</label><br>
5.  <input type="text" id="name" name="name"><br>
6.  <label for="pass">Enter Password</label><br>
7.  <input type="Password" id="pass" name="pass"><br>
8.  <input type="submit" value="submit">
9.  </fieldset>
10. lt;/form>
```

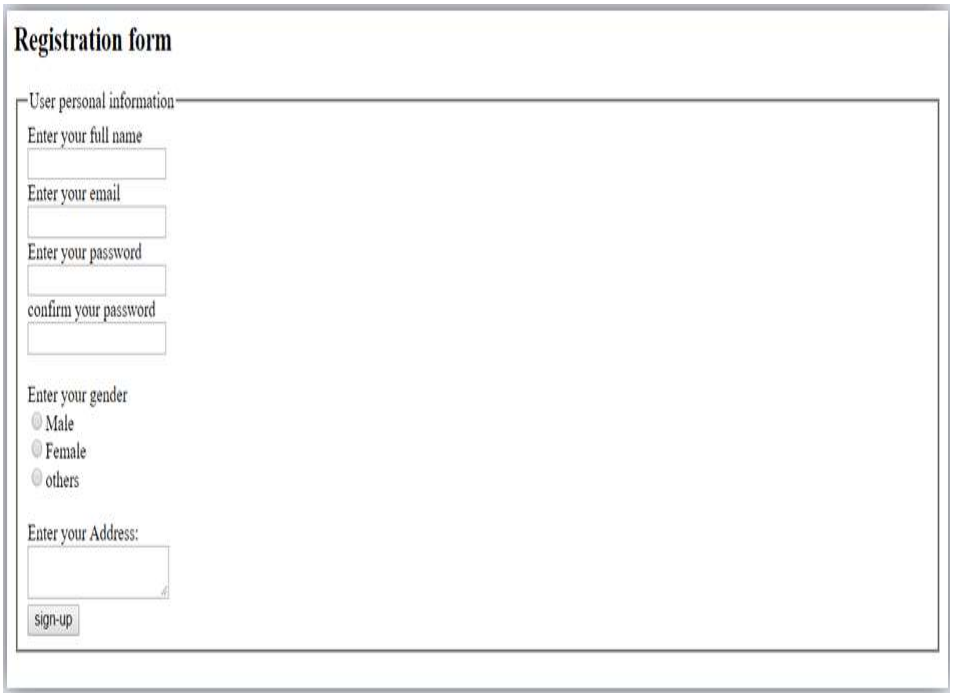
Output:

HTML Form Example

Following is the example for a simple form of registration.

```
<!DOCTYPE html>
 <html>
 <head>
  <title>Form in HTML</title>
</head>
 <body>
    <h2>Registration form</h2>
   <form>
    <fieldset>
      <legend>User personal information</legend>
      <label>Enter your full name</label><br>
      <input type="text" name="name"><br>
       <label>Enter your email</label><br>
       <input type="email" name="email"><br>
       <label>Enter your password</label><br>
       <input type="password" name="pass"><br>
       <label>confirm your password</label><br>
       <input type="password" name="pass"><br>
       <br><label>Enter your gender</label><br>
       <input type="radio" id="gender" name="gender" value="male"/>Male <br>
       <input type="radio" id="gender" name="gender" value="female"/>Female <br/>
       <input type="radio" id="gender" name="gender" value="others"/>others <br/>
        <br>Enter your Address:<br>
       <textarea></textarea><br>
       <input type="submit" value="sign-up">
   </fieldset>
 </form>
 </body>
</html>
```

Output:



HTML Form Example

Let's see a simple example of creating HTML form.

```
<form action="#">
<table>
<tr>
    <td class="tdLabel"><label for="register_name" class="label">Enter name:</label></td>
    <td><input type="text" name="name" value="" id="register_name" style="width:160px"/></td>
</tr>
<tr>
    <td class="tdLabel"><label for="register_password" class="label">Enter password:</label></td>
    <td><input type="password" name="password" id="register_password" style="width:160px"/></td>
</tr>
<tr>
    <td class="tdLabel"><label for="register_email" class="label">Enter Email:</label></td>
    <td
```

```
>><input type="email" name="email" value="" id="register_email" style="width:
160px"/></td>
</tr>
<tr>
   <td class="tdLabel"><label for="register_gender" class="label">Enter Gend
er:</label></td>
   <td>
<input type="radio" name="gender" id="register_gendermale" value="male"/>

<label for="register_gendermale">male</label>
<input type="radio" name="gender" id="register_genderfemale" value="femal
e"/>
<label for="register_genderfemale">female</label>
   </td>
</tr>
<tr>
   <td class="tdLabel"><label for="register_country" class="label">Select Cou
ntry:</label></td>
   <td><select name="country" id="register_country" style="width:160px">
   <option value="india">india</option>
   <option value="pakistan">pakistan</option>
   <option value="africa">africa</option>
   <option value="china">china</option>
   <option value="other">other</option>
</select>
</td>
</tr>
<tr>
   <td colspan="2"><div align="right"><input type="submit" id="register_0"
value="register"/>
</div></td>
</tr>
</table>
</form>
```