

Hyperlink, image, image-
map, table, frame and form, color

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HTML Anchor

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

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

Types of Hyperlink

1. Inter-page Hyperlink: In this type of link the control flows from one page to another.

Eg: ` click here`

2. Intra-page Hyperlink

Intra page hyperlink is a link within a same page, sometimes a jump is required to a different location in the same document. Since the jump has to be targeted to specific location the 2 steps need to perform.

- a) Identify the location with a name and
- b) Jump to that location using the name

Eg:

` html text`

` goto top`

Cont.

3. Email Hyperlink: This type of Hyperlink is used especially to write e-mail. The link doesn't open any web pages but opens the outlook express for writing mail. You can write the mail and send.

Eg: <a href=<mailto:sim.kasaju@acme.edu.np>>Simanta

4. External links: you can also have external links the links when clicking upon them you can jump to next web page.

<a href=<https://www.google.com>>google

Hyperlink tags

```
<!DOCTYPE html>
<html>
<body>
<h1>HTML Links</h1>
<p><a
href="https://www.w3schools.com/">VisitW3Schools.com!</a></p>
</body>
</html>
```

Output: [Visit W3Schools.com!](https://www.w3schools.com/)

index.html

```
<!DOCTYPE html>
<html>
<head>
  <title>Index</title>
</head>
<body>
  <ol>
    <li> <a href="https://www.facebook.com/">Click to open facebook</a> </li>
    <li><a href="https://www.youtube.com/">Click to open youtube</a> </li>
    <li><a href="https://www.gmail.com/">Click to open gmail</a></li>
    <li> <a href="first.html"> move to first page</a> </li>
    <li> <a href="second.html"> move to second page</a></li>
  </ol>
```

1. [Click to open facebook](#)
2. [Click to open youtube](#)
3. [Click to open gmail](#)
4. [move to first page](#)
5. [move to second page](#)

first.html

```
<!DOCTYPE html>
```

```
<html>
```

```
<head>
```

```
    <title>First page</title>
```

```
</head>
```

```
<body>
```

```
    <h1>welcome to first page </h1>
```

```
    <a href="index.html"> back to index</a><br>
```

```
<a href="second.html"> back to second page</a>
```

```
</body>
```

```
</html>
```

welcome to first page

[back to index](#)

[back second page](#)

second.html

welcome to second page

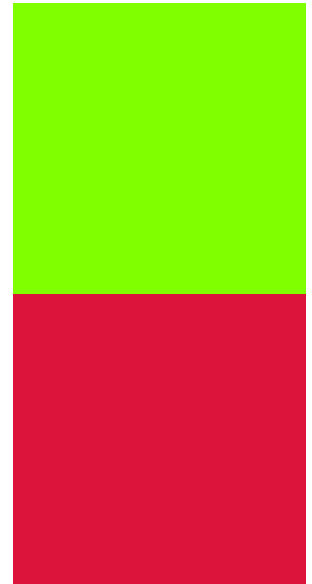
```
<!DOCTYPE html>
<html>
<head>
    <title>Second page</title>
</head>
<body>
    <h1>welcome to first page </h1>
    <a href="index.html"> back to index</a><br>
    <a href="first.html"> back to first page</a>
</body>
</html>
```

[back to index](#)

[back to first](#)

Using div

```
<a href="https://www.google.com/">  
<div style="width: 100px;height: 100px; background-  
color: chartreuse;">  
</div>  
</a>  
<a href="https://www.wikipedia.org/">  
<div style="width:100px;height:100px;background-  
color: crimson;">  
</div>  
</a>
```



```
<p><a href="#C4">Jump to Chapter 4</a></p>
<p><a href="#C10">Jump to Chapter 10</a></p>
<h2>Chapter 1</h2>
<p>This chapter explains ba bla bla</p>
<h2>Chapter 2</h2>
<p>This chapter explains ba bla bla</p>
<h2>Chapter 3</h2>
<p>This chapter explains ba bla bla</p>
<h2 id="C4">Chapter 4</h2>
<p>This chapter explains ba bla bla</p>
<h2>Chapter 5</h2>
<p>This chapter explains ba bla bla</p>
<h2>Chapter 6</h2>
<p>This chapter explains ba bla bla</p>
<h2>Chapter 7</h2>
<p>This chapter explains ba bla bla</p>
<h2>Chapter 8</h2>
<p>This chapter explains ba bla bla</p>
<h2>Chapter 9</h2>
<p>This chapter explains ba bla bla</p>
<h2 id="C10">Chapter 10</h2>
<p>This chapter explains ba bla bla</p>
```

Href as bookmark

Base href

```
<!DOCTYPE html>
<html >           Department | Notes | Admission | Examination
<head>
<title>Index</title>
  <base href = "http://www.acme.edu.np">
</head>
<body>
<a href = "/department" >Opens in Department</a> |
<a href = "/notes" >Opens in notes</a> |
  <a href = "/admission" >Opens in admission</a> |
    <a href = "/examination" >Opens in examination</a>
</body>
</html>
```

Download

- ``
- ``



smile.jpg

✓ Verified

HTML Links - The target Attribute

By default, the linked page will be displayed in the current browser window. To change this, you must specify another target for the link.

The target attribute specifies where to open the linked document.

The target attribute can have one of the following values:

_self - Default. Opens the document in the same window/tab as it was clicked

_blank - Opens the document in a new window or tab

_parent - Opens the document in the parent frame

_top - Opens the document in the full body of the window

This is frame1

This is frame2

This is frame3

[NEW](#)
[SELF](#)
[Parent](#)
[TOP](#)
[test](#)

```
<!DOCTYPE html>
<html>
<head>
  <title></title>
  <frameset rows="25%, *,25%">
    <frame src="frame1.html" n
ame="test"></frame>
    <frame src="frame2.html"><
/frame>
    <frame src="frame3.html" >
</frame>
  </frameset>
```

frame1.html

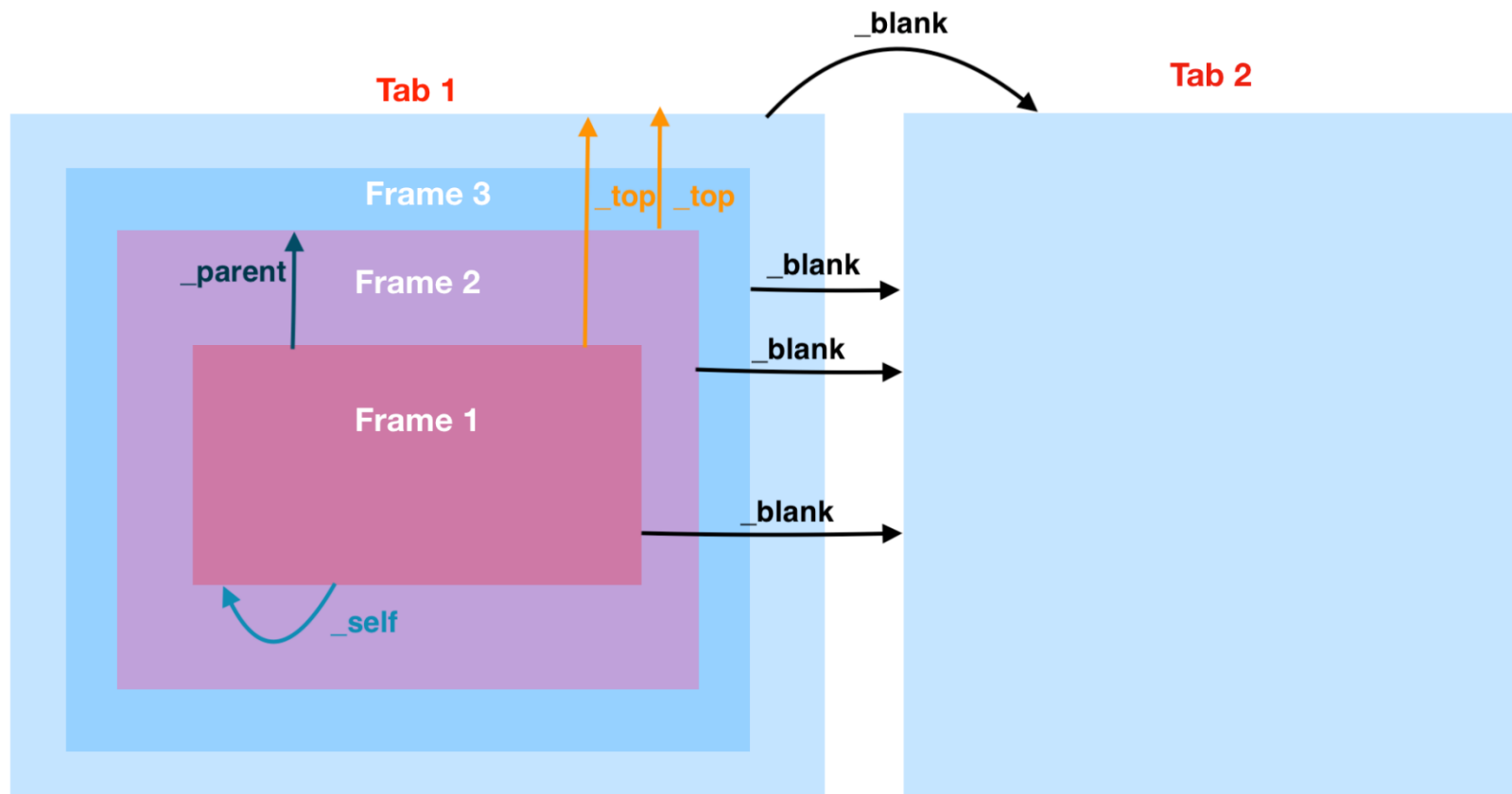
```
<!DOCTYPE html>
<html>
<head>
    <title></title>
</head>
<body>
<h1>
    This is frame1
</h1>
</body>
</html>
```

frame2.html

```
<!DOCTYPE html>
<html>
<head>
    <title></title>
</head>
<body>
<h1>
    This is frame2
</h1>
</body>
</html>
```

```
Frame3.html
<!DOCTYPE html>
<html>
<head>
    <title></title>
</head>
<body>
<h1>
    This is frame3
</h1>
<a href="https://www.google.com/"
target="_blank">NEW</a><br>
<a href="https://www.google.com/"
target="_self">SELF</a> <br>
<a href="https://www.google.com/"
target="_parent">Parent</a> <br>
<a href="https://www.google.com/"
target="_top">TOP</a> <br>
<a href="https://www.google.com/"
target="test">test</a>
</body>

</html>
```

Used to move top and buttom

```
<a name="top">simanta</a> <br>
```

```
  <a href="#bottom">goto bottom</a><br>
```

```
<a name="bottom">kasaju</a> <br>
```

```
  <a href="#top">goto top</a><br>
```

**Image **

Definition and Usage

The tag is used to embed an image in an HTML page.

Images are not technically inserted into a web page; images are linked to web pages. The tag creates a holding space for the referenced image.

The tag has two required attributes:

src - Specifies the path to the image

alt - Specifies an alternate text for the image, if the image for some reason cannot be displayed

Image

Images are very important to beautify as well as to depict many complex concepts In simple way on your web page.

This is inline function.

Example

```
<!DOCTYPE html>
```

```
<html>
```

```
<body>
```

```
<h2>HTML Image</h2>
```

```

```

```
</body>
```

```
</html>
```

Output:



Image

```
<!DOCTYPE html>
<html>
<head>
  <title>Image</title>
</head>
<body>
   <br>
   <br>
  
```

**We can create more interesting by
doing this.or we can create a link to image**

```
  <a href="pic/0.jpg">
     <br>
  </a>
<a href="https://www.facebook.com/
">
   <br>
</a>
```

Attributes of HTML 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.

We can use title as well

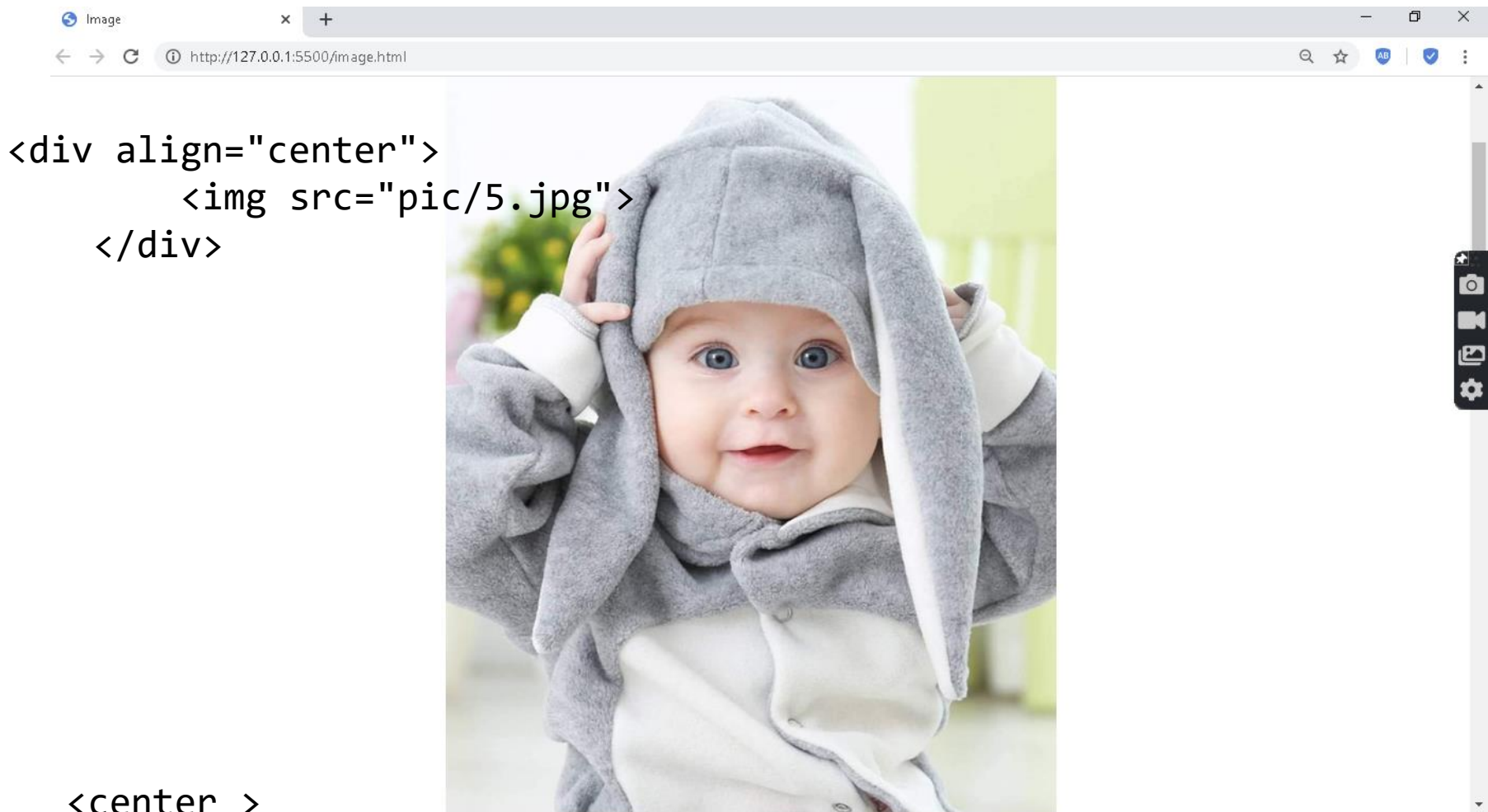
```

```



cute baby holding head

Image at center



```
<center >  
    
</center>
```


Alt attribute



```

```

If some times image is missing or it takes some time to load then alt attribute helps us to load text and gives us extra information.

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:

```

```

Use the CSS **float** property to let the image float to the right or to the left of a text:

```

```

ismap

- The ismap attribute is a boolean attribute.
- When present, it specifies that the image is part of a server-side image map (an image map is an image with clickable areas).
- When clicking on a server-side image map, the click coordinates are sent to the server as a URL query string.
- ``
- ``
- ``

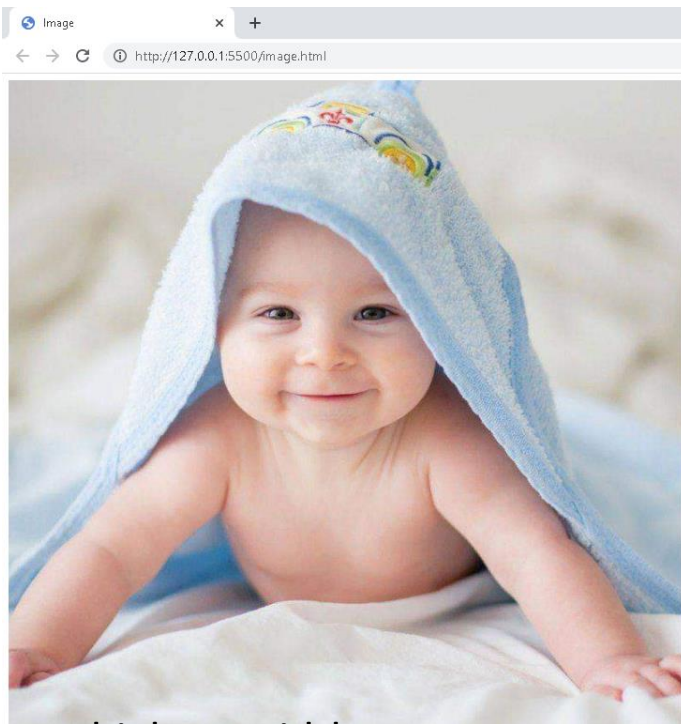
srcset

Definition and Usage

The **srcset** attribute specifies the URL of the image to use in different situations.

This attribute is required when **<source>** is used in **<picture>**.

```
<!DOCTYPE html>
<html>
<head>
  <title>Image</title>
</head>
<body >
  <picture>
    <source media="(min-
width: 800px)" srcset="pic/5.jpg">
    <source media="(min-
width: 500px)" srcset="pic/7.jpg">
    <source media="(min-
width: 155px)" srcset="pic/3.jpg">
    
  </picture>
```



At highest width



When width is reduced



When width is reduced more

Image maps

The HTML <map> tag defines an image map. An image map is an image with clickable areas. The areas are defined with one or more <area> tags.

Example

```
<!DOCTYPE html>
<html>
<body>
<h2>Image Maps</h2>
<p>Click on the computer, the phone, or the cup of coffee to go to a new page
and read more about the topic:</p>

<map name="workmap">
  <area
shape="rect" coords="34,44,270,350" alt="Computer" href="computer.htm">
  <area shape="rect" coords="290,172,333,250" alt="Phone" href="phone.htm">
  <area shape="circle" coords="337,300,44" alt="Cup of
coffee" href="coffee.htm">
</map>
</body>
</html>
```

Output:



Shape

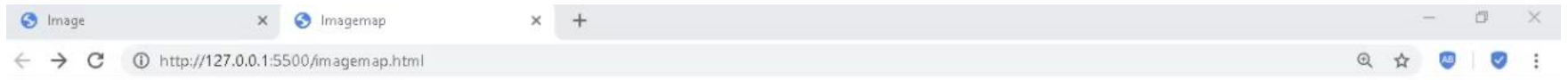
- You must define the shape of the clickable area, and you can choose one of these values:
- rect - defines a rectangular region(The coordinates for shape="rect" come in pairs, one for the x-axis and one for the y-axis.LTRB)
- circle - defines a circular region(Center(x,y),radius)
- poly - defines a polygonal region(x,y co-ordinates of each corner)
- default - defines the entire region

```

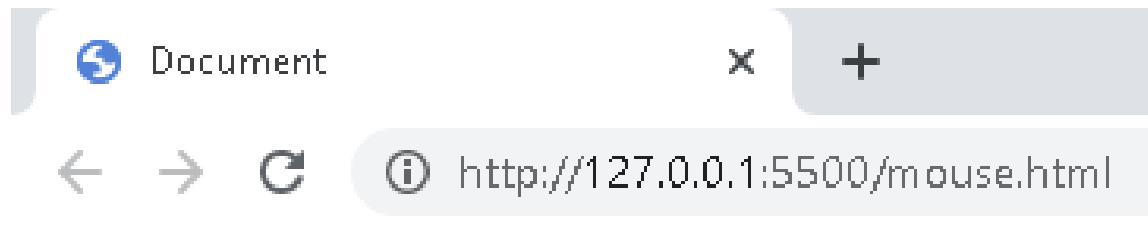
Imagemap.html
<!DOCTYPE html>
<html lang="en">
<head>
  <title>Imagemap</title>
</head>
<body>
  
<map name="cofee">
  <area shape="rect" coords="161,109,338,225" alt="Computer" title="la
ptop" href="laptop.html">
  <area shape="rect" coords="123,196,152,252" alt="Phone" title="mobil
e" href="mobile.html">
  <area shape="circle" coords="108,113,19" alt="Cup of coffee" title=
"cofee" href="cofee.html">
<area shape="poly"
coords="328,239,338,250,342,259,334,268,311,285,296,273,303,257"
title="mouse" href="mouse.html">
</map>
</body>
</html>

```





```
mouse.html
<!DOCTYPE html>
<html>
<head>
  <title>Document</title>
</head>
<body>
  <h1>This is mouse section</h1>
</body>
</html>
```



This is mouse section

```
Laptop.html
<!DOCTYPE html>
<html>
<head>
    <title>laptop</title>
</head>
<body bgcolor="pink">
    <center> <h1> this is Laptop section</h1> </center>
    <center> </center>
    <p> A laptop computer is a small personal computer. They are designed to be more portable than traditional desktop computers, with many of the same abilities.
        Laptops are able to be folded flat for transportation and have a built-in keyboard and touchpad.
    </p>
</body>
</html>
```

Document

laptop


+

← → ↻

http://127.0.0.1:5500/laptop.html

🔍 ☆ AB | 🔒

this is Laptop section



A photograph of a man with short brown hair, wearing a blue denim jacket over a white t-shirt, sitting at a wooden desk. He is smiling and waving both hands in the air. In front of him is a silver laptop with the Apple logo. The background is a plain, light-colored wall. In the top right corner of the photo, the text 'conormaynard-germany' is visible.

A laptop computer is a small personal computer. They are designed to be more portable than traditional desktop computers, with many of the same abilities. Laptops are able to be folded flat for transportation and have a built-in keyboard and touchpad.

```

Mobile.html
<!DOCTYPE html>
<html>
<head>
    <title>mobile</title>
</head>
<body bgcolor="black">
    <center> <h1 style="color: chartreuse;"> this is mobile section</h1> </center>
<center> </center>
    <p style="color: cyan;">

```

A mobile phone, cellular phone, cell phone, cellphone, handphone, or hand phone, sometimes shortened to simply mobile, cell or just phone, is a portable telephone that can make and receive calls over a radio frequency link while the user is moving within a telephone service area.

A mobile phone (also known as a hand phone, cell phone, or cellular telephone) is a small portable radio telephone. The mobile phone can be used to communicate over long distances without wires. ... Now, more people are using smartphones than the old kind of mobile phone, which are called feature phones. A mobile phone, cellular phone, cell phone, cellphone, handphone, or hand phone, sometimes shortened to simply mobile, cell or just phone, is a portable telephone that can make and receive calls over a radio frequency link while the user is moving within a telephone service area. A mobile phone (also known as a hand phone, cell phone, or cellular telephone) is a small portable radio telephone. The mobile phone can be used to communicate over long distances without wires. ..Now, more people are using smartphones than the old kind of mobile phone, which are called feature phones.

```

    </p>
</body>
</html>

```

this is mobile section



A mobile phone, cellular phone, cell phone, cellphone, handphone, or hand phone, sometimes shortened to simply mobile, cell or just phone, is a portable telephone that can make and receive calls over a radio frequency link while the user is moving within a telephone service area. A mobile phone (also known as a hand phone, cell phone, or cellular telephone) is a small portable radio telephone. The mobile phone can be used to communicate over long distances without wires. ... Now, more people are using smartphones than the old kind of mobile phone, which are called feature phones. A mobile phone, cellular phone, cell phone, cellphone, handphone, or hand phone, sometimes shortened to simply mobile, cell or just phone, is a portable telephone that can make and receive calls over a radio frequency link while the user is moving within a telephone service area. A mobile phone (also known as a hand phone, cell phone, or cellular telephone) is a small portable radio telephone. The mobile phone can be used to communicate over long distances without wires. ... Now, more people are using smartphones than the old kind of mobile phone, which are called feature phones.

```

<!DOCTYPE html>
<html lang>
<head>
    <title>coffee</title>
</head>
<body bgcolor="coffee">
    <center> <h1> this is coffee section</h1> </center>
<center> </center>

<ul>
<li> of various tropical African shrubs or trees of the genus Coffea, e
specially C. arabica or C.
canephora, widely cultivated in the tropics for their seeds that are dr
ied, roasted, and ground to
prepare a stimulating aromatic drink.</li>
<li> beanlike seeds of this plant, two of which are found in each fruit
. </li>
<li>The beverage prepared from the seeds of this plant: likes to drink
coffee with breakfast.</li>
<li>A serving of such a beverage: ordered two coffees with sugar.</li>
<li>A moderate brown to dark brown or dark grayish brown.</li>
<li>An informal social gathering at which coffee and other refreshments
are served.</li>
</ul>
</body>
</html>

```

this is coffee section



- of various tropical African shrubs or trees of the genus *Coffea*, especially *C. arabica* or *C. canephora*, widely cultivated in the tropics for their seeds that are dried, roasted, and ground to prepare a stimulating aromatic drink.
- beanlike seeds of this plant, two of which are found in each fruit.
- The beverage prepared from the seeds of this plant: likes to drink coffee with breakfast.
- A serving of such a beverage: ordered two coffees with sugar.
- A moderate brown to dark brown or dark grayish brown.
- An informal social gathering at which coffee and other refreshments are served.

Image maps

- Server-Side Image Maps
- Client-Side Image Maps

Server-side Image maps

- Image used as image map
- Map file defines areas of image and corresponding URLs
- Image map program runs on server as part of its server software
- Map file and image map program reside on server
- Web server performs calculations

Client-side Image maps

- HTML document contains map information
 - Browser performs calculations
 - Better performance than server-side image maps
 - Can test and implement locally
 - URL of hyperlink will display in browser status bar when mouse hovers over image
- ## Client-Side Image Maps

Marquee tag

- Marquee is one of the important tags introduced in HTML to support such scrollable texts and images within a web page. In this tutorial, you will be learning about the Marquee tag and its different attributes for developing a well-groomed static website.
- The `<marquee>` tag is a container tag of HTML is implemented for creating scrollable text or images within a web page from either left to right or vice versa, or top to bottom or vice versa. But this tag has been deprecated in the new version of HTML, i.e., HTML 5.

| Attribute | Description |
|--------------|---|
| width | provides the width or breadth of a marquee. For example width="10" or width="20%" |
| height | provides the height or length of a marquee. For example height="20" or height="30%" |
| direction | provides the direction or way in which your marquee will allow you to scroll. The value of this attribute can be: left, right, up or down |
| scrollDelay | provides a feature whose value will be used for delaying among each jump. |
| scrollAmount | provides value for speeding the marquee feature |
| behavior | provides the scrolling type in a marquee. That scrolling can be like sliding, scrolling or alternate |
| loop | provides how many times the marquee will loop |
| bgColor | provides a background color where the value will be either the name of the color or the hexadecimal color-code. |
| vspace | provides a vertical space and its value can be like: vspace="20" or vspace="30%" |
| hspace | provides a horizontal space and its value can be like: vspace="20" or vspace="30%" |

Basic marquee

```
<!DOCTYPE html>
<html>
<head>
<title>HTML marquee Tag</title>
</head>
  <body>
<marquee>This is basic example of marquee tag</marquee>
  </body>
</html>
```

Width 50%

```
<marquee width = "50%">This example will take only 50% width</marquee>
```

Right to left

```
<marquee direction = "right">This text will scroll from left to right</marquee>
```

behaviour

```
<marquee behavior=alternate color=red><h2>thank you for visiting  
my blog</h2></marquee>
```

```
<marquee behavior=slide><h2>thank you for visiting my blog</h2></  
marquee>
```

```
<marquee behavior=scroll><h2>thank you for visiting my blog</h2><  
/marquee>
```

```
<marquee behavior=alternate style=color:chocolate;><h2>thank you  
for visiting my blog</h2></marquee>
```

```
<marquee behavior=scroll bgcolor=yellow direction=right><h2>thank you for  
visiting my blog</h2></marquee>
```

```
<marquee behavior=scroll bgcolor=yellow direction=up><h2>thank you for vis  
iting my blog</h2></marquee>
```

```
<marquee behavior=scroll bgcolor=yellow direction=down><h2>thank you for v  
isiting my blog</h2></marquee>
```

```
<marquee behavior=scroll bgcolor=yellow direction=up height=600 width=500><h2>thank you for visiting my blog</h2></marquee>
```

```
<marquee behavior=scroll bgcolor=yellow direction=up loop=5><h2>5 times scroll</h2></marquee>
```

```
<marquee behavior=scroll direction=up scrollamount=100><h2> scroll</h2></marquee>
```

```
<marquee behavior=alternate></marquee>
```

```
<marquee behavior=slide></marquee>
```

```
<marquee behavior=alternate direction=up height=1000 width=1000></marquee>
```

```
<marquee behavior=alternate scrolldelay="1000" ></marquee>
```



```
<marquee behavior=alternate bgcolor=red height=400 scroll  
amount=10 hspace=50 ></marquee>
```

```
<marquee behavior=alternate bgcolor=red height=400 scrollamount  
=10 vspace=50 ></marquee>
```

Tables

- 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 .

- ## Table Heading

Table heading can be defined using `<th>` tag. This tag will be put to replace `<td>` tag, which is used to represent actual data cell. Normally you will put your top row as table heading as shown below, otherwise you can use `<th>` element in any row. Headings, which are defined in `<th>` tag are centered and bold by default.

- ## Cellpadding and Cellspacing Attributes

There are two attributes called *cellpadding* and *cellspacing* which you will use to adjust the white space in your table cells. The *cellspacing* attribute defines space between table cells, while *cellpadding* represents the distance between cell borders and the content within a cell.

.Colspan and Rowspan Attributes

You will use **colspan** attribute if you want to merge two or more columns into a single column. Similar way you will use **rowspan** if you want to merge two or more rows.

Tables Backgrounds

You can set table background using one of the following two ways –

- **bgcolor** attribute – You can set background color for whole table or just for one cell.

- **background** attribute – You can set background image for whole table or just for one cell.

You can also set border color also using **bordercolor** attribute.

Note – The *bgcolor*, *background*, and *bordercolor* attributes deprecated in HTML5. Do not use these attributes.

```

<!DOCTYPE html>
<html>
<body>
<h2>Basic HTML Table</h2>
<table>
  <tr>
    <th>Firstname</th>
    <th>Lastname</th>
    <th>gender</th>
  </tr>
  <tr>
    <td>Simanta</td>
    <td>Kasaju</td>
    <td>Male</td>
  </tr>
  <tr>
    <td>Prashant</td>
    <td>Kasaju</td>
    <td>Male</td>
  </tr>
  <tr>
    <td>Salina</td>
    <td>Kasaju</td>
    <td>Female</td>
  </tr>
</table>

</body>
</html>

```

Basic HTML Table

| Firstname | Lastname | gender |
|-----------|----------|--------|
| Simanta | Kasaju | Male |
| Prashant | Kasaju | Male |
| Salina | Kasaju | Female |

Table tags

| Tag | Description |
|------------------------------|--|
| <code><table></code> | It defines a table. |
| <code><tr></code> | It defines a row in a table. |
| <code><th></code> | It defines a header cell in a table. |
| <code><td></code> | It defines a cell in a table. |
| <code><caption></code> | It defines the table caption. |
| <code><colspan></code> | It specifies a group of one or more columns in a table for formatting. |
| <code><rowspan></code> | It is used to group a row section. |
| <code><tbody></code> | It is used to group the body content in a table. |
| <code><thead></code> | It is used to group the header content in a table. |
| <code><tfoot></code> | It is used to group the footer content in a table. |

classwork

| Heading | Students | Details | | |
|--------------|----------|----------|------------------|-------------|
| | Id | Name | Department | Roll Number |
| Student List | 1 | Simanta | Computer Science | 12345 |
| | 2 | Prashant | Electronics | 23456 |
| | 3 | Salina | Electrical | 34567 |
| | 4 | Puran | Civil | 45678 |

```

<!DOCTYPE html>
<html>
<head>
</head>
<body>
<h1>The col element</h1>
<table border="1px">
  <colgroup>
    <col span="2" style="background-
color:red">
    <col style="background-color:yellow">
  </colgroup>
  <tr>
    <th>ISBN</th>
    <th>Title</th>
    <th>Price</th>
  </tr>

```

```

<tr>
  <td>3476896</td>
  <td>My first HTML</td>
  <td>$53</td>
</tr>
<tr>
  <td>5869207</td>
  <td>My first CSS</td>
  <td>$49</td>
</tr>
</table>
</body>
</html>

```

The col element

| ISBN | Title | Price |
|---------|-------|-------|
| 3476896 | HTML | \$53 |
| 5869207 | CSS | \$49 |


```

<!DOCTYPE html>
<html>
<head>
</head>
<body>
<h1>The thead, tbody, and tfoot elements</h1>

```

```

<table border="1px">
  <thead>
    <tr>
      <th>Month</th>
      <th>Savings</th>
    </tr>
  </thead>
  <tbody>
    <tr>
      <td>January</td>
      <td>$100</td>
    </tr>
    <tr>
      <td>February</td>
      <td>$80</td>
    </tr>

```

```

</tbody>
  <tfoot>
    <tr>
      <td>Sum</td>
      <td>$180</td>
    </tr>
  </tfoot>
</table>

</body>
</html>

```

The thead, tbody, and tfoot elements

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

```

<!DOCTYPE html>
<html>
  <head>
    <title>Simple HTML table using thead and tbody</title>
  </head>
  <body>

    <table border="2px" width="80%" cellpadding="4">
      <thead>
        <tr>
          <th rowspan="2">Heading</th>
          <th>Students</th>
          <th colspan="3">Details</th>
        </tr>
        <tr>
          <th>Id</th>
          <th>Name</th>
          <th>Department</th>
          <th>Roll Number</th>
        <tr>

```

```

      </thead>
      <tbody>
        <tr>
          <td rowspan="4">Student List</td>
          <td>1</td>
          <td>Simanta</td>
          <td>Computer Science</td>
          <td>12345</td>
        </tr>
        <tr>
          <td>2</td>
          <td>Prashant</td>
          <td>Electronics</td>
          <td>23456</td>
        </tr>
        <tr>
          <td>3</td>
          <td>Salina</td>
          <td>Electrical</td>
          <td>34567</td>
        </tr>
        <tr>
          <td>4</td>
          <td>Puran</td>
          <td>Civil</td>
          <td>45678</td>
        </tr>
      </tbody>
    </table>
  </body>
</html>

```

We can add image on background as well with caption

<caption>My family</caption>

<table border="2px" width=100px height=100px cellspacing="4" cellpadding="4" style="background-image: url(pic/3.jpg); background-position: center; background-size: contain;">

My family

| Heading | Students | | Details | |
|--------------|----------|----------|------------------|-------------|
| | Id | Name | Department | Roll number |
| Student list | 1 | Simanta | Computer science | 12345 |
| | 2 | Prashant | Electronics | 23456 |
| | 3 | salina | Electrical | 34567 |
| | 4 | Puran | civil | 45678 |

we can insert another table, list paragraph as well inside the table

| Column 1 | Column 2 | | | | |
|--|--|---|---|---|---|
| <p>This is a paragraph</p> <p>This is another paragraph</p> | <p>This cell contains a table:</p> <table><tr><td>A</td><td>B</td></tr><tr><td>C</td><td>D</td></tr></table> | A | B | C | D |
| A | B | | | | |
| C | D | | | | |
| <p>This cell contains a list</p> <ul style="list-style-type: none">• apples• bananas• pineapples | <p>HELLO</p> | | | | |

```

<table border="1" bordercolor = "red">
  <tr>
    <th>Column 1</th>

    <th>Column 2</th>

  </tr>
  <tr>
    <td>
      <p>This is a paragraph</p>

      <p>This is another paragra
h</p>
    </td>
    <td>This cell contains a table:

      <table border="1">
        <tr>
          <td>A</td>
          <td>B</td>
        </tr>
        <tr>
          <td>C</td>
          <td>D</td>
        </tr>
      </table>
    </td>
  </tr>
</table>

```

```

</td>
</tr>
<tr>
  <td>This cell con
tains a list
    <ul>
      <li>apple
s</li>
      <li>banan
as</li>
      <li>pinea
pples</li>
    </ul>
  </td>
  <td>HELLO</td>
</tr>
</table>

```

Alignment on row

```
<tr style="text-align: center;">Align at center</tr>
```

Alignment overall table

```
<table style="text-align: center;">
```

Alignment within cell

```
<td style="text-align: center;">Align at center</td>
```

```
<table style="background-color:lightcoral;">
```

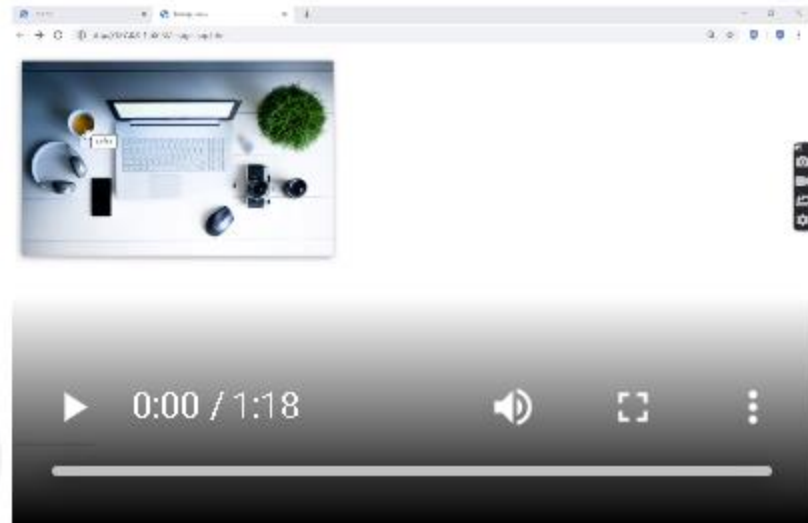
My family

| Heading | Students | Details | | |
|--------------|----------|----------|------------------|-------------|
| | Id | Name | Department | Roll number |
| Student list | 1 | Simanta | Computer science | 12345 |
| | 2 | Prashant | Electronics | 23456 |
| | 3 | salina | Electrical | 34567 |
| | 4 | Puran | civil | 45678 |

```
<audio controls >  
  <source src="1.mp3" type="audio/mp3">
```

```
</audio>  
<video width="500" height="500" controls>  
  <source src="2.mp4" type="video/mp4">  
</video>
```

We can use autoplay as well



Audio In HTML

<audio controls>

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

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

Your browser does not support the audio tag.

</audio>

MIME Types for Audio Formats

| Format | MIME-type |
|--------|------------|
| MP3 | audio/mpeg |
| Ogg | audio/ogg |
| Wav | audio/wav |

Attributes

| Attribute | Value | Description |
|-----------------|--------------------------|---|
| <u>autoplay</u> | autoplay | Specifies that the audio will start playing as soon as it is ready |
| <u>controls</u> | controls | Specifies that audio controls should be displayed (such as a play/pause button etc) |
| <u>loop</u> | loop | Specifies that the audio will start over again, every time it is finished |
| <u>muted</u> | muted | Specifies that the audio output should be muted |
| <u>preload</u> | auto metadata none | Specifies if and how the author thinks the audio should be loaded when the page loads |
| <u>src</u> | URL | Specifies the URL of the audio file |

Video on HTML

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

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

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

Your browser does not support the video tag.

MIME Types for Video Formats

| Format | MIME-type |
|--------|------------|
| MP4 | video/mp4 |
| WebM | video/webm |
| Ogg | video/ogg |

Attributes

| Attribute | Value | Description |
|-----------------|--------------------------|---|
| <u>autoplay</u> | autoplay | Specifies that the video will start playing as soon as it is ready |
| <u>controls</u> | controls | Specifies that video controls should be displayed (such as a play/pause button etc). |
| <u>height</u> | <i>pixels</i> | Sets the height of the video player |
| <u>loop</u> | loop | Specifies that the video will start over again, every time it is finished |
| <u>muted</u> | muted | Specifies that the audio output of the video should be muted |
| <u>poster</u> | <i>URL</i> | Specifies an image to be shown while the video is downloading, or until the user hits the play button |
| <u>preload</u> | auto metadata none | Specifies if and how the author thinks the video should be loaded when the page loads |
| <u>src</u> | <i>URL</i> | Specifies the URL of the video file |
| <u>width</u> | <i>pixels</i> | Sets the width of the video player |

Frame

- HTML frames are used to divide your browser window into multiple sections where each section can load a separate HTML document. A collection of frames in the browser window is known as a frameset. The window is divided into frames in a similar way the tables are organized: into rows and columns.

```
<frameset rows="25%, *, 25%">
  <frame src="frame1.html" name="test"
></frame>
  <frame src="frame2.html"></frame>
  <frame src="frame3.html" ></frame>
</frameset>
```

This is frame1

frame1.html
<h1>
This is frame1
</h1>

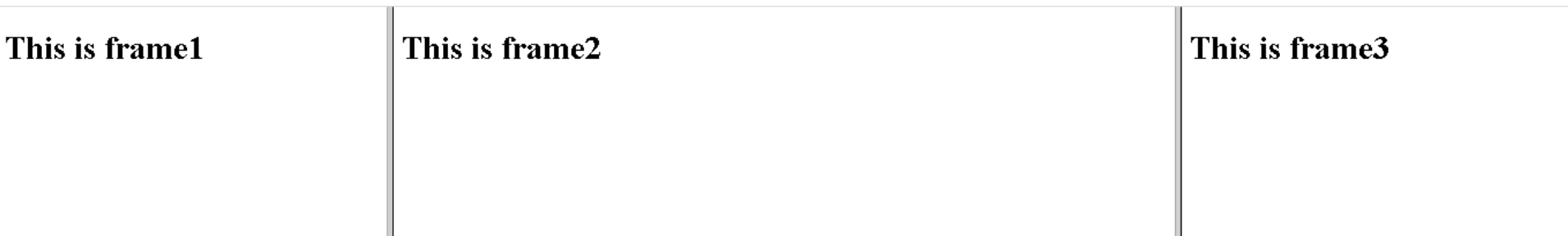
This is frame2

frame2.html
<h1>
This is frame1
</h1>

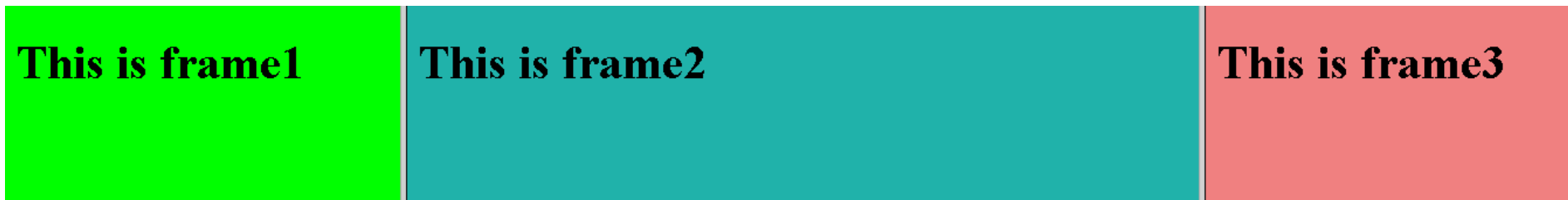
This is frame3

frame3.html
<h1>
This is frame1
</h1>

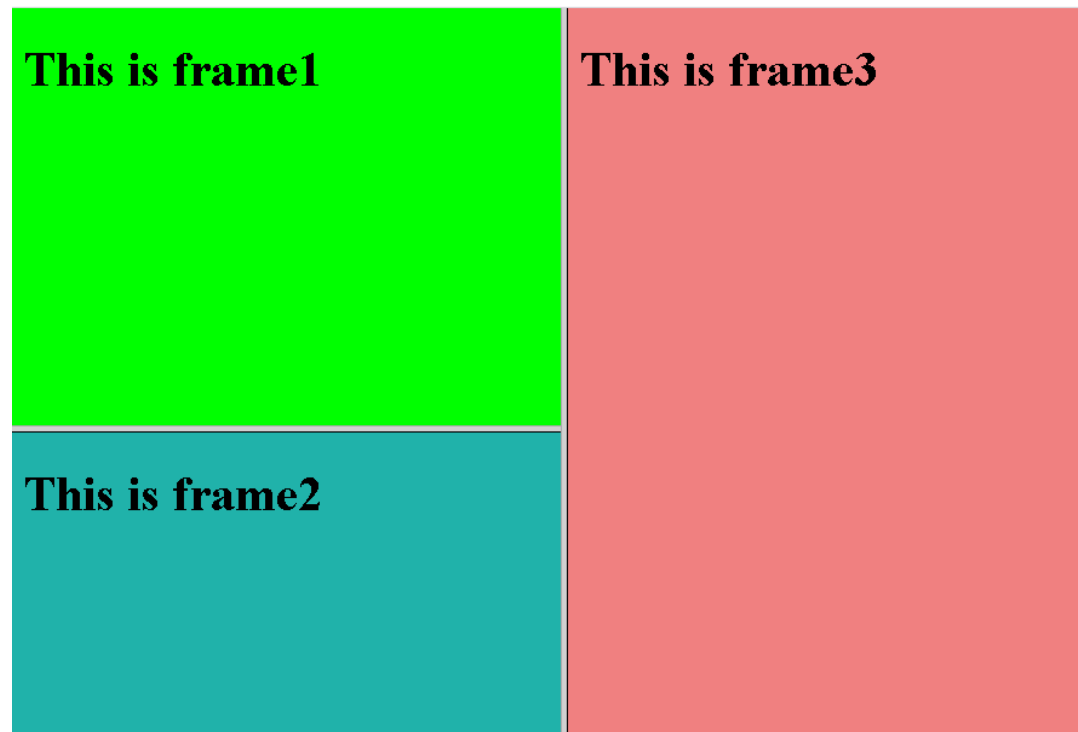
```
<frameset cols="25%, 50%,25%">  
    <frame src="frame1.html" name="test"></fra  
me>  
    <frame src="frame2.html"></frame>  
    <frame src="frame3.html" ></frame>  
</frameset>
```



When we added the background color to the frame1.frame2 and frame3



```
<frameset cols="25%, 50%">  
  <frameset rows="10% ,10%">  
    <frame src="frame1.html" name="test"></frame>  
    <frame src="frame2.html"></frame>  
</frameset>  
  <frame src="frame3.html" ></frame>
```



Disadvantages of Frames

.There are few drawbacks with using frames, so it's never recommended to use frames in your webpages –

- Some smaller devices cannot cope with frames often because their screen is not big enough to be divided up.
- Sometimes your page will be displayed differently on different computers due to different screen resolution.
- The browser's *back* button might not work as the user hopes.
- There are still few browsers that do not support frame technology.

The <frameset> Tag Attributes

Following are important attributes of the <frameset> tag -

| Sr.No | Attribute & Description |
|-------|---|
| 1 | <p>cols</p> <p>Specifies how many columns are contained in the frameset and the size of each column. You can specify the width of each column in one of the four ways -</p> <p>Absolute values in pixels. For example, to create three vertical frames, use <i>cols</i> = "100, 500, 100".</p> <p>A percentage of the browser window. For example, to create three vertical frames, use <i>cols</i> = "10%, 80%, 10%".</p> <p>Using a wildcard symbol. For example, to create three vertical frames, use <i>cols</i> = "10%, *, 10%". In this case wildcard takes remainder of the window.</p> <p>As relative widths of the browser window. For example, to create three vertical frames, use <i>cols</i> = "3*, 2*, 1*". This is an alternative to percentages. You can use relative widths of the browser window. Here the window is divided into sixths: the first column takes up half of the window, the second takes one third, and the third takes one sixth.</p> |
| 2 | <p>rows</p> <p>This attribute works just like the cols attribute and takes the same values, but it is used to specify the rows in the frameset. For example, to create two horizontal frames, use <i>rows</i> = "10%, 90%". You can specify the height of each row in the same way as explained above for columns.</p> |

| | |
|---|--|
| 3 | <p>border</p> <p>This attribute specifies the width of the border of each frame in pixels. For example, border = "5". A value of zero means no border.</p> |
| 4 | <p>frameborder</p> <p>This attribute specifies whether a three-dimensional border should be displayed between frames. This attribute takes value either 1 (yes) or 0 (no). For example frameborder = "0" specifies no border.</p> |
| 5 | <p>framespacing</p> <p>This attribute specifies the amount of space between frames in a frameset. This can take any integer value. For example framespacing = "10" means there should be 10 pixels spacing between each frames.</p> |

The <frame> Tag Attributes

Following are the important attributes of <frame> tag -

| Sr.No | Attribute & Description |
|-------|---|
| 1 | src This attribute is used to give the file name that should be loaded in the frame. Its value can be any URL. For example, src = "/html/top_frame.htm" will load an HTML file available in html directory. |
| 2 | name This attribute allows you to give a name to a frame. It is used to indicate which frame a document should be loaded into. This is especially important when you want to create links in one frame that load pages into an another frame, in which case the second frame needs a name to identify itself as the target of the link. |
| 3 | frameborder This attribute specifies whether or not the borders of that frame are shown; it overrides the value given in the frameborder attribute on the <frameset> tag if one is given, and this can take values either 1 (yes) or 0 (no). |
| 4 | marginwidth This attribute allows you to specify the width of the space between the left and right of the frame's borders and the frame's content. The value is given in pixels. For example marginwidth = "10". |

| | |
|---|---|
| 5 | <p>marginheight</p> <p>This attribute allows you to specify the height of the space between the top and bottom of the frame's borders and its contents. The value is given in pixels. For example <code>marginheight = "10"</code>.</p> |
| 6 | <p>noresize</p> <p>By default, you can resize any frame by clicking and dragging on the borders of a frame. The <code>noresize</code> attribute prevents a user from being able to resize the frame. For example <code>noresize = "noresize"</code>.</p> |
| 7 | <p>scrolling</p> <p>This attribute controls the appearance of the scrollbars that appear on the frame. This takes values either "yes", "no" or "auto". For example <code>scrolling = "no"</code> means it should not have scroll bars.</p> |
| 8 | <p>longdesc</p> <p>This attribute allows you to provide a link to another page containing a long description of the contents of the frame. For example <code>longdesc = "framedescription.htm"</code></p> |

The <iframe> tag specifies an inline frame.

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

| Attribute | Value | Description |
|---------------------|--|---|
| <u>align</u> | left right top middle bottom | Not supported in HTML5. Specifies the alignment of an <iframe> according to surrounding elements |
| <u>frameborder</u> | 1 0 | Not supported in HTML5. Specifies whether or not to display a border around an <iframe> |
| <u>height</u> | <i>pixels</i> | Specifies the height of an <iframe> |
| <u>longdesc</u> | <i>URL</i> | Not supported in HTML5. Specifies a page that contains a long description of the content of an <iframe> |
| <u>marginheight</u> | <i>pixels</i> | Not supported in HTML5. Specifies the top and bottom margins of the content of an <iframe> |
| <u>marginwidth</u> | <i>pixels</i> | Not supported in HTML5. Specifies the left and right margins of the content of an <iframe> |
| <u>name</u> | <i>text</i> | Specifies the name of an <iframe> |

| | | |
|------------------|---|---|
| <u>sandbox</u> | <div> <div></div> <div>allow-forms</div> <div>allow-pointer-lock</div> <div>5 allow-popups</div> <div>allow-same-origin</div> <div>allow-scripts</div> <div>allow-top-navigation</div> </div> | Enables an extra set of restrictions for the content in an <iframe> |
| <u>scrolling</u> | <div>yes</div> <div>no</div> <div>auto</div> | <div>Not supported in HTML5.</div> <div>Specifies whether or not to display scrollbars in an <iframe></div> |
| <u>src</u> | URL | Specifies the address of the document to embed in the <iframe> |
| <u>srcdoc</u> | 5 HTML_code | Specifies the HTML content of the page to show in the <iframe> |
| <u>width</u> | pixels | Specifies the width of an <iframe> |

HTML Forms

HTML Forms are required, when you want to collect some data from the site visitor. For example, during user registration you would like to collect information such as name, email address, credit card, etc. A form will take input from the site visitor and then will post it to a back-end application such as CGI, ASP Script or PHP script etc. The back-end application will perform required processing on the passed data based on defined business logic inside the application.

There are various form elements available like text fields, textarea fields, drop-down menus, radio buttons, checkboxes, etc.

The HTML **<form>** tag is used to create an HTML form and it has following syntax –

```
<form action = "Script URL" method = "GET|POST"> form  
elements like input, textarea etc. </form>
```

Form Attributes

Apart from common attributes, following is a list of the most frequently used form attributes

| Sr.No | Attribute & Description |
|-------|--|
| 1 | action Backend script ready to process your passed data. <form action="/action_page.php"> |
| 2 | method Method to be used to upload data. The most frequently used are GET and POST methods. The form-data can be sent as URL variables (with method="get") or as HTTP post transaction (with method="post"). <form action="/action_page.php" method="get"> |
| 3 | target Specify the target window or frame where the result of the script will be displayed. It takes values like _blank, _self, _parent etc. <form action="/action_page.php" target="_blank"> |

Notes on GET:

- Appends the form data to the URL, in name/value pairs
- NEVER use GET to send sensitive data! (the submitted form data is visible in the URL!)
- The length of a URL is limited (2048 characters)
- Useful for form submissions where a user wants to bookmark the result
- GET is good for non-secure data, like query strings in Google

Notes on POST:

- Appends the form data inside the body of the HTTP request (the submitted form data is not shown in the URL)
- POST has no size limitations, and can be used to send large amounts of data.
- Form submissions with POST cannot be bookmarked

Tip: Always use POST if the form data contains sensitive or personal information!

| | |
|------------|--|
| name | Specifies the name of the form |
| novalidate | Specifies that the form should not be validated when submitted |

HTML Form Controls

HTML Form Controls

There are different types of form controls that you can use to collect data using HTML form –

- Text Input Controls
- Checkboxes Controls
- Radio Box Controls
- Select Box Controls
- File Select boxes
- Hidden Controls
- Clickable Buttons
- Submit and Reset Button

Text Input Controls

There are three types of text input used on forms –

- Single-line text input controls** – This control is used for items that require only one line of user input, such as search boxes or names. They are created using HTML **<input>** tag.

- Password input controls** – This is also a single-line text input but it masks the character as soon as a user enters it. They are also created using HTML **<input>** tag.

- Multi-line text input controls** – This is used when the user is required to give details that may be longer than a single sentence. Multi-line input controls are created using HTML **<textarea>** tag.

1. Single-line text input controls

```
<!DOCTYPE html>  
<html>
```

First name:

Last name:

```
  <head>  
    <title>Text Input Control</title>  
  </head>  
  <body>  
    <form >  
      First name: <input type = "text" name =  
"first_name" />  
      <br>  
      Last name: <input type = "text" name =  
"last_name" />  
    </form>  
  </body>  
  
</html>
```

Attributes

Following is the list of attributes for `<input>` tag for creating text field.

First name:

Last name:

| Sr.No | Attribute & Description |
|-------|--|
| 1 | type Indicates the type of input control and for text input control it will be set to text . |
| 2 | name Used to give a name to the control which is sent to the server to be recognized and get the value. |
| 3 | value This can be used to provide an initial value inside the control. <form > First name: <input type = "text" name = "first_name" value="Simanta"> Last name: <input type = "text" name = "last_name" value="Kasaju"> |
| 4 | size Allows to specify the width of the text-input control in terms of characters. |
| 5 | maxlength Allows to specify the maximum number of characters a user can enter into the text box. <code>maxlength="5"</code> |

We can use **readonly** ,**required**,**disabled**,**Hidden**,**Placeholder**as well with the input text

```
<form >  
    First name: <input type = "text" name =  
"first_name" required>  
    <br>  
    Last name: <input type = "text" name =  
"last_name" />  
</form>
```

First Name:

First Name:



Please fill out this field.

Submit

readonly

First name:

Last name:

Disabled

First name:

Last name:

Hidden

2. Password input controls

User ID :

Password:

<form >

User ID : <input type = "text" name = "user_id" />

Password: <input type = "password" name =
"password" />

</form>

Attributes are same as previous

3. Multiple-Line Text Input Controls

Description :

Enter description here...

<form>

Description :

<textarea rows = "5" cols = "50" name =
"description">

Enter description here...

</textarea>

</form>

Validation using **Pattern** and title

<form >

User ID : <input type = "text" name =
"user_id" pattern="[a-z]{1,15}"
title="Username should only contain lowercase
letters. e.g. simanta">

Password: <input type = "password" name
= "password"/>
</form>

User ID : Sio

Password:

Username should only contain lowercase letters, e.g. simanta

We can use autocomplete,required
Input mode

Pattern="[a-zA-Z][a-zA-Z0-9-_{4,24}"

pattern=".{8,}" title="Eight or more characters"

pattern="[A-Za-z]{3}" title="Three letter
country code"

pattern="(?=.*\d)(?=.*[a-z])(?=.*[A-Z]).{8,}"

title="Must contain at least one number and one uppercase and lowercase letter, and at
least 8 or more characters"

Attributes

Following is the list of attributes for <textarea> tag.

| Sr.No | Attribute & Description |
|-------|---|
| 1 | name Used to give a name to the control which is sent to the server to be recognized and get the value. |
| 2 | rows Indicates the number of rows of text area box. |
| 3 | cols Indicates the number of columns of text area box |

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> <br/>
    <input type="text" id="lastname"
name="lastname"/> <br/>
</form>
```

First Name:

Last Name:

HTML 5 Email Field Control

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

Email:



Please include an '@' in the email address.
'assjjakbxhs' is missing an '@'.

Checkbox Control

Checkboxes are used when more than one option is required to be selected. They are also created using HTML `<input>` tag but type attribute is set to **checkbox**..

```
<form>
```

Hobby:


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

```
<form>
```

```
    <input type = "checkbox" name = "maths" value = "on">
Maths
    <input type = "checkbox" name = "physics" value =
"on"> Physics
</form>
```

Hobby:

☒ Cricket
☒ Football
☐ Hockey

☐ Maths ☐ Physics

Attributes

Following is the list of attributes for <checkbox> tag.

| Sr.No | Attribute & Description |
|-------|---|
| 1 | type Indicates the type of input control and for checkbox input control it will be set to checkbox .. |
| 2 | name Used to give a name to the control which is sent to the server to be recognized and get the value. |
| 3 | value The value that will be used if the checkbox is selected. |
| 4 | checked Set to <i>checked</i> if you want to select it by default. <input type = "checkbox" name = "maths" value = "off" checked> |

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Radio Button Control

Radio buttons are used when out of many options, just one option is required to be selected. They are also created using HTML `<input>` tag but type attribute is set to **radio**. Attributes are same as checkbox

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

Gender: ☒ Male ☐ Female

```
<form>
  <input type = "radio" name = "subject"
value = "maths"> Maths
  <input type = "radio" name = "subject"
value = "physics"> Physics
</form>
```

☒ Maths ☐ Physics

Select Box Control

A select box, also called drop down box which provides option to list down various options in the form of drop down list, from where a user can select one or more options.

```
<form>
```

```
  <select name="dropdown">
```

```
    <option value = "Web tech"
```

```
selected>Web tech</option>
```

```
    <option value = "Java">Java</option>
```

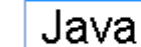
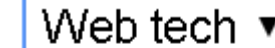
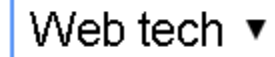
```
    <option value = "DSA">DSA</option>
```

```
    <option value =
```

```
"Maths">Maths</option>
```

```
  </select>
```

```
</form>
```



Attributes

Following is the list of important attributes of
<select> tag –

| Sr.No | Attribute & Description |
|-------|---|
| 1 | name Used to give a name to the control which is sent to the server to be recognized and get the value. |
| 2 | size This can be used to present a scrolling list box. |
| 3 | multiple If set to "multiple" then allows a user to select multiple items from the menu. |

Following is the list of important attributes of <option> tag –

| Sr.No | Attribute & Description |
|-------|---|
| 1 | value The value that will be used if an option in the select box box is selected. |
| 2 | selected Specifies that this option should be the initially selected value when the page loads. |
| 3 | label An alternative way of labeling options |

File Upload Box

If you want to allow a user to upload a file to your web site, you will need to use a file upload box, also known as a file select box. This is also created using the `<input>` element but type attribute is set to **file**.

```
<form>
```

```
  <input type = "file" name = "fileupload" accept = "image/*" />
```

```
</form>
```

Choose File No file chosen

Attributes

Following is the list of important attributes of file upload box –

| Sr.No | Attribute & Description |
|-------|---|
| 1 | name Used to give a name to the control which is sent to the server to be recognized and get the value. |
| 2 | accept Specifies the types of files that the server accepts. |

Button Controls

There are various ways in HTML to create clickable buttons.

You can also create a clickable button using `<input>` tag by setting its type attribute to **button**.

The type attribute can take the following values –

| Sr.No | Type & Description |
|-------|---|
| 1 | submit This creates a button that automatically submits a form. |
| 2 | reset This creates a button that automatically resets form controls to their initial values. |
| 3 | button This creates a button that is used to trigger a client-side script when the user clicks that button. |
| 4 | image This creates a clickable button but we can use an image as background of the button. |



| | | |
|--------|-------|----|
| Submit | Reset | OK |
|--------|-------|----|

```
<form>  
    <input type = "submit" name = "submit"  
value = "Submit" />  
    <input type = "reset" name = "reset"  
value = "Reset" />  
    <input type = "button" name = "ok"  
value = "OK" />  
    <input type = "image" name =  
"imagebutton" src = "pic/7.jpg" width="100"  
height="100"/>  
</form>
```

Grouping Form Controls

You also group logically related controls and labels within a web form using the <legend> element. Grouping form controls into categories makes it easier for users to locate a control which makes the form more user-friendly. Let's try out the following example to see how it works:

| | |
|--|------------------------------------|
| Name | |
| Firstname: <input type="text"/> | Lastname: <input type="text"/> |
| Gender | |
| <input type="radio"/> Male <input type="radio"/> Female | |
| Hobbies | |
| <input type="checkbox"/> Soccer <input type="checkbox"/> Cricket <input type="checkbox"/> Baseball | |
| Contact Details | |
| Email Address: <input type="text"/> | Phone Number: <input type="text"/> |

```

<!DOCTYPE html>
<html lang="en">
<head>
  <title>Grouping Form Controls in
  HTML</title>
</head>
<body>
  <form>
    <fieldset>
      <legend>Name</legend>
      <label>Firstname: <input type="text"
name="firstname"></label>
      <label>Lastname: <input type="text"
name="lastname"></label>
    </fieldset>
    <fieldset>
      <legend>Gender</legend>
      <label><input type="radio"
name="gender" value="male"> Male</label>
      <label><input type="radio"
name="gender" value="female">
Female</label>
    </fieldset>

```

```

<fieldset>
  <legend>Hobbies</legend>
  <label><input type="checkbox"
name="hobbies" value="soccer">
Soccer</label>
  <label><input type="checkbox"
name="hobbies" value="cricket">
Cricket</label>
  <label><input type="checkbox"
name="hobbies" value="baseball">
Baseball</label>
</fieldset>
<fieldset>
  <legend>Contact Details</legend>
  <label>Email Address: <input
type="email" name="email"></label>
  <label>Phone Number: <input
type="text" name="phone"></label>
</fieldset>
</form>
</body>
</html>

```


```
<form>
  <input type="button"
value="Button"><br>
<input type="color" ><br>
<input type="date"><br>
<input type="datetime-local"><br>
<input type="email"> <br>
<input type="file"><br>
<input type="hidden"><br>
<input type="image" src="pic/3.jpg"
width="50px" height="50px"><br>
<input type="month" value="2021-
05"><br>
<input type="number" value="4"><br>
<input type="password" > <br>
<input type="range"><br>
<input type="reset"><br>
<input type="search"><br>
<input type="submit"><br>
<input type="time"><br>
<input type="url"><br>
<input type="week"><br>
</form>
```

Button

mm / dd / yyyy

mm / dd / yyyy -- : -- --

Choose File No file chosen



May 2021

4

Reset

Submit

-- : -- --

Week --, ----

June 2021 ▼



| Week | Sun | Mon | Tue | Wed | Thu | Fri | Sat |
|------|-----|-----|-----|-----|-----|-----|-----|
| 22 | 30 | 31 | 1 | 2 | 3 | 4 | 5 |
| 23 | 6 | 7 | 8 | 9 | 10 | 11 | 12 |
| 24 | 13 | 14 | 15 | 16 | 17 | 18 | 19 |
| 25 | 20 | 21 | 22 | 23 | 24 | 25 | 26 |
| 26 | 27 | 28 | 29 | 30 | 1 | 2 | 3 |

Week --, ----



HTML color




RGB Colors

RGB color values are supported in all browsers.

An RGB color value is specified with: `rgb(RED , GREEN , BLUE)`.

Each parameter defines the intensity of the color as an integer between 0 and 255.

For example, `rgb(0,0,255)` is rendered as blue, because the blue parameter is set to its highest value (255) and the others are set to 0.

| Color | RGB | Color |
|---|---------------------------|-------|
|  | <code>rgb(255,0,0)</code> | Red |
|  | <code>rgb(0,255,0)</code> | Green |
|  | <code>rgb(0,0,255)</code> | Blue |

[https://www.w3schools.com/tags/ref_colorna
mes.asp](https://www.w3schools.com/tags/ref_colorna
mes.asp)

Cont.

Hexadecimal Colors

Hexadecimal color values are also supported in all browsers.

A hexadecimal color is specified with: #RRGGBB.

RR (red), GG (green) and BB (blue) are hexadecimal integers between 00 and FF specifying the intensity of the color.

For example, #0000FF is displayed as blue, because the blue component is set to its highest value (FF) and the others are set to 00.

| Color | HEX | RGB | Color |
|--|---------|--------------|-------|
|  | #FF0000 | rgb(255,0,0) | Red |
|  | #00FF00 | rgb(0,255,0) | Green |
|  | #0000FF | rgb(0,0,255) | Blue |

```
<!DOCTYPE html>
<html>
<style>
div {padding:10px;}
</style>
<body>
```

```
<h1>Colors can be set using color names</h1>
```

```
<div style="background-color:red">
  <h1 style="color:white">Heading</h1>
</div>
```

```
<div style="background-color:yellow">
  <h1 style="color:blue">Heading</h1>
</div>
```

```
<div style="background-color:blue">
  <h1 style="color:yellow">Heading</h1>
</div>
```

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

Colors can be set using color names

Heading

Heading

Heading

```
<style>
div {height:50px;width:100%;}
</style>
<body>
<h1>Gray can be set using equal values for all
light sources</h1>
```

```
<div style="background-
color:rgb(0,0,0)"></div>
<div style="background-
color:rgb(64,64,64)"></div>
<div style="background-
color:rgb(128,128,128)"></div>
<div style="background-
color:rgb(192,192,192)"></div>
```

```
<h1 style="color:rgb(0,0,0)">Heading</h1>
<h1 style="color:rgb(64,64,64)">Heading</h1>
<h1
style="color:rgb(128,128,128)">Heading</h1>
<h1
style="color:rgb(192,192,192)">Heading</h1>
```

Gray can be set using equal values for all light sources



Heading

Heading

Heading

Heading

Some Useful HTML Character Entities

| | | | |
|---|---------------------------------------|---------|---------|
| | non-breaking space | | |
| < | less than | < | < |
| > | greater than | > | > |
| & | ampersand | & | & |
| " | double quotation mark | " | " |
| ' | single quotation mark (apostrophe) | ' | ' |
| ¢ | cent | ¢ | ¢ |
| £ | pound | £ | £ |
| ¥ | yen | ¥ | ¥ |
| € | euro | € | € |
| © | copyright | © | © |
| ® | registered trademark | ® | ® |

End of HTML