

Starting with HTML :

HTML stands for the **Hyper Text Marked up Language** . It is used for designing the web pages

The general layout is ,

```
<html>
<head>
    ::
</head>
<body>
    ::
</body>
</html>
```

Tags : The tags are the keywords of the HTML which specify how the specific text is to be displayed .

The general form of the tag is ,

```
<tag>.....</tag>
```

/ is used to denote the end of the tag.

The general layout is , the entire HTML document is enclosed in the tag **<HTML>...</HTML>**.

The entire HTML code is divided into the two parts ,

1. Head Part .

2. Body Part .

1. Head Part : The head part enclose the title of the HTML document , Java Script code , DHTML code etc...

The general form is ,

```
<head> ... </head>
```

The **<title>** tag which is given with in the **<head>** tag is used to specify the HTML page or the web page title which will be displayed on the title bar of the web page .

2. Body Part : This part will contains all the tags and contents which will displayed in the web page .

The general form is ,

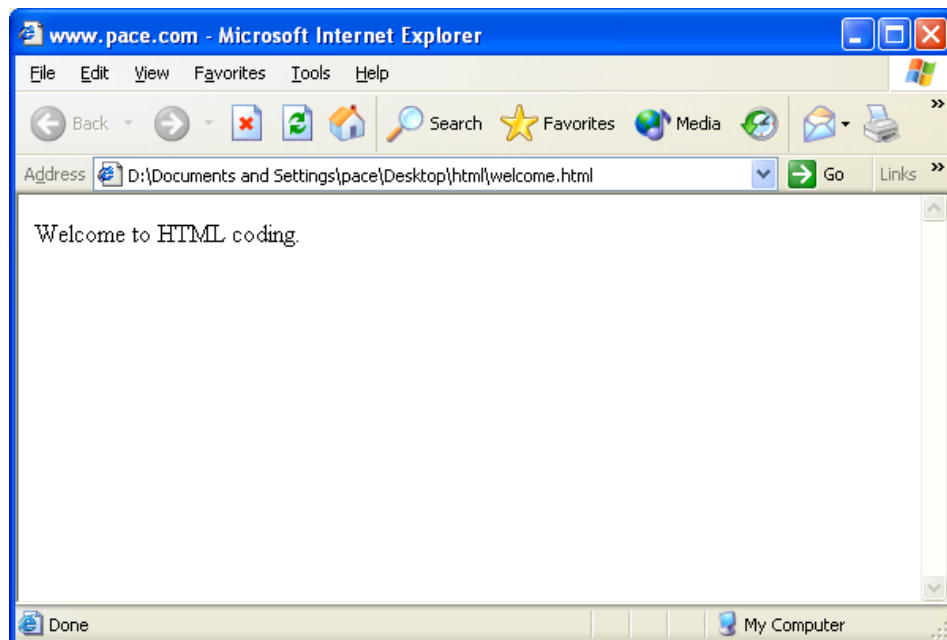
```
<body> ...</body>
```

Consider the following HTML document ,

```
<html>
<head>
  <title>www.pace.com</title>
</head>
<body>
  Welcome to HTML coding.
</body>
</html>
```

Now, save this file with the name "welcome.html" , note that all the HTML documents will be saved with the extension .HTML and these files when we double click on them will get opened in the web browser , such as Internet explorer , netscape navigator etc...

output :



Attributes of the **<body>** tag :

(a) **bgcolor** : This attribute of the **<body>** tag is used to specify the background color .

There are two ways by which we can specify the background color ,

(i) Using the hexadecimal color code .

(ii) Using the color name directly .

(i) Using the hexadecimal color code .

In this case we use the six hexadecimal digits to specify the color code. And each two hexadecimal digit will specify one basic color value .

There are three primary colors , **Red , Green and Blue**. There are **256** shades supported for each color.

So, 8 bits are required to represent each color.

In the case of the Hexadecimal number system , the base is 16. So , 4 bits are required to represent the hexadecimal digit.

Thus , to represent each of the primary color , we require only **2 hexadecimal digits**.

#d1d2d3d4d5d6

d1...d6 will range from 0-f

d1 and d2 will specify the color value for the red color .

d3 and d4 will specify the color value for the green color .

d5 and d6 will specify the color value for the blue color.

The general form will be

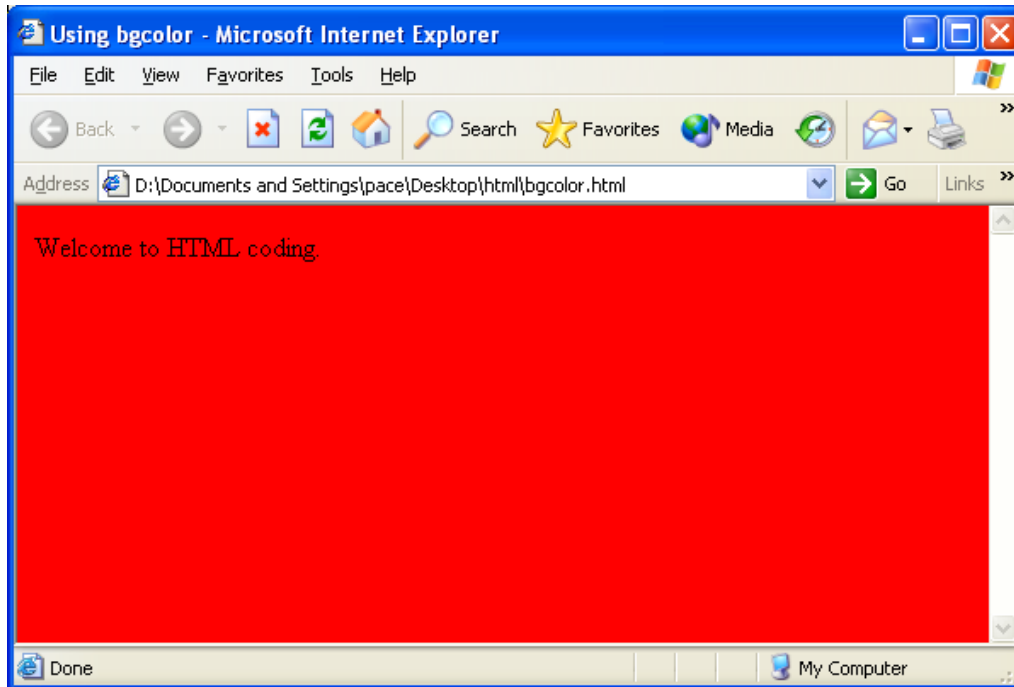
```
<body bgcolor="#d1d2d3d4d5d6">  
:      :      :      :  
:      :      :      :  
</body>
```

Consider the following

<html>

```
<head>
    <title>Using bgcolor </title>
</head>
<body bgcolor="#ff0000">
    Welcome to HTML coding.
</body>
</html>
```

Output :



(ii) Using the color name directly

With the bgcolor attribute we can use the color name directly .

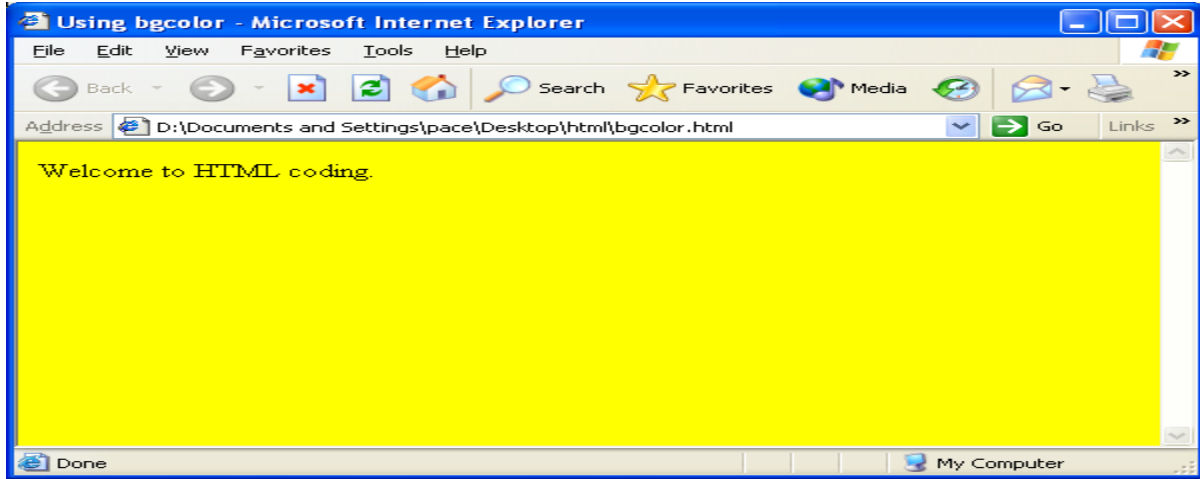
The general form is n

```
<body bgcolor="colorname">
```

Consider the following code ,

```
<html>
<head>
    <title>Using bgcolor </title>
</head>
<body bgcolor="yellow">
    Welcome to HTML coding.
</body>
```

</html>



(b) background attribute :

This attribute is used to specify the background image for the HTML or the web document .

The general form is ,

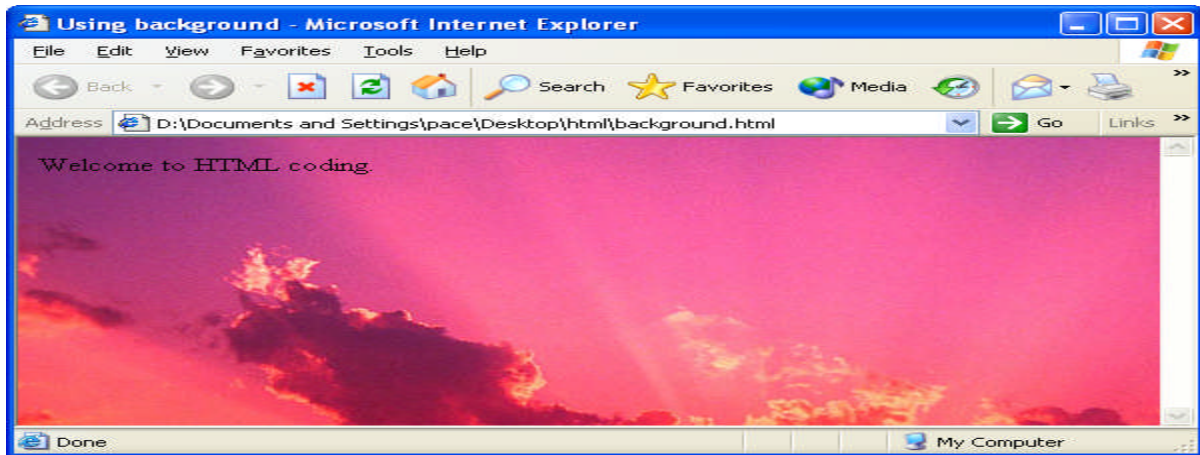
```
<body background="image_path">
```

```
    :           :   :   :   :  
    :           :   :   :   :  
</body>
```

Consider the following code :

```
<html>  
<head>  
    <title>Using bgcolor </title>  
</head>  
<body background="Sunset.jpg">  
    Welcome to HTML coding.  
</body>  
</html>
```

output :



Tags which we use in the <body> part of the HTML document .

1. <p>

It is the paragraph tag . It is used to mark the beginning of the paragraph . It can be used as the single tag , as there is no need to close this tag .

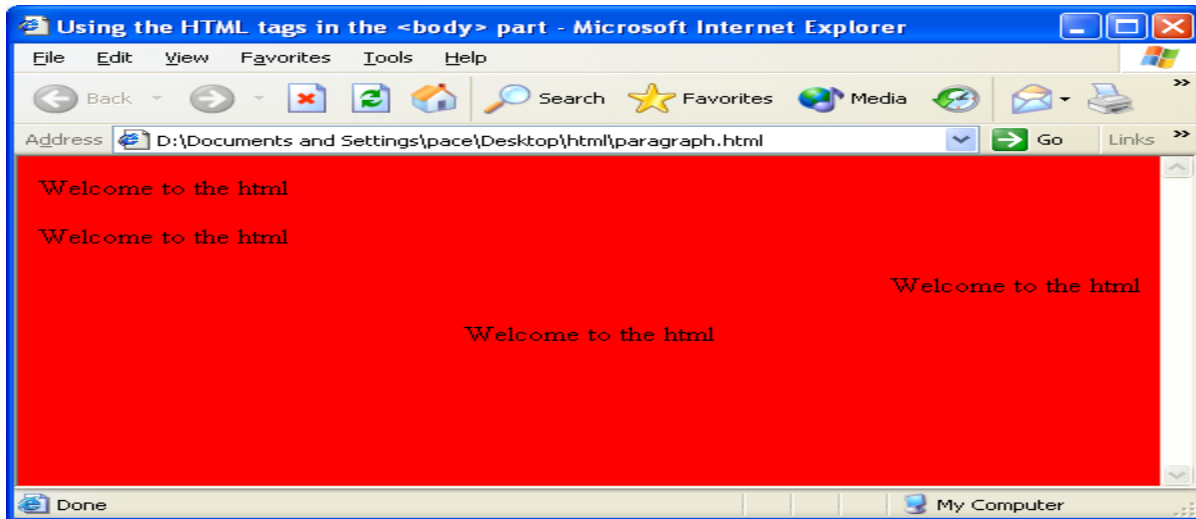
The general form is ,

```
<p align="alignment"> Text contents
```

Consider the following code ,

```
<html>
<head>
<title>Using the HTML tags in the <body> part </title>
</head>
<body bgcolor="red">
<p>Welcome to the html
<p align=left>Welcome to the html
<p align="right">Welcome to the html
<p align=center>Welcome to the html
</body>
</html>
```

output :



align attribute to the <p> tag is used for specifying the alignment of the paragraph .

The values for the <p> tag align attribute is ,

- (i) left : For the left alignment
- (ii) right : For the right alignment .
- (iii) center : For the center alignment .

By default the alignment is the left alignment .

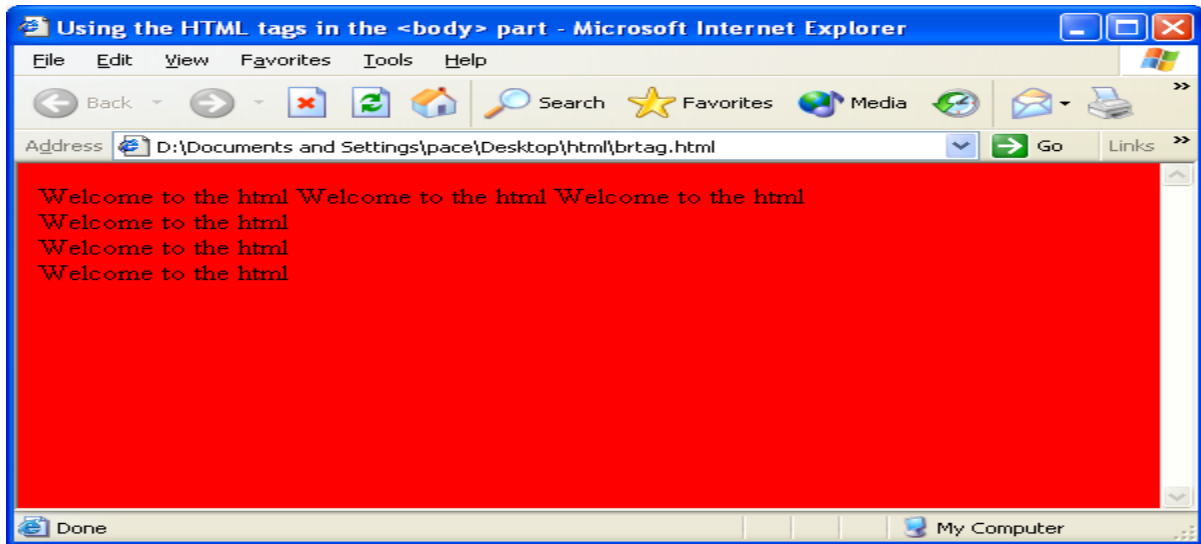
2.
 tag : This tag is used for making the text appear on the new line .

Consider the following code ,

```
<html>
<head>
<title>Using the HTML tags in the <body> part </title>
</head>
<body bgcolor="red">
Welcome to the html
Welcome to the html
Welcome to the html

<br>Welcome to the html
<br>Welcome to the html
<br>Welcome to the html
</body>
</html>
```

output :



3. <pre> tag : This tag is known as preformatted tag . It will display the text or the content as we type in the HTML code file .

```
<html>
<head>
<title>Using the HTML tags in the <body> part </title>
</head>
<body bgcolor="red">
<p>Without pre
```

Roll Number	Name
1	Kapil
2	Sunil
3	Vikas
4	Sanjay

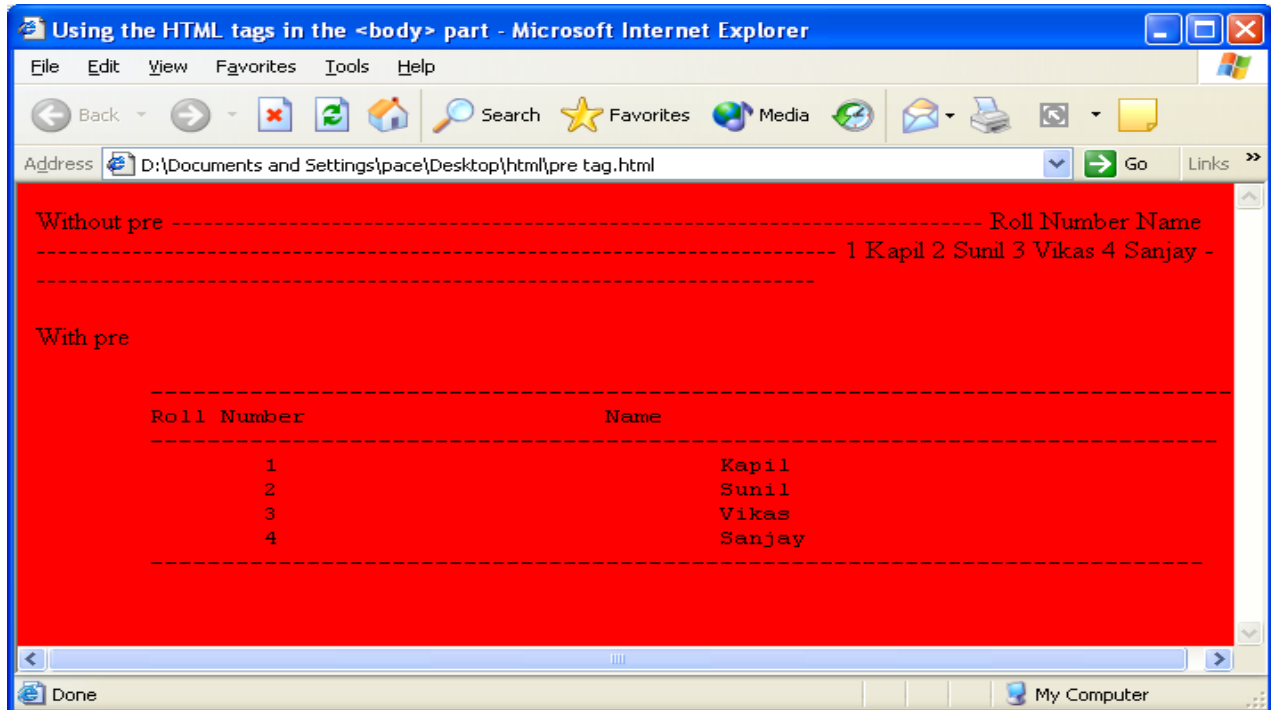
<p>With pre

```
<pre>
```

Roll Number	Name
1	Kapil
2	Sunil
3	Vikas
4	Sanjay

```
</pre>
</body>
</html>
```

output :



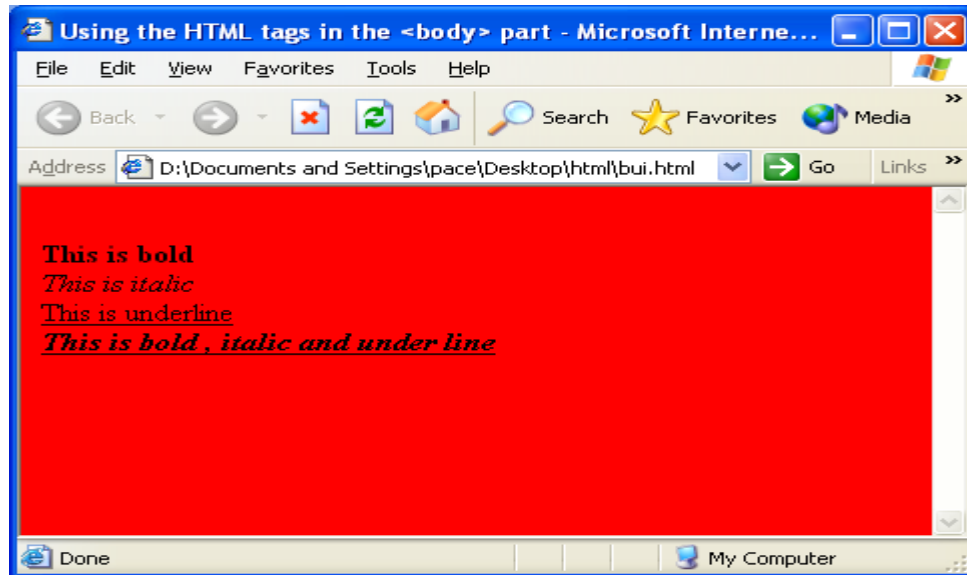
4. tag : This tag is the bold tag . And the text enclosed in this tag will appear bold.
5. <i> tag : This tag is the italic tag . And the text enclosed in this tag will appear italic or tilted.
6. <u> tag : This tag is the underline tag . And the text enclosed in this tag will appear underlined.

Consider the following code ,

```
<html>
<head>
<title>Using the HTML tags in the <body> part </title>
</head>
<body bgcolor="red">
<br><b>This is bold </b>
<br><i>This is italic </i>
<br><u>This is underline</u>
<br><b><u><i>This is bold , italic and under line </i></u></b>
```

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

output :



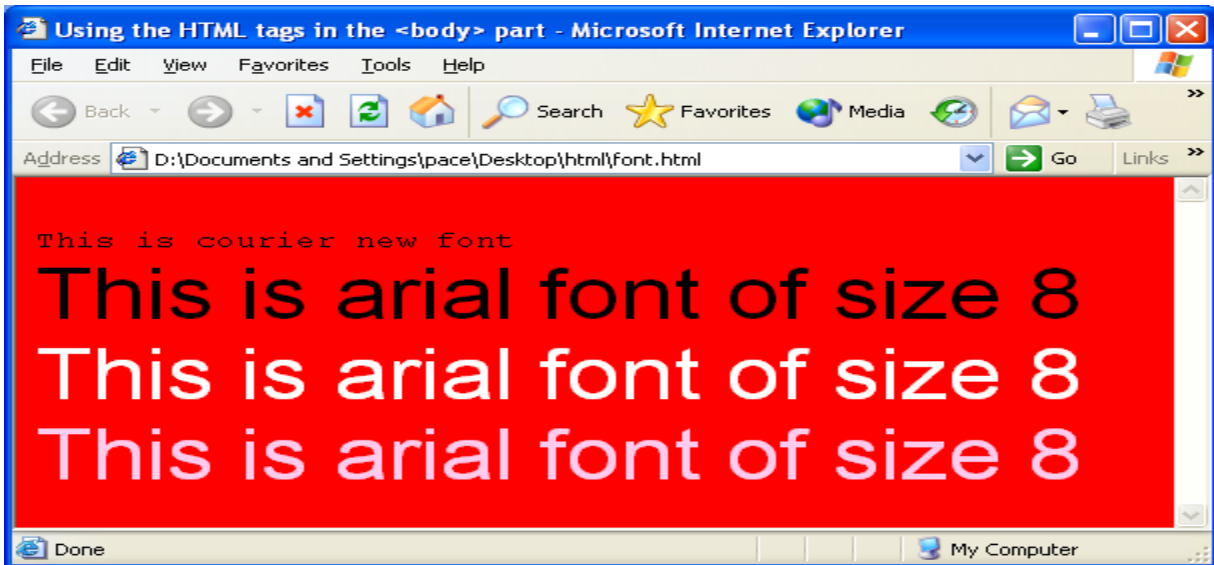
7. tag : This tag is used to specify the font related settings.

The general form is ,

```
<font face="font_name" size="size_in_pixel" color="font_color"> text </font>
```

```
<html>
<head>
<title>Using the HTML tags in the <body> part </title>
</head>
<body bgcolor="red">
<br><font face="courier new">This is courier new font </font>
<br><font face="arial" size=8>This is arial font of size 8 </font>
<br><font face="arial" size=8 color=white>This is arial font of size 8 </font>
<br><font face="arial" size=8 color="#ffccee">This is arial font of size 8 </font>
</body>
</html>
```

output :



7.<hr> tag : This tag is used specify the horizontal rule .

The general form is ,

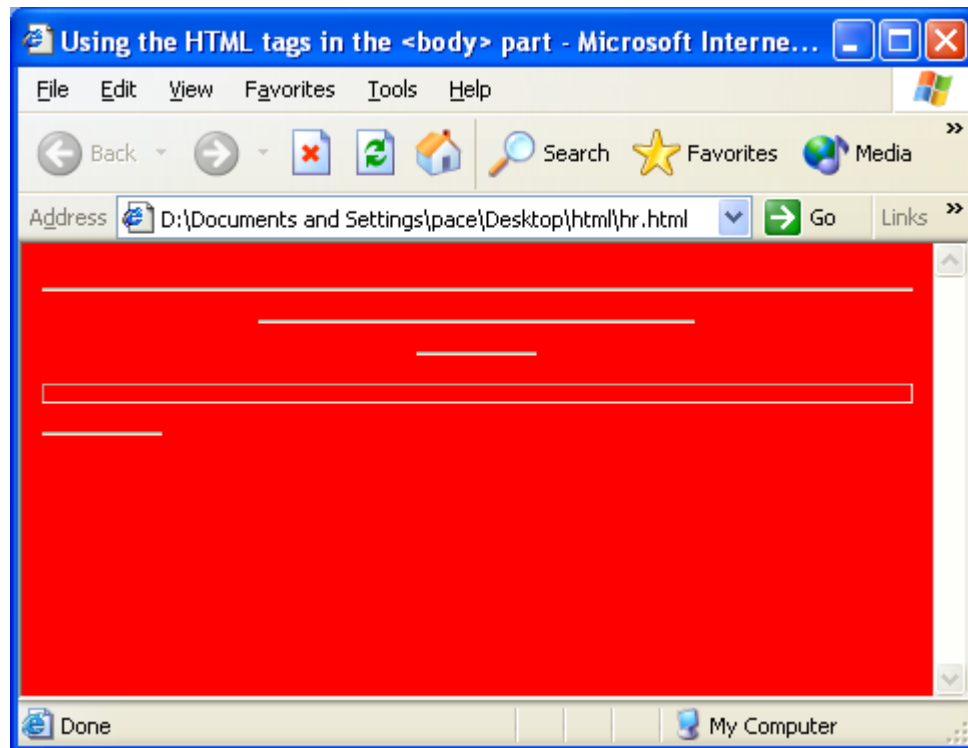
```
<hr width="percentage/pixel" size="size" align="alignment">
```

width : It is used to specify the length of the rule

size : it is used to specify the thickness of the rule.

```
<html>
<head>
<title>Using the HTML tags in the <body> part </title>
</head>
<body bgcolor="red">
<hr>
<hr width=50%>
<hr width=60>
<hr size=10>
<hr width=60 align=left>
</body>
</html>
```

output :



8. tag : This tag is used to insert the images in the document .

The general form of the tag is ,

```

```

Attributes :

(a) src : This attribute is used to specify the image source . It is used to specify the location of the image .

(b) border : This attribute is used to specify the width of the border to be drawn around the image .

(c) alt : This attribute is used to specify the alternative text , which is generally be displayed if the image is not displayed due to some reason . Otherwise it will act as a tooltip.

(d) height : This attribute is used to specify the height of the image in terms of the pixels .

(e) width : This attribute is used to specify the width of the image in terms of the

pixels .

Consider the following code ,

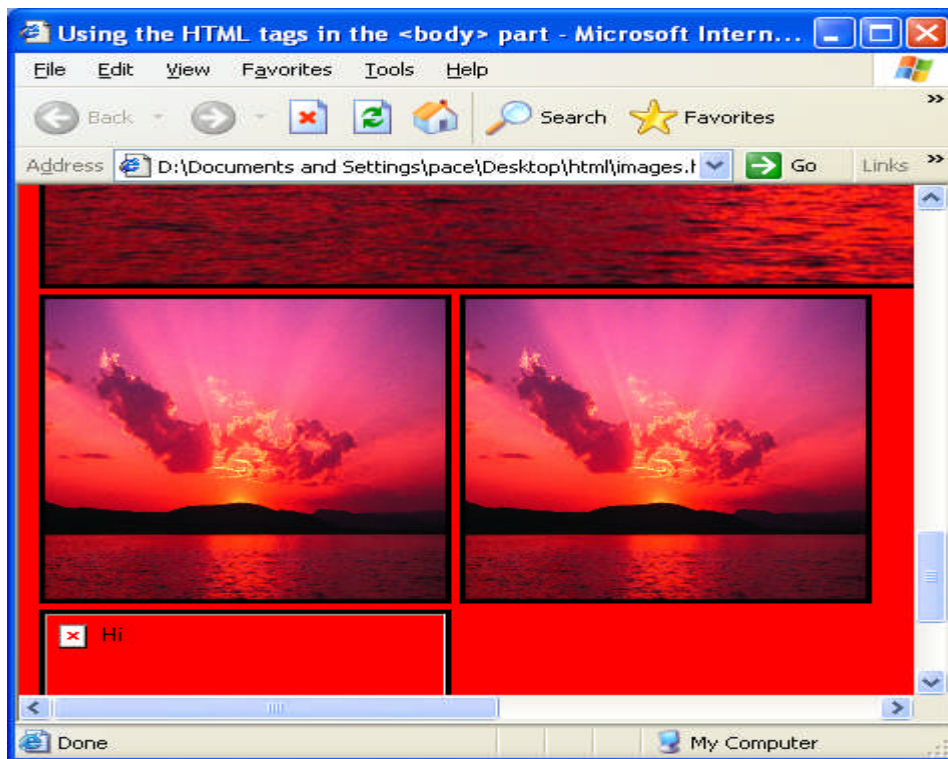
```
<html>
<head>
<title>Using the HTML tags in the <body> part </title>
</head>
<body bgcolor="red">





</body>
</html>
```

output :



9. tag : This tag is used to create the unordered list .

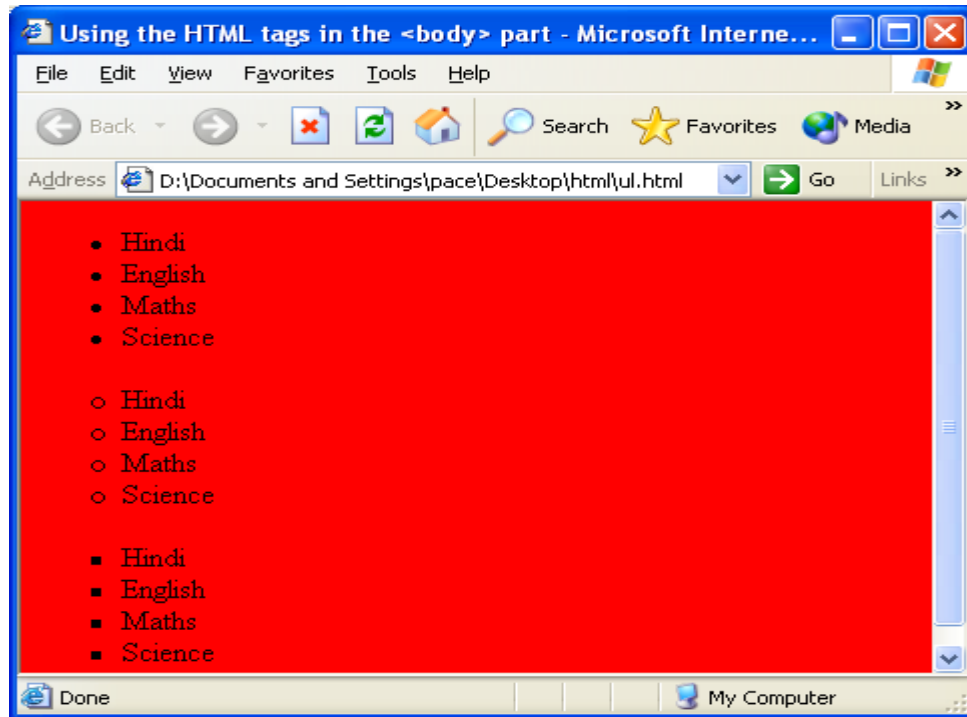
The general form is ,

```
<ul type="bullet_type">
<li>list item1 </li>
<li>list item2 </li>
:      :      :      :
:      :      :      :
<li>list itemn </li>
</ul>
```

Consider the following program ,

```
<html>
<head>
<title>Using the HTML tags in the <body> part </title>
</head>
<body bgcolor="red">
<ul>
<li>Hindi</li>
<li>English</li>
<li>Maths</li>
<li>Science</li>
</ul>
<ul type="circle">
<li>Hindi</li>
<li>English</li>
<li>Maths</li>
<li>Science</li>
</ul>
<ul type="square">
<li>Hindi</li>
<li>English</li>
<li>Maths</li>
<li>Science</li>
</ul>
</body>
</html>
```

output :



10. tag : This tag is used to create the ordered list .

The general form is ,

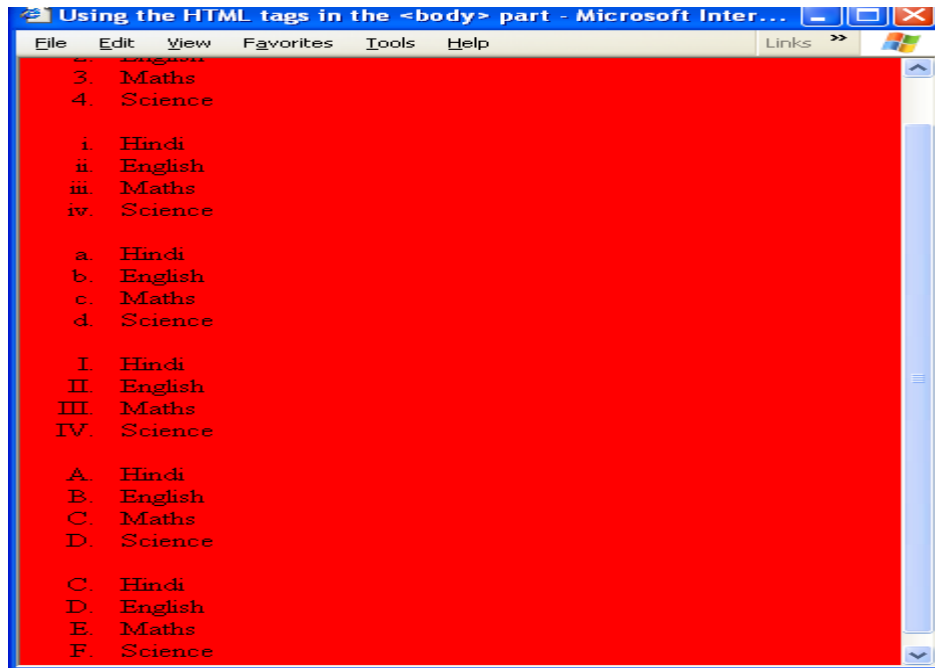
```
<ol type="list_type" start="list_starting_position">
<li>list item1 </li>
<li>list item2 </li>
:      :      :      :
:      :      :      :
<li>list itemn </li>
</ol>
```

Consider the following program ,

```
<html>
<head>
<title>Using the HTML tags in the <body> part </title>
</head>
<body bgcolor="red">
<ol>
<li>Hindi</li>
<li>English</li>
<li>Maths</li>
<li>Science</li>
</ol>
```

```
<ol type="i">
<li>Hindi</li>
<li>English</li>
<li>Maths</li>
<li>Science</li>
</ol>
<ol type="a">
<li>Hindi</li>
<li>English</li>
<li>Maths</li>
<li>Science</li>
</ol>
<ol type="I">
<li>Hindi</li>
<li>English</li>
<li>Maths</li>
<li>Science</li>
</ol>
<ol type="A">
<li>Hindi</li>
<li>English</li>
<li>Maths</li>
<li>Science</li>
</ol>
<ol type="A" start=3>
<li>Hindi</li>
<li>English</li>
<li>Maths</li>
<li>Science</li>
</ol>
</body>
</html>
```

output :



Creating the Tables :

The <table> tag is used to create the table .It is used to organise the data in the tabluar form i.e. in the rows and columns.

The general form of creating the table is ,

```
<table border="border_size">
<tr>
  <th>heading 1</th>
  <th>heading 2</th>
  :      :      :      :
  :      :      :      :
  <th>heading n</th>
</tr>
<tr>
  <td>data1</td>
  <td>data2</td>
  :      :      :
  :      :      :
  <td>datan</td>
</tr>
</table>
```

Where ,

<tr> tag is used to specify the table row

<th> tag is used to specify the table column heading

<td> tag is used to specify the table row data .

Consider the following code ,

```
<html>
<head>
<title>Using the HTML tags in the <body> part </title>
</head>
<body>
<table>
  <tr>
    <th>Roll Number </th>
    <th>Name </th>
  </tr>
  <tr>
    <td>1</td>
    <td>Ajay</td>
  </tr>
  <tr>
    <td>2</td>
```

```

        <td>Sanjay</td>
    </tr>
    <tr>
        <td>3</td>
        <td>Vijay</td>
    </tr>
</table>
<br>
<hr>
<br>
<table border=2>
    <tr>
        <th>Roll Number </th>
        <th>Name </th>
    </tr>
    <tr>
        <td>1</td>
        <td>Ajay</td>
    </tr>
    <tr>
        <td>2</td>
        <td>Sanjay</td>
    </tr>
    <tr>
        <td>3</td>
        <td>Vijay</td>
    </tr>
</table>
<br>
<hr>
<br>
<table border=2 bgcolor="yellow">
    <tr>
        <th>Roll Number </th>
        <th>Name </th>
    </tr>
    <tr>
        <td>1</td>
        <td>Ajay</td>
    </tr>
    <tr>
        <td>2</td>
        <td>Sanjay</td>
    </tr>
    <tr>
        <td>3</td>

```

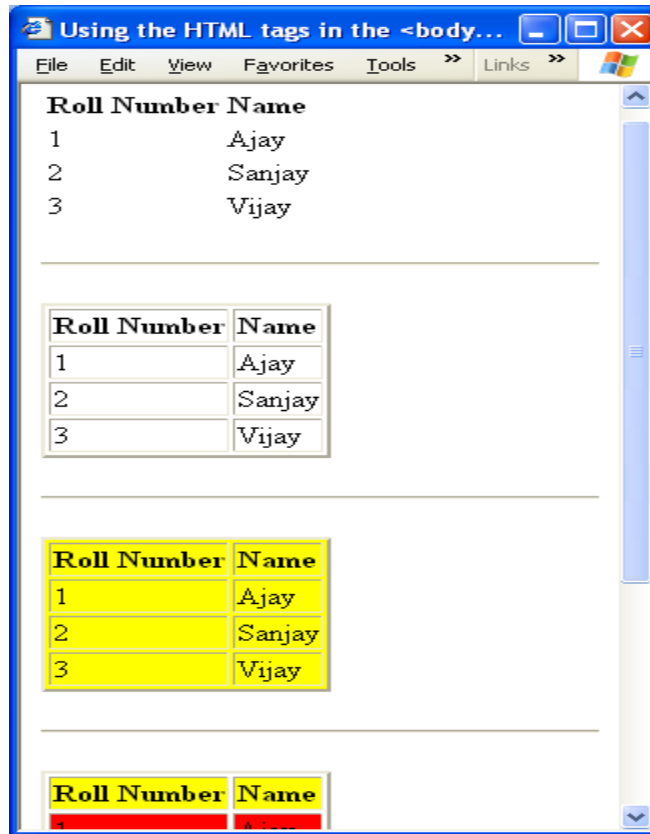
```

        <td>Vijay</td>
    </tr>
</table>
<br>
<hr>
<br>
<table border=2>
    <tr bgcolor="yellow">
        <th>Roll Number </th>
        <th>Name </th>
    </tr>
    <tr bgcolor="red">
        <td>1</td>
        <td>Ajay</td>
    </tr>
    <tr>
        <td>2</td>
        <td>Sanjay</td>
    </tr>
    <tr>
        <td>3</td>
        <td>Vijay</td>
    </tr>
</table>
<br>
<hr>
<br>
<table border=2>
    <tr>
        <th bgcolor="red">Roll Number </th>
        <th bgcolor="orange">Name </th>
    </tr>
    <tr>
        <td>1</td>
        <td>Ajay</td>
    </tr>
    <tr>
        <td>2</td>
        <td>Sanjay</td>
    </tr>
    <tr>
        <td>3</td>
        <td>Vijay</td>
    </tr>
</table>

```

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

output :



Using the rowspan and colspan :

The rowspan attribute is used to extends the column to the specified number of rows and the colspan attribute is used to extends the column to the specified number of columns.

Consider the following code ,

```
<html>  
<head>  
<title>Using the HTML tags in the <body> part </title>  
</head>  
<body>  
<table border=2>  
<tr>  
<th rowspan=2>Name</th>  
<th colspan=3>Course Completed </th>  
</tr>  
<tr>
```

```

        <th>Visual Basic</th>
        <th>Oracle</th>
        <th>C#</th>
</tr>
<tr>
        <td>Jack</td>
        <td>78</td>
        <td>89</td>
        <td>67</td>
</tr>
<tr>
        <td>Mack</td>
        <td>88</td>
        <td>92</td>
        <td>79</td>
</tr>
<tr>
        <td>Romit</td>
        <td>67</td>
        <td>78</td>
        <td>69</td>
</tr>
</table>

```

output :

Name	Course Completed		
	Visual Basic	Oracle	C#
Jack	78	89	67
Mack	88	92	79
Romit	67	78	69

Using the cell padding and cell spacing :

Cell Padding is used to pad the each cell of the table with the extra spaces .

Cell Spacing is used to extends the spacing to be left in between the cells .

Consider the following code ,

```

<html>
<head>
<title>Using the HTML tags in the <body> part </title>

```

```

</head>
<body>
<center>
<table border=4 cellpadding=10 cellspacing=8>
<tr>
    <th rowspan=2>Name</th>
    <th colspan=3>Course Completed </th>
</tr>
<tr>
    <th>Visual Basic</th>
    <th>Oracle</th>
    <th>C#</th>
</tr>
<tr>
    <td>Jack</td>
    <td>78</td>
    <td>89</td>
    <td>67</td>
</tr>
<tr>
    <td>Mack</td>
    <td>88</td>
    <td>92</td>
    <td>79</td>
</tr>
<tr>
    <td>Romit</td>
    <td>67</td>
    <td>78</td>
    <td>69</td>
</tr>
</table>
</center>
</body>
</html>

```

output :

Name	Course Completed		
	Visual Basic	Oracle	C#
Jack	78	89	67
Mack	88	92	79
Romit	67	78	69

Using Internal and external Hyper Links :

External Hyper Links are those Hyper Links which refers to another page or another files.

The tag which is used to creating the Hyper Links is , <a> tag or anchor tag .

The general form is,

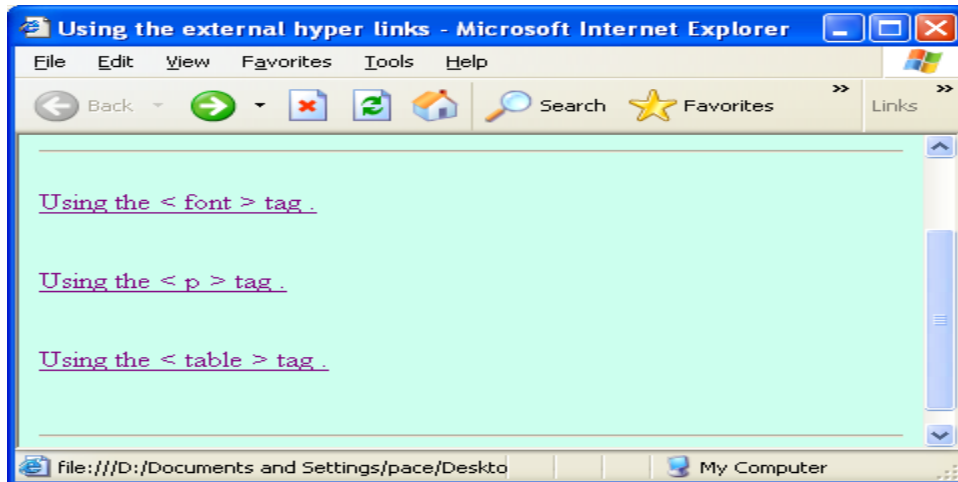
```
<a href="filename/pathname/url"> Link Name </a>
```

Consider the following code ,

```
<html>
<head>
<title>Using the external hyper links </title>
</head>
<body bgcolor="#ccffee">
<br>
<br>
<br>
<br>
<hr>
<br><a href="font.html">Using the <font> tag . </a>
<br>
<br>
<br><a href="paragraph.html">Using the <p> tag . </a>
<br>
<br>
<br><a href="table.html">Using the <table> tag . </a>
<br>
<br>
<br>
```



```
<hr>
</body>
</html>
```



The attribute href is used to specify the file or url to which the hyperlink will be linked. href stands for the hyper reference.

Related to the hyperlinks , there are some attributes of the body tag .

- (i). vlink
- (ii). alink

(i) vlink : This attribute is used to specify the color of the link when the link is visited.

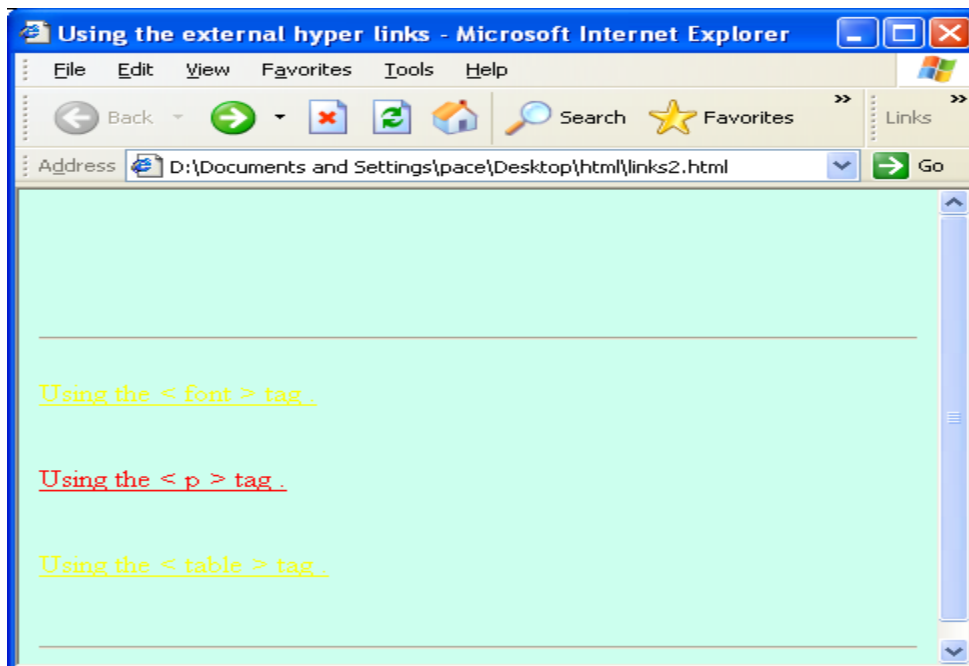
(ii) alink : This attribute is used to specify the color of the link when the link is active.

Consider the following code,

```
<html>
<head>
<title>Using the external hyper links </title>
</head>
<body bgcolor="#ccffee" vlink="yellow" alink="red" >
<br>
<br>
<br>
<br>
<hr>
<br><a href="font.html">Using the < font > tag . </a>
<br>
```

```
<br>
<br><a href="paragraph.html">Using the < p > tag . </a>
<br>
<br>
<br><a href="table.html">Using the < table > tag . </a>
<br>
<br>
<br>
<br>
<hr>
</body>
</html>
```

output :



Internal Hperlinks :

The inter hyperlinks are created on the same page . And they refers to the different sections of the same page .

To create an internal hyper links . we have to first define the name of a particular section to which we want to visit.

For this , the general form is ,

```
<a name="location_name">
```

And the anchor tag will look like ,

```
<a href="#location_name">link name</a>
```

Consider the following code ,

```
<html>
<head>
<title>Using the internal hper links </title>
</head>
<body bgcolor="red">
<pre> 1. <a href="#Image">Image tag </a> 2. <a href="#Border">Using
Border</a> 3. <a href="#hw">Using Height and width </a> </pre>
<br>
<br>
<a name="image">

<a name="Border">

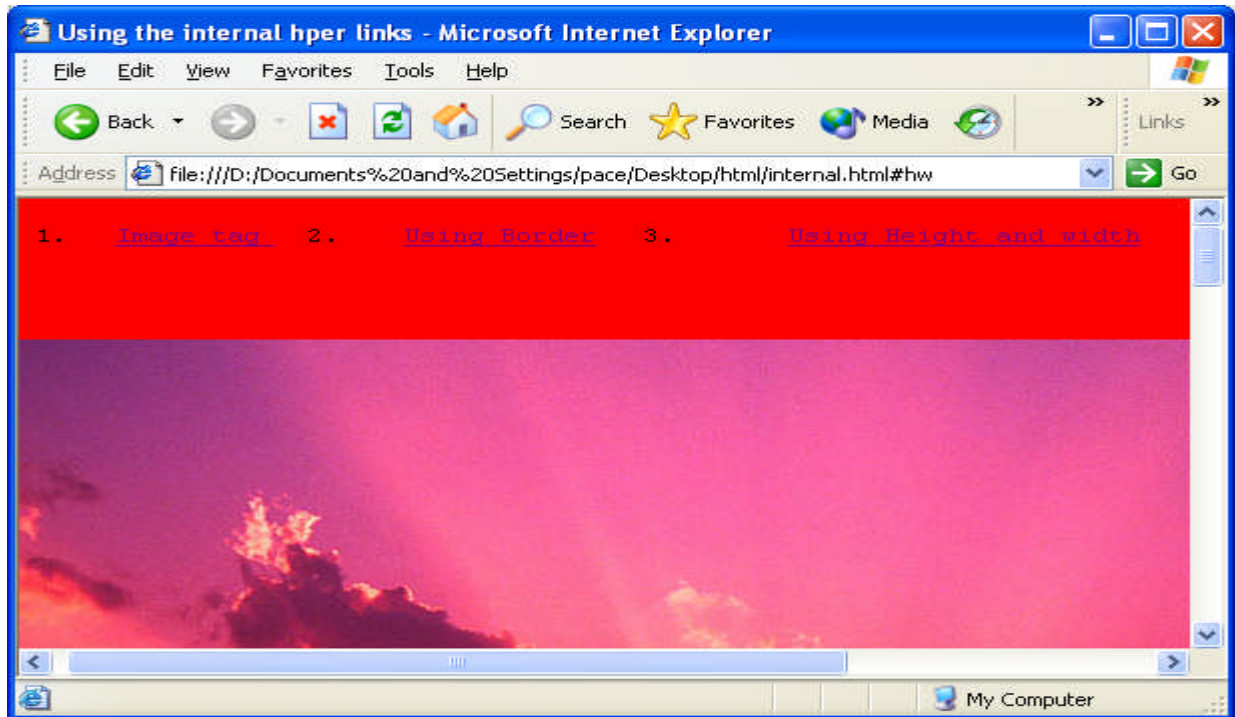
<a name="hw">



<br>
<br>
<br>
<pre> 1. <a href="#Image">Image tag </a> 2. <a href="#Border">Using
Border</a> 3. <a href="#hw">Using Height and width </a> </pre>

</body>
</html>
```

output :



Using the <form> tag .

The <form> tag is used to define the form , which is used for defining the user interface . The <form> tag is used for defining the user interface elements , like command buttons , text boxes etc...

The general form of defining form is ,

```
<form name="form_name">  
    :      :      :      :  
    :      :      :      :  
  
</form>
```

The name is optional .

The form elements are ,

1. Text Box :

The text box is the most basic element of the form and it is used to capture the data from the user .

The general form of creating the text box is ,

```
<input type="text" name="textbox_name" value ="default_value" disabled>
```

where,

type = text is used to create the text box control .

name is used to identify the text box control .

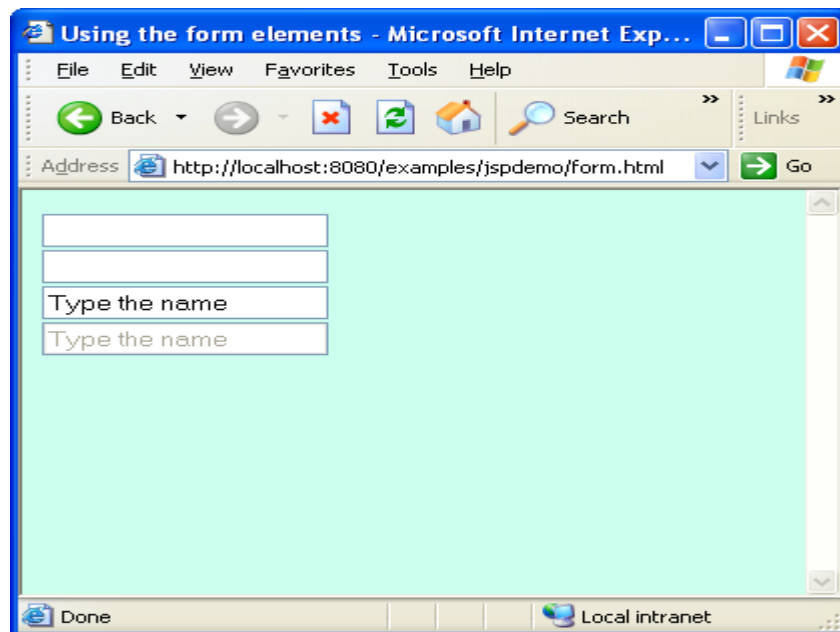
value is used to identify the default value which is to be displayed in the text box .

disabled is used to disable the text box control .

consider the following code ,

```
<html>
<head>
<title>Using the form elements </title>
</head>
<body bgcolor="#ccffee">
<form name="myform">
<input type="text"><br>
<input type="text" name="txtname"><br>
<input type="text" name="txtname" value="Type the name"><br>
<input type="text" name="txtname" value="Type the name" disabled><br>
</form>
</body>
</html>
```

output :



2. Command buttons : The comand button control is used to initiate a particular action .
The `<input>` tag is again used for creating the command button .

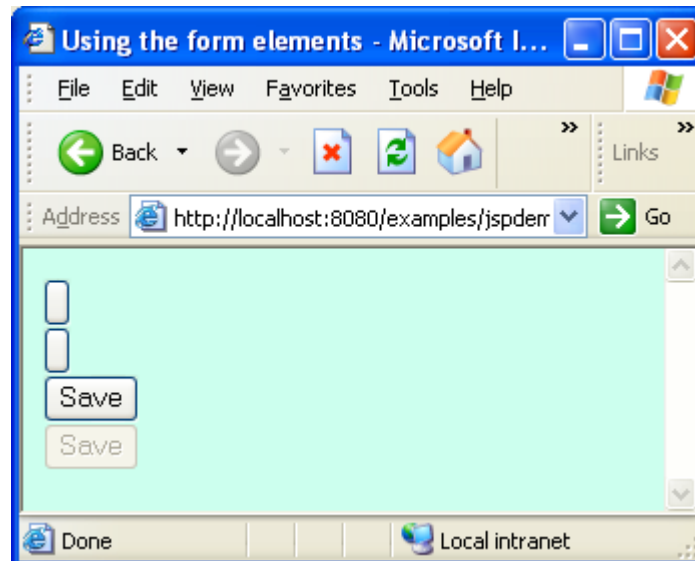
The general form is ,

```
<input type="button" name="command_button" value="Default_caption" disabled>
```

Consider the following code ,

```
<html>
<head>
<title>Using the form elements </title>
</head>
<body bgcolor="#ccffee">
<form name="myform">
<input type="button"><br>
<input type="button" name="cmdsave"><br>
<input type="button" name="cmdsave" value="Save"><br>
<input type="button" name="cmdsave" value="Save" disabled><br>
</form>
</body>
</html>
```

output :



3. Checkboxes : The checkbox control will consists of the small square box , when we click in the square box , a check box will appear.

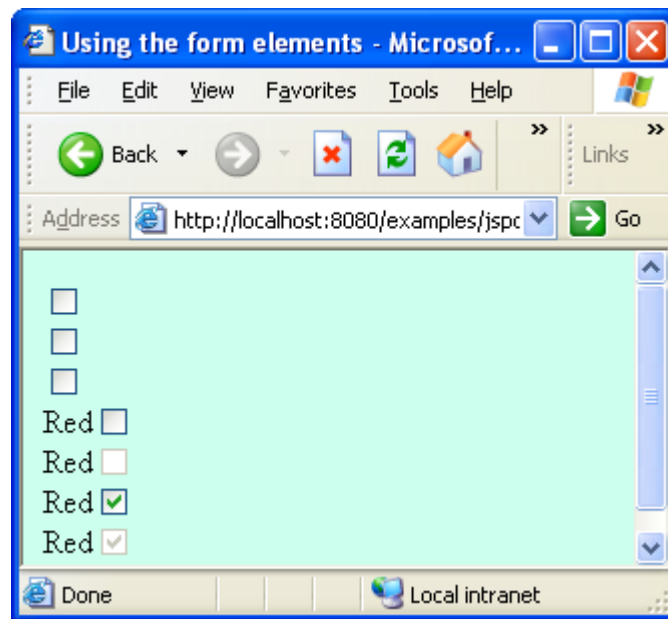
The general form is,

```
<input type="checkbox" name="checkbox" value="default_value" checked disabled>
```

Consider the following code ,

```
<html>
<head>
<title>Using the form elements </title>
</head>
<body bgcolor="#ccffee">
<form name="myform">
<input type="checkbox"><br>
<input type="checkbox" name="chkred"><br>
<input type="checkbox" name="chkred" value="Red"><br>
Red<input type="checkbox" name="chkred" value="Red"><br>
Red<input type="checkbox" name="chkred" value="Red" disabled><br>
Red<input type="checkbox" name="chkred" value="Red" checked><br>
Red<input type="checkbox" name="chkred" value="Red" checked disabled><br>
</form>
</body>
</html>
```

output :



4. Radio buttons : This option is used to create a circle ,in which if we click a small dot will appear .

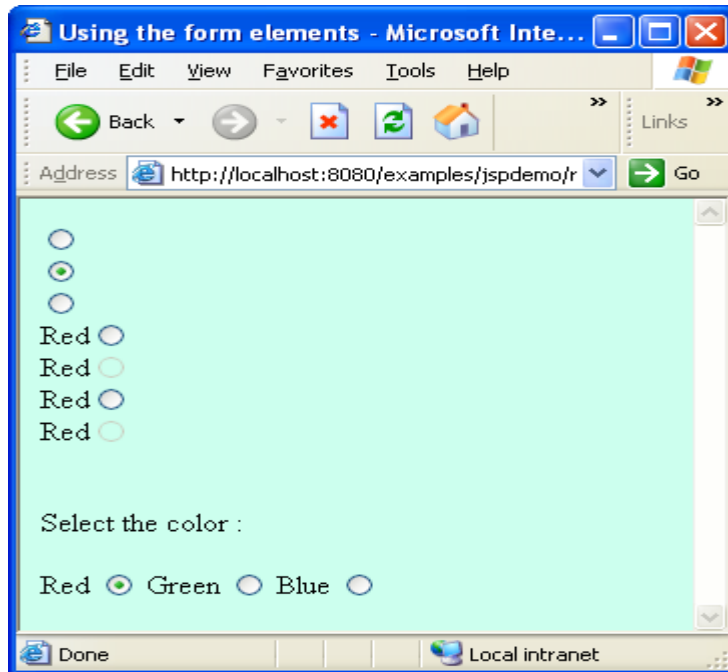
The general form is ,

```
<input type="radio" name="button_name" value="default_value" checked disabled>
```

Consider the following code ;

```
<html>
<head>
<title>Using the form elements </title>
</head>
<body bgcolor="#ccffee">
<form name="myform">
<input type="radio"><br>
<input type="radio" name="optred"><br>
<input type="radio" name="optred" value="Red"><br>
Red<input type="radio" name="optred" value="Red"><br>
Red<input type="radio" name="optred" value="Red" disabled><br>
Red<input type="radio" name="optred" value="Red" checked><br>
Red<input type="radio" name="optred" value="Red" checked disabled><br>
<br>
<br>
Select the color :
<br>
<br>
Red <input type="radio" name="optcolor" value="Red">
Green <input type="radio" name="optcolor" value="Green">
Blue <input type="radio" name="optcolor" value="Blue">
</form>
</body>
</html>
```

output :



5. TextArea :

The text area is used to create the edit box , which lets you enter the text which can extend to multiple lines .

The general form of creating the textarea is ,

```
<textarea name="textarea_name" rows="nrows" cols="ncols">
    default text
</textarea>
```

output :

```
<html>
<head>
<title>Using the form elements </title>
</head>
<body bgcolor="#ccffee">
<form name="myform">
<textarea></textarea><br><br>
<textarea name="txtaddress"></textarea><br><br>
<textarea name="txtaddress">Type your address</textarea><br><br>
<textarea name="txtaddress" rows=10>Type your address</textarea><br><br>
<textarea name="txtaddress" rows=10 cols=50>Type your address</textarea><br>
<br>
</form>
</body>
```

```
</html>
```

6. Combo box :

The combo box is a drop down list box . When we click on the arrow button on its right , it will display the list containing the items .

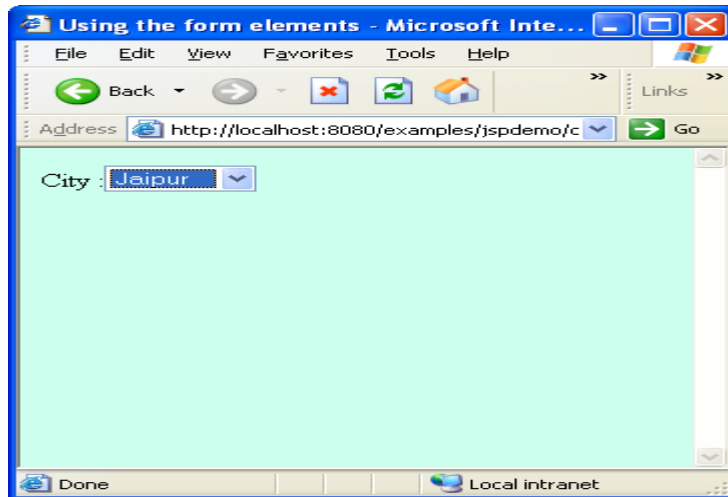
The general form of creating the combo box is ,

```
<select name="combo_box_name">
<option>Option1</option>
<option>Option2</option>
:      :      :      :      :
:      :      :      :      :
<option>Optionn</option>
</select>
```

Consider the following code ,

```
<html>
<head>
<title>Using the form elements </title>
</head>
<body bgcolor="#ccffee">
City :<select name="bocity">
    <option>Ajmer</option>
    <option>Jaipur</option>
    <option>Jodhpur</option>
    <option>Udaipur</option>
</select>
</body>
</html>
```

output :



7. List box :

The List box is a box which will display a list of items , in which all the items are displayed at a time .

The general form of creating the list box is ,

```
<select name="list_box_name" size="number of rows">
<option>Option1</option>
<option>Option2</option>
:   :   :   :   :
:   :   :   :   :
<option>Optionn</option>
</select>
```

Consider the following code ,

```
<html>
<head>
<title>Using the form elements </title>
</head>
<body bgcolor="#ccffee">
City :<select name="cbocity" size=3>
    <option>Ajmer</option>
    <option>Jaipur</option>
    <option>Jodhpur</option>
    <option>Udaipur</option>
</select>
</body>
</html>
```

Frames :

The Frames are used to logically partition the page and each section can be used for opening a separate file.

To create or define the frames we use the <frameset> tag,

The general form is ,

```
<frameset rows="percentage/pixels" | cols="percentage/pixels">
  <frame src=filename name=frameName>
      :      :      :      :      :      :      :
      :      :      :      :      :      :      :
      :      :      :      :      :      :      :
</frameset>
```

where,

rows attribute is used for the horizontal division of the page.

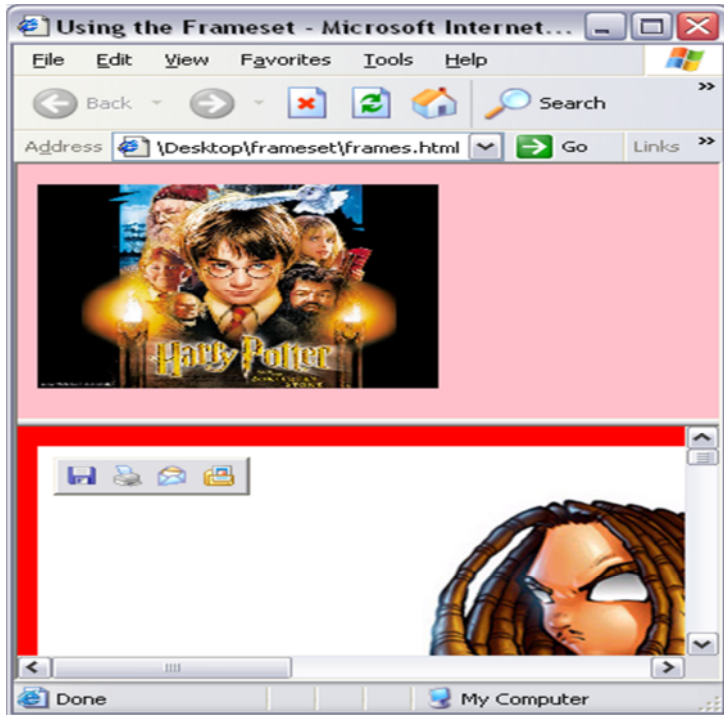
cols attribute is used for the vertical division of the page.

Note that, the <frameset> tag is used in the <head> part of the HTML document.

Consider the following code,

```
<html>
<head>
<title>Using the Frameset</title>
<frameset rows="50%,*">
  <frame src=img.html>
  <frame src="image.html">
</frameset>
</head>
```

Output:



Consider the tag,

```
<frameset rows="50%,*">
```

This will divide the webpage, in two equal part.

Note that <frame> tag will specify the content of the frame and it is scanned sequentially .

```
<frame src=img.html>  
<frame src="imag.html">
```

Now, the first frame will display the contents of the file img.html and the second frame will display the contents of the file image.html

The src attribute will be use to specify the location of the file or url which will be displayed in the frame.

Now, consider the following code ,

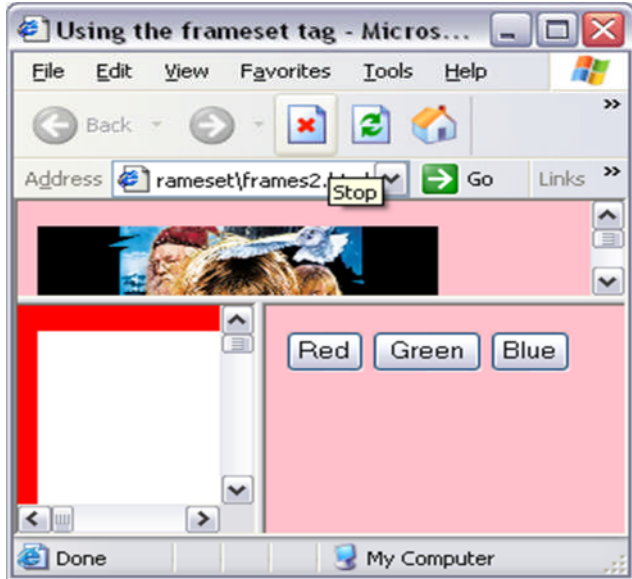
```
<html>  
<head>  
<title>Using the frameset tag</title>  
<frameset rows="30%,*">  
  <frame src=img.html>  
  <frameset cols="40%,*">  
    <frame src=image.html>
```

```

        <frame src=colorpallette.html>
    </frameset>
</frameset>
</html>

```

output :



The <frameset> tag,

```
<frameset rows="30%,*">
```

will divide the html web page into two section or frames. The first frame will occupy the width equivalent to the 30 % of the web page window, and remaining area , that is , 70 % is occupied by the next frame.

```
<frameset cols="40%,*">
```

The next frame is again divided into two sections, first sub-frame is of 40 % of the second frame and the second sub-frame is of 60% of the second frame.

Now, consider the following code ,

```

<html>
<head>
<title>Using the frameset tag</title>
<frameset cols="50%,*">
    <frame src=img.html>
    <frameset rows="40%,*">
        <frame src=image.html>
        <frame src=colorpallette.html>
    </frameset>

```

</frameset>
</html>

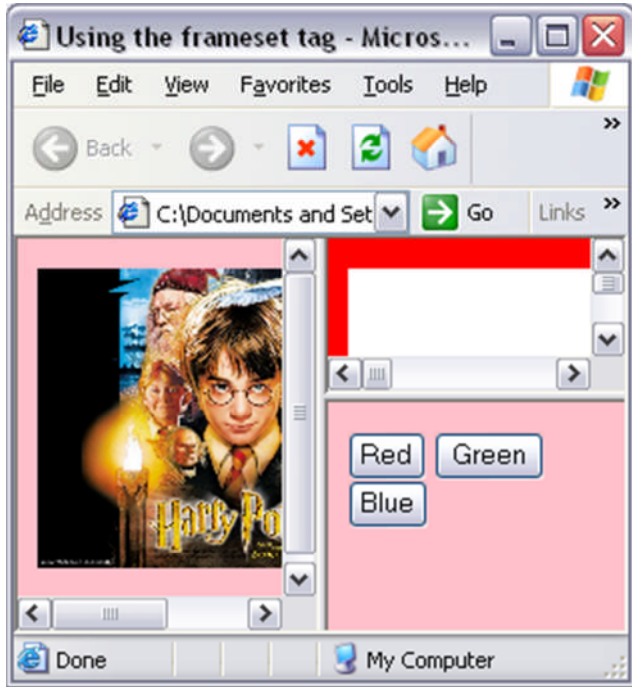


Image Map :

Till now, we have discussed how to link an image to another file. But using the Image Map concept, we can link the different section of the image with the different file.

The Image Map will logically partition the image.

Defining the Image Map is the two step process :-

(A) Defining the Map

The Map which we want to associate with the image is defined using the `<map>` tag,

The general form is ,

```
<map name="map_name">  
<area shape="shape_type" coords="coordinates" href="filename/url">  
</map>
```

where ,

name is used to identify the image map.

`<area>` tag will be used to define the section for the image

Attributes of the `<area>` tag :

(i) shape :

It is used for specifying the shape of the section.

The shape can be,

- rect
- circle
- polygon

(ii) coords :

It is used for specifying the coordinates of the shape.

If the shape is **rect** then the coordinates are x1,y1,x2,y2

where x_1, y_1 will specify the coordinates for the upper left corner
and x_2, y_2 will specify the coordinates for the bottom right corner

If the shape is **circle** the the coordinates are x, y, r

where,

x, y will specify the coordinates for the center.

r will specify the radius of the circle.

If the shape is **polygon** then we have to specify the coordinates in continuation .

The first and last coordinates are joined logically to form the closed area.

(iii) href

The attribute is used to specify the url or the file name which will get opened when we click in the area specified by the coordinates.

(B) Using the Map

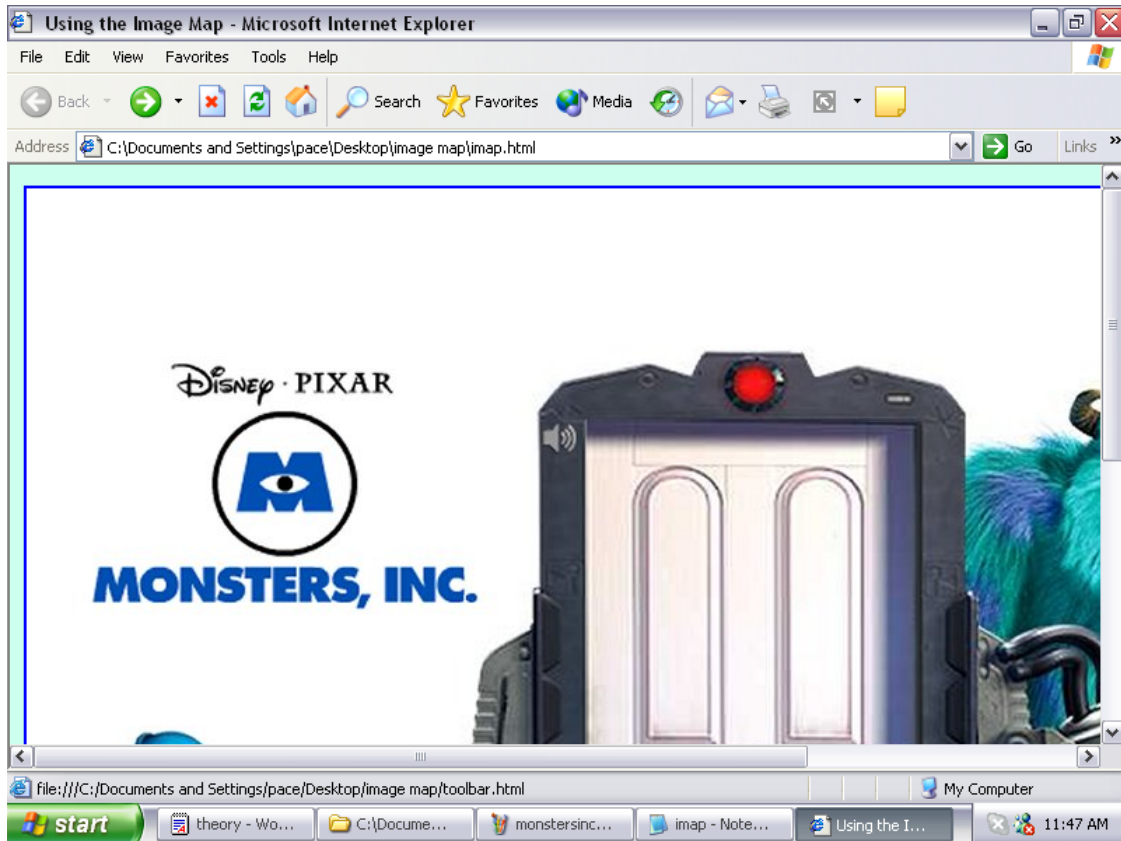
Now , to use the map , the `` tag which is used for inserting the image had gone under the following change,

The general form is ,

```

```

The usemap attribute of the `` tag is used for associating the image with the map defined.



```
<html>
<head>
<title>Using the Image Map</title>
</head>
<body bgcolor="#cffee">
<map name="mymap">
<area shape="circle" coords="183,211,48" href="maths.html">
<area shape="polygon"
coords="70,455,58,484,68,532,139,558,197,480,221,463,211,522,221,504,240,452,191,464,142,
420" href="number.html">
<area shape="rect" coords="399,165,636,616" href="toolbar.html">
</map>

</body>
</html>
```

DHTML:

DHTML stands for Dynamic Hyper Text Marked Up Language.

The DHTML code can be used with the static HTML page or with the scripting languages like JavaScript.

In DHTML , we design the CSS (Cascading Style Sheets) , which apply the uniformity in the layout of the web document.

Cascading Style Sheets

=====

In the case of the CSS, there are number of attributes by which we can apply the layout related settings.

There are various ways of using the DHTML in the HTML document. One way is to make use of the <style> tag.

The general form is ,

```
<style type="text/css">
    body of the code
</style>
```

Here,

type="text/css" is used to specify that our DHTML code , will conform to the CSS standards.

The general form of setting the attribute value for a tag is ,

```
tag{ attribute1:value1;attribute2:value2;...;attributen:valuen;}
```

(i) font attributes .

These attributes are used to set the font related setting , i.e. the font name , style ,size etc...

List of the font attributes are ,

Attribute	Description

(a) font-family

In this we can specify the font face or the font name .

e.g:

font-family:arial;

(b) font-style It is used to specify the font style , which can either be normal or italic.

e.g:

font-style:italic;

(c) font-weight It is used for specifying the darkness of the font . Its value can be a constant name ,

bold,bolder,lighter or a numeric value like 100,200,300...,900.

(d) font-size It is used to specify the font size The size can be specified in terms of constant name , like x-small,xx-small,medium,large,x-large,xx-large, or some numeric value in point(pt)

Consider the following code ,

```
<html>
<head>
<title>Using the DHTML font-attributes</title>
<style type="text/css">

    p{font-family:arial black;}
    h1{font-family:garamond;font-style:italic;}
    pre{font-family:times new roman;font-style:normal;font-weight:bolder}
    h2{font-size:medium}
    address{font-size:19pt}
</style>
</head>
<body>
<center><h1>DHTML</h1></center>
<p>Welcome to DHTML </p>
<br>
<br>
<pre>Dynamic Hyper Text Markedup language</pre>
<h2>hi</h2>
```

```
<address>24 Shanti Nagar</address>
</body>
</html>
```



(e) font-variant : This attribute is used to capitalise the text.
The values for these attribute are , normal
or small-caps.

e.g.
font-variant:small-caps;

(f) font : It is used to set all the attributes in the same row.

The general form is ,

font: font-style font-variant font-weight font-size font-family

Consider the following DHTML code ,

```
<html>
<head>
<title>Using the font attributes in the DHTML</title>
<style type="text/css">
  p{font: italic normal bolder 16pt garamond;}
  h1 {font-variant:small-caps;}
</style>
</head>
<body bgcolor="red">
```

```

<h1>Pace Infotech</h1>
<p>Welcome to the dream world of DTML</p>
</body>
</html>

```

output :



Color and Background Properties :

These attributes are used to specify the color setting for the text as well as for its background.

Attributes in this list are ,

Attribute	Description
-----------	-------------

(a)	color	This attribute is used to set the text color. Note that the color can be specified in the hexadecimal code or by the color name directly.
-----	-------	---

(b)	background-color	This attribute is used to specify the setting related to the background color.
-----	------------------	--

(c)	background-image	This attribute is used to set the background image. URL() function is used to load the image.
-----	------------------	---

(d) **background-repeat** This attribute is mainly useful when the image is smaller as compared to the area it is required to fill, the image can be repeated horizontally, vertically, or no repeatation at all.

(e) **background-attachment**: This attribute is used to specify that whether the image will scroll with the contents or not. Its value are , fixed ,scroll

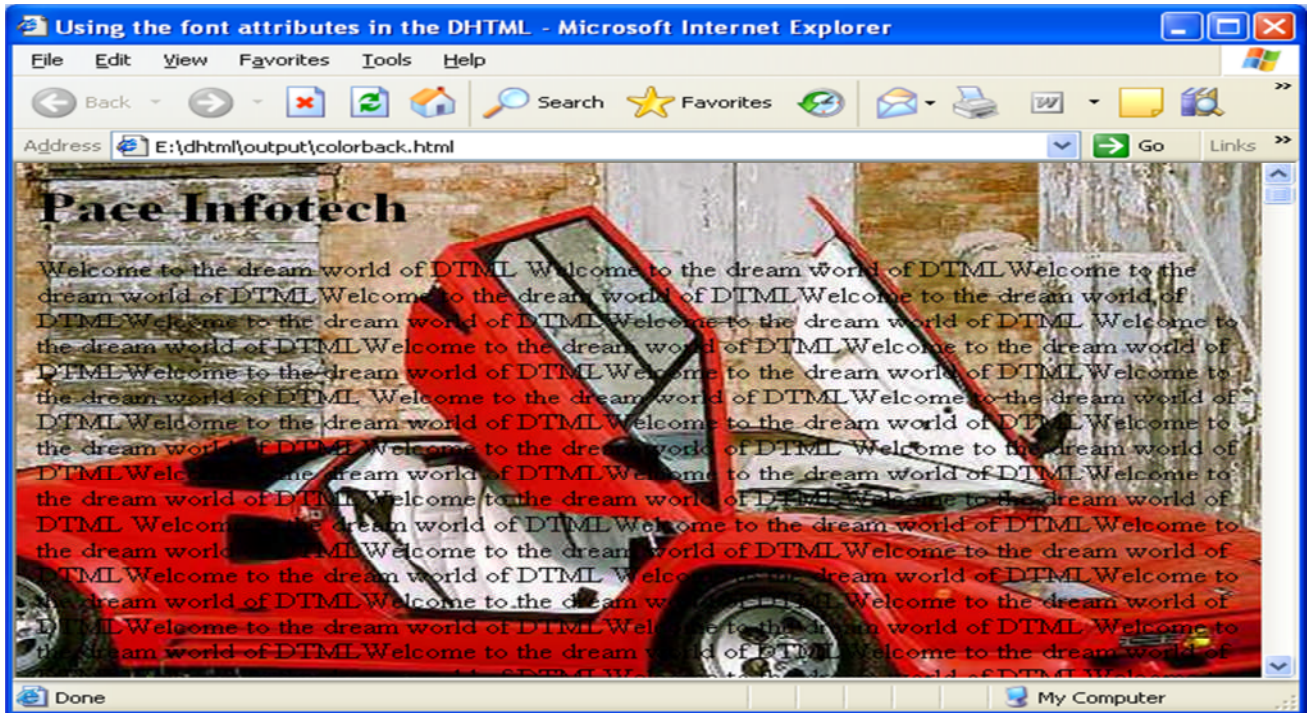
(f) **background-position** This attribute is used to set the position of the image.

The possible values are ,

top,right	top,left	top,center
center,right	center,left	center,center
bottom,right	bottom,left	bottom,center

Consider the following code ,

```
<html>
<head>
<title>Using the font attributes in the DHTML</title>
<style type="text/css">
body{ background-image:url("cars\cars1.jpg");background-repeat:no-repeat;background-position:center center;background-attachment:fixed}
</style>
</head>
<body>
<h1>Pace Infotech</h1>
<p>Welcome to the dream world of DTML Welcome to the dream world of
DTMLWelcome to the dream world of DTMLWelcome to the dream world of DTMLWelcome to
the dream world of DTMLWelcome to the dream world of DTMLWelcome to the dream world of
DTML Welcome to the dream world of DTMLWelcome to the dream world of DTMLWelcome to
the dream world of DTMLWelcome to the dream world of DTMLWelcome to the dream world of
DTMLWelcome to the dream world of DTML Welcome to the dream world of DTMLWelcome to
the dream world of DTMLWelcome to the dream world of DTMLWelcome to the dream world of
DTMLWelcome to the dream world of DTMLWelcome to the dream world of DTML Welcome to
the dream world of DTMLWelcome to the dream world of DTMLWelcome to the dream world of
DTMLWelcome to the dream world of DTMLWelcome to the dream world of DTMLWelcome to
```

Wednesday, July 19, 2006

Text attributes : These attributes are used to specify the text related setting affecting the layout and the presentation of the text on the web page.

The list of text attribute is ,

Attribute	Description
-----------	-------------

(i) text-transform	This attributes is used to transform the text into uppercase , lower case etc..
--------------------	---

are ,

The possible values

- (a) capitalize
- (b) uppercase
- (c) lowercase
- (d) none

(ii) text-decoration	It is used to decorate the text by drawing line on it.
----------------------	--

are ,

The possible values

line-through

- (a)
- (b) overline
- (c) underline
- (d) none

(iii) word-spacing
spaces to
between the two words.

It is used to specify the amount of
be left

specified in terms of

This distance can be

inches(in),centimeters(cm),milimeters

(mm),point(pt),pixels(px).

(iv) letter-spacing
spaces to
between the two letters.

It is used to specify the amount of
be left

specified in terms of

This distance can be

inches(in),centimeters(cm),milimeters
(mm),point(pt),pixels(px).

(v) vertical-align
vertical alignment .
possible values are ,

It is used to specify the
The

- (a) baseline
- (b) super
- (c) sub
- etc....

(vi) horizontal-align
alignment.

It is used to specify the horizontal

justify.

left,right,center,and

Consider the following code,

```
<html>
<head>
<style type="text/css">
```

```

p{text-transform:capitalize;}
h1{text-decoration:overline;}
h2{word-spacing:10pt;}
h3{letter-spacing:14pt;color:white;background-color:blue;}
</style>
<title>Using the Text Attributes in DTML </title>
</head>
<body bgcolor="#ccddee">
<p>Welcome to DTML</p>
<h1>Pace Infotech</h1>
<h3>Personal Information</h3>
<h2>Personal Information</h2>
</body>
</html>

```

Border properties :

These attributes are used to specify the setting for the border.

***** Attribute	Description

(i) border-style will drawing the	This attribute is used to specify that how the border be drawn,that is, the style which is used for border around the object.
---	---

Its possible values are ,

- (a) dotted
- (b) dashed
- (c) solid
- (d) double

(ii) border-color the directly or by hexadecimal code.	This attribute is used to spicify the border color and color can be specified by the color name making use of the
---	---

(iii) border-width labeled and thick . We can also border width using the numeric values in	This attribute is used to specify the border width.The width of the border can be specified using the constants like,thin,medium specify the
--	--

terms of pixels(px).

It contains the following sub attributes ,

- (a) border-top-width
- (b) border-bottom-width
- (c) border-left-width
- (d) border-right-width

(iv) border shorthand

(a) border: style width color

- (b) border-top: style width color
- (c) border-bottom: style width color
- (d) border-left: style width color
- (e) border-right: style width color

Consider the following code ,

```
<html>
<head>
<title>Using the DHTML border attributes</title>
<style type="text/css">
body{ background-color:#ccddee;}
p{ border-style:dashed;color:blue;}
table{ border-style:dotted;border-width:12px;}
address{ border: double 24px red;}
img{ border-top:dashed 12px green; border-bottom:solid 24px blue;}
</style>
</head>
<body>
<p>Pace Infotech,24 Shanti Nagar, Opp DCM,Ajmer Road , Jaipur(Raj)</p>

<address>24 Shanti Nagar</address>
<table>
<tr>
<th>Roll No</th>
<th>Name</th>
</tr>
<tr>
<td>1</td>
<td>Kapil</td>
</tr>
<tr>
<td>1</td>
<td>Kapil</td>
```

```
</tr>
<tr>
<td>1</td>
<td>Kapil</td>
</tr>
</table>
<img src=cartoons\1.jpg height=200 width=200>

</body>
</html>
```

<DIV> TAG

The <div> tag defines a division or a section in an HTML document.

The <div> element is often used as a container for other HTML elements to style them with CSS or to perform certain tasks with JavaScript.

Tip: The <div> element is very often used together with CSS, to layout a web page.

```
<html>
<body>
<p>This is some text.</p>
<div style="background-color:lightblue">
  <h3>This is a heading in a div element</h3>
  <p>This is some text in a div element.</p>
</div>
<p>This is some text.</p>
</body>
</html>
```

Most browsers will display the <div> element with the following default values:

```
<html>
<head>
<style>
div {
  display: block;
}
</style>
</head>
<body>
```

A div element is displayed like this:

```
<div>This is some text in a div element.</div>
```

Change the default CSS settings to see the effect.

```
</body>
```

```
</html>
```

3.

```
<html>
```

```
  <head>
```

```
  </head>
```

```
  <body>
```

```
    <div style="background-color:red; width:300px; height:100px; position:relative; top:10px; left:80px; z-index:2">
```

```
    </div>
```

```
    <div style="background-color:yellow; width:300px; height:100px; position:relative; top:-60px; left:35px; z-index:1;">
```

```
    </div>
```

```
    <div style="background-color:green; width:300px; height:100px; position:relative; top:-220px; left:120px; z-index:3;">
```

```
    </div>
```

```
  </body>
```

```
</html>
```

<IFrame > Tag

Definition and Usage

The <iframe> tag specifies an inline frame.

An inline frame is used to embed another document within the current HTML document.

Tip: To deal with browsers that do not support <iframe>, add a text between the opening <iframe> tag and the closing </iframe> tag.

Tip: Use CSS to style the <iframe> (even to include scrollbars).

```
<html>
<body>
<iframe src="https://www.w3schools.com">
  <p>Your browser does not support iframes.</p>
</iframe>
</body>
</html>
```

<layer > Tag :-

The CSS layers refer to applying the *z-index* property to elements that overlap with each other.

The *z-index* property is used along with the *position* property to create an effect of layers. You can specify which element should come on top and which element should come at bottom.

A *z-index* property can help you to create more complex webpage layouts. Following is the example which shows how to create layers in CSS.

```
<html>
  <head>
  </head>
  <body>
    <div style="background-color:red; width:300px; height:100px;
position:relative; top:10px; left:80px; z-index:2">
    </div>

    <div style="background-color:yellow; width:300px; height:100px;
position:relative; top:-60px; left:35px; z-index:1;">
    </div>

    <div style="background-color:green; width:300px; height:100px;
position:relative; top:-220px; left:120px; z-index:3;">
    </div>
  </body>
</html>
```


The HTML <layer> tag is used to position and animate (through scripting) elements in a page. A layer can be thought of as a separate document that resides on top of the main one, all existing within one window.

This tag has support in Netscape 4 and higher versions of it.

<LAYER> and <ILAYER> Tag Parameters

The <LAYER> and <ILAYER> tags have these attributes:

- [NAME and ID](#)

The NAME parameter specifies the name of the layer so that other layers and JavaScript scripts can refer to it.

- [LEFT and TOP](#)

The LEFT and TOP parameters specify the horizontal and vertical position of the layer for layers defined with <LAYER> or the relative horizontal and vertical positions for layers defined with <ILAYER>.

- [PAGEX and PAGEY](#)

The PAGEX and PAGEY parameters specify the horizontal and vertical position of the layer relative to the document's window.

- [SRC](#)

The SRC parameter specifies the pathname of a file that contains HTML-formatted content for the layer.

- [Z-INDEX, ABOVE and BELOW](#)

These three parameters specify the stacking order of a layer. These three parameters are mutually exclusive - use only one of them.

- [WIDTH](#)

This parameters specifies the width of the layer's content. It controls the right margin for wrapping purposes.

- [HEIGHT](#)

This parameters specifies the height of the layer's clipping region, and serves as the reference for setting the relative height of children layers.

- [CLIP](#)

This parameter specifies the clipping rectangle (viewable area) of the layer, which can be less than the width and height of the content of the layer.

- [VISIBILITY](#)

The VISIBILITY parameter specifies whether the layer is visible or not.

- [BGCOLOR](#), [BACKGROUND](#)

The BGCOLOR specifies the background color of the layer, while the BACKGROUND parameter specifies an image to use as the background.

- [OnMouseOver](#), [OnMouseOut](#)

These are JavaScript event handlers that are invoked when the mouse enters or leaves the layer.

- [OnFocus](#), [OnBlur](#)

These are JavaScript event handlers that are invoked when the layer gets or loses keyboard focus.

- [OnLoad](#)

Example

This example creates three overlapping layers. The back one is red, the middle one is blue, and the front one is green.

CSS:-

1

```
<html>
```

```
<head>
```

```
<title>HTML CSS</title>
```

```
</head>
```

```
<body>
  <p><font color = "green" size = "5">Hello, World!</font></p>
</body>
</html>
```

2.

```
<html>
  <head>
    <title>HTML CSS</title>
  </head>
  <body>
    <p style = "color:green; font-size:24px;" >Hello, World!</p>
  </body>
</html>
```

You can use CSS in three ways in your HTML document –

- **External Style Sheet** – Define style sheet rules in a separate .css file and then include that file in your HTML document using HTML <link> tag.
- **Internal Style Sheet** – Define style sheet rules in header section of the HTML document using <style> tag.
- **Inline Style Sheet** – Define style sheet rules directly along-with the HTML elements using **style** attribute.

Let's see all the three cases one by one with the help of suitable examples.

External Style Sheet

If you need to use your style sheet to various pages, then its always recommended to define a common style sheet in a separate file. A cascading style sheet file will have extension as **.css** and it will be included in HTML files using <link> tag.

Example

Consider we define a style sheet file **style.css** which has following rules –

```
.red {
  color: red;
}
.thick {
  font-size:20px;
```

```
}  
.green {  
    color:green;  
}
```

Here we defined three CSS rules which will be applicable to three different classes defined for the HTML tags. I suggest you should not bother about how these rules are being defined because you will learn them while studying CSS. Now let's make use of the above external CSS file in our following HTML document

```
<html>  
  
    <head>  
        <title>HTML External CSS</title>  
        <link rel = "stylesheet" type = "text/css" href = "/html/style.css">  
    </head>  
  
    <body>  
        <p class = "red">This is red</p>  
        <p class = "thick">This is thick</p>  
        <p class = "green">This is green</p>  
        <p class = "thick green">This is thick and green</p>  
    </body>  
  
</html>
```

Internal Style Sheet

If you want to apply Style Sheet rules to a single document only, then you can include those rules in header section of the HTML document using <style> tag.

Rules defined in internal style sheet overrides the rules defined in an external CSS file.

Example

Let's re-write above example once again, but here we will write style sheet rules in the same HTML document using <style> tag

```
<html>  
  
    <head>  
        <title>HTML Internal CSS</title>  
  
        <style type = "text/css">  
            .red {  
                color: red;  
            }  
            .thick{  
                font-size:20px;  
            }  
        </style>  
    </head>  
  
</html>
```

```

        .green {
            color:green;
        }
    </style>
</head>

<body>
    <p class = "red">This is red</p>
    <p class = "thick">This is thick</p>
    <p class = "green">This is green</p>
    <p class = "thick green">This is thick and green</p>
</body>

</html>

```

Inline Style Sheet

You can apply style sheet rules directly to any HTML element using **style** attribute of the relevant tag. This should be done only when you are interested to make a particular change in any HTML element only.

Rules defined inline with the element overrides the rules defined in an external CSS file as well as the rules defined in <style> element.

Example

Let's re-write above example once again, but here we will write style sheet rules along with the HTML elements using **style** attribute of those elements.

```

<html>

    <head>
        <title>HTML Inline CSS</title>
    </head>

    <body>
        <p style = "color:red;">This is red</p>
        <p style = "font-size:20px;">This is thick</p>
        <p style = "color:green;">This is green</p>
        <p style = "color:green;font-size:20px;">This is thick and green</p>
    </body>

</html>

```

CSS z-index Property

Example

Set the z-index for an image:

```
img {  
  position: absolute;  
  left: 0px;  
  top: 0px;  
  z-index: -1;  
}
```

```
<html>
```

```
<head>
```

```
<style>
```

```
img {  
  position: absolute;  
  left: 200px;  
  top: 100px;  
  z-index: -1;  
}
```

```
</style>
```

```
</head>
```

```
<body>
```

```
<h1>The z-index Property</h1>
```

```

```

```
<p>Because the image has a z-index of -1, it will be placed behind the heading.</p>
```

```
</body>
```

```
</html>
```

The position Property

The `position` property specifies the type of positioning method used for an element.

There are five different position values:

- `static`
- `relative`
- `fixed`
- `absolute`
- `sticky`

Elements are then positioned using the `top`, `bottom`, `left`, and `right` properties. However, these properties will not work unless the `position` property is set first. They also work differently depending on the position value.

position: static;

HTML elements are positioned static by default.

Static positioned elements are not affected by the `top`, `bottom`, `left`, and `right` properties.

An element with `position: static;` is not positioned in any special way; it is always positioned according to the normal flow of the page:

This `<div>` element has `position: static;`

Here is the CSS that is used:

```
div.static {  
  position: static;  
  border: 3px solid #73AD21;  
}
```

```
<html>
```

```
<head>
```

```
<style>
div.static {
    position: static;
    border: 3px solid #73AD21;
}
</style>
</head>
<body>
<h2>position: static;</h2>
<p>An element with position: static; is not positioned in any special way; it is
always positioned according to the normal flow of the page:</p>
<div class="static">
This div element has position: static;
</div>
</body>
</html>
```

position: relative;

An element with `position: relative;` is positioned relative to its normal position.

Setting the top, right, bottom, and left properties of a relatively-positioned element will cause it to be adjusted away from its normal position. Other content will not be adjusted to fit into any gap left by the element.

This `<div>` element has `position: relative;`

Here is the CSS that is used:

Example

```
div.relative {
    position: relative;
    left: 30px;
```



```

border: 3px solid #73AD21;
}

<html>

<head>

<style>

div.relative {

    position: relative;

    left: 30px;

    border: 3px solid #73AD21;

}

</style>

</head>

<body>

<h2>position: relative;</h2>

<p>An element with position: relative; is positioned relative to its normal position:</p>

<div class="relative">

This div element has position: relative;

</div>

</body>

</html>

```

position: fixed;

An element with `position: fixed;` is positioned relative to the viewport, which means it always stays in the same place even if the page is scrolled. The top, right, bottom, and left properties are used to position the element.

A fixed element does not leave a gap in the page where it would normally have been located.

Notice the fixed element in the lower-right corner of the page. Here is the CSS that is used:

Example

```
div.fixed {  
  position: fixed;  
  bottom: 0;  
  right: 0;  
  width: 300px;  
  border: 3px solid #73AD21;  
}
```

```
<html>
```

```
<head>
```

```
<style>
```

```
div.fixed {  
  position: fixed;  
  bottom: 0;  
  right: 0;  
  width: 300px;  
  border: 3px solid #73AD21;  
}
```

```
</style>
```

```
</head>
```

```
<body>
```

```
<h2>position: fixed;</h2>
```

<p>An element with position: fixed; is positioned relative to the viewport, which means it always stays in the same place even if the page is scrolled:</p>

```
<div class="fixed">
```

This div element has position: fixed;

```
</div>
```

```
</body>
```

```
</html>
```

position: absolute;

An element with `position: absolute;` is positioned relative to the nearest positioned ancestor (instead of positioned relative to the viewport, like `fixed`).

However; if an absolute positioned element has no positioned ancestors, it uses the document body, and moves along with page scrolling.

Note: A "positioned" element is one whose position is anything except `static`.

Here is a simple example:

This `<div>` element has `position: relative;`

This `<div>` element has `position: absolute;`

Here is the CSS that is used:

```
div.relative {  
  position: relative;  
  width: 400px;  
  height: 200px;  
  border: 3px solid #73AD21;  
}
```

```
div.absolute {  
  position: absolute;  
  top: 80px;  
  right: 0;  
  width: 200px;  
  height: 100px;  
  border: 3px solid #73AD21;  
}
```

```
<html>
```

```
<head>
```

```
<style>
```

```
div.relative {  
  
  position: relative;  
  
  width: 400px;
```

```
height: 200px;
border: 3px solid #73AD21;
}
```

```
div.absolute {
    position: absolute;
    top: 80px;
    right: 0;
    width: 200px;
    height: 100px;
    border: 3px solid #73AD21;
}
```

```
</style>
```

```
</head>
```

```
<body>
```

```
<h2>position: absolute;</h2>
```

```
<p>An element with position: absolute; is positioned relative to the nearest positioned ancestor (instead of positioned relative to the viewport, like fixed):</p>
```

```
<div class="relative">This div element has position: relative;
```

```
  <div class="absolute">This div element has position: absolute;</div>
```

```
</div>
```

```
</body>
```

```
</html>
```