HTML:

HTML stands for Hyper Text Markup Language it was created by Berners-Lee in late 1991, which is the most widely used language on Web to develop web pages.

Web browsers can read HTML files and compose them into visible or audible web pages. Browsers do not display the HTML tags and scripts, but use them to interpret the content of the page. HTML describes the structure of a website semantically along with cues for presentation, making it a markup language, rather than a programming language.

HTML VERSIONS

VERSION YEAR

Html 1991

Html 2.0 1995

Html 3.2 1997

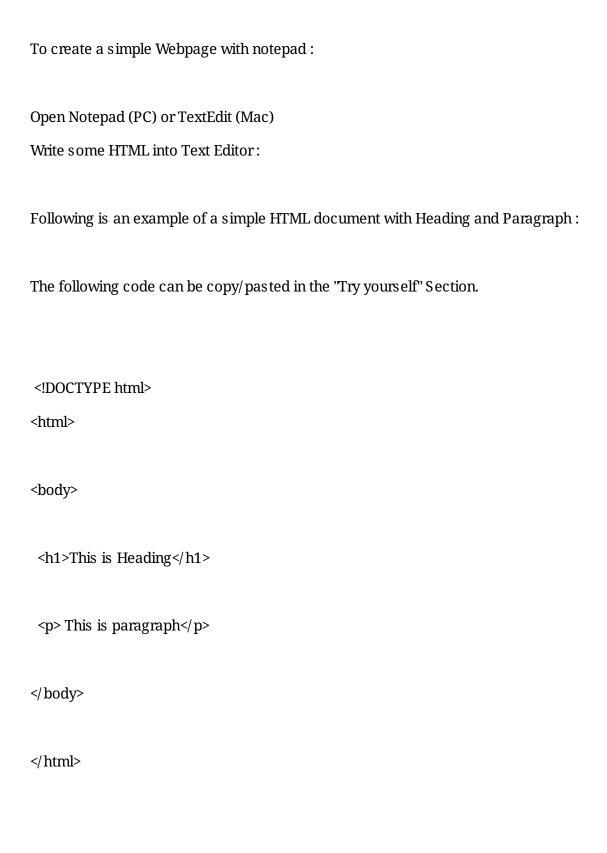
Html 4.01 1999

XHtml 2000

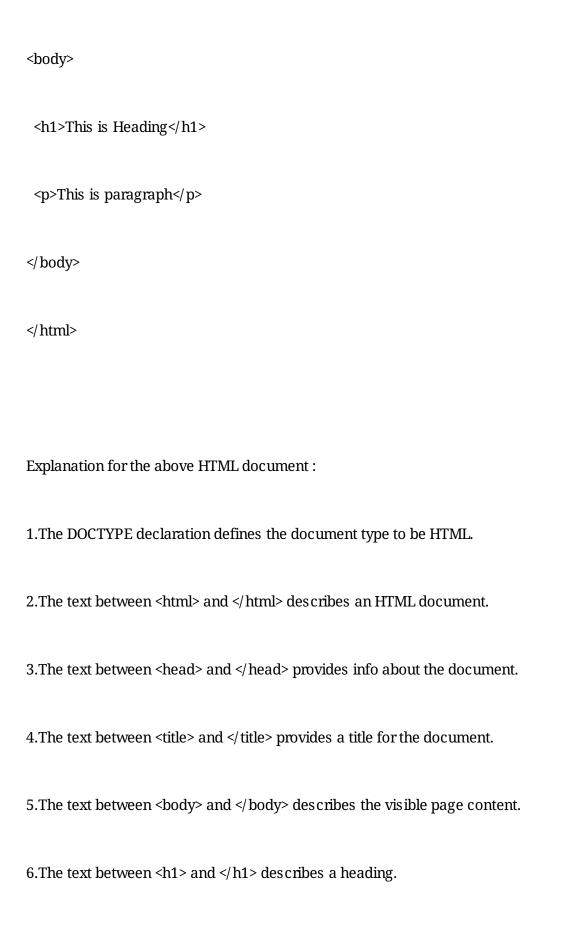
Html 5 2012

GETTING STARTED:

HTML files are just simple text files, so to start writing in HTML, you need a simple text editor ,for learning HTML a simple text editor like Notepad (PC) or TextEdit (Mac) will be easy. HTML can be edited by using a professional HTML editor like Adobe Dreamweaver, Microsoft Expression Web,CoffeeCup HTML Editor.



Save the HTML page :
The finished page should be saved in .Html extension .
UTF-8 is the preferred encoding for HTML files .
To view the HTML page :
Open the saved HTML file in your browser. The page will look like this:
HTML BASICS :
A simple HTML Document :
html
<html></html>
<head></head>
<title>Title of the page</title>



7.The text between and describes a paragraph.
HEADING IN HTML:
Every document will have a heading. HTML has different sizes for headings. which use the following elements <h1>, <h2>, <h3>, <h4>, <h5>, and <h6>. While displaying any heading, browser adds one line before and one line after that heading.</h6></h5></h4></h3></h2></h1>
Example for Heading:
html
<html></html>
<head></head>
<title>Heading Example</title>
<body></body>
<h1>Example for heading h1</h1>
<h2>Example for heading h2</h2>

<h3>Example for heading h3</h3>
<h4>Example for heading h4</h4>
<h5>Example for heading h5</h5>
<h6>Example for heading h6</h6>
Result for the above Example :
PARAGRAPH IN HTML:
In HTML you can structure your text into different paragraphs by using the tag p . Each paragraph of text should go in between an opening p and a closing p tag .
Example for Paragraph:
html
<html></html>
<head></head>
<title>Paragraph Example</title>

 body>
This is First Paragraph.
This is Second Paragraph.
This is Third Paragraph.
Result for the above example :
LINE BREAK IN HTML:
If you use the br> tag , anything following it starts from the next line . This tag is an example of an empty element, there is no need for opening and closing tags, as there is nothing to go in between them.
Example for Line break:

html
<html></html>
<head></head>
<title>Example for Line Break</td></tr><tr><td></title>
<body></body>
This
is an example for
Line Break

Result for the above example :

CENTERING CONTENT:
To center any content in HTML You can use <center> tag this will to put any content inside the tag in the center of the page or any table cell.</center>
Example for Centering content :
html
<html></html>
<head></head>
<title>Centering content</title>
 body>
This is not in the center .
<center></center>
This is in the center.
<pre></pre>

</body>

</html>

Result for the above example :
PRESERVE FORMATTING:
If want your text to be exact format of how it is written in the HTML document you can use the preformatted tag <pre></pre>
Example for Preserve formatting:
html
<html></html>
<head></head>
<title>Preserve Formatting</title>
 body>

<pre><pre><</pre></pre>
This
is
an
Example for preserve
Result for the above example :
HORIZONTAL LINE:
To create a horizontal line between a section of document the <hr/> > tag can be used it creates a

line from the current position in the document to the right margin and breaks the line

accordingly.

Example for horizontal line :
html
<html></html>
<head></head>
<title>Horizontal Line </title>
<body></body>
This is above the line
<hr/>
This is below the line

HTML BASICS:



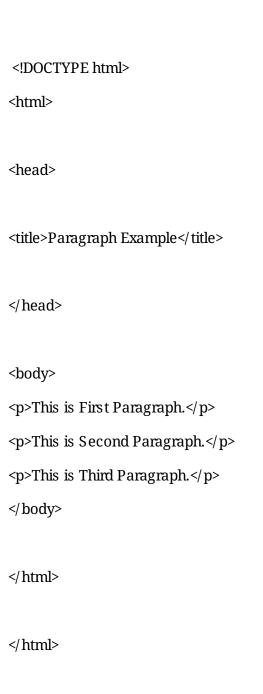
2.The text between html describes an HTML document.
3.The text between <head> and </head> provides info about the document.
4.The text between <title> and </title> provides a title for the document.
5.The text between <body> and </body> describes the visible page content.
6.The text between <h1> and </h1> describes a heading.
7.The text between and describes a paragraph.
HEADING IN HTML:
Every document will have a heading. HTML has different sizes for headings. which use the following elements <h1>, <h2>, <h3>, <h4>, <h5>, and <h6>. While displaying any heading, browser adds one line before and one line after that heading.</h6></h5></h4></h3></h2></h1>
Example for Heading:
html
<html></html>

<head></head>
<title>Heading Example</title>
<body></body>
<h1>Example for heading h1</h1>
<h2>Example for heading h2</h2>
<h3>Example for heading h3</h3>
<h4>Example for heading h4</h4>
<h5>Example for heading h5</h5>
<h6>Example for heading h6</h6>
Result for the above Example :

PARAGRAPH IN HTML:

In HTML you can structure your text into different paragraphs by using the tag p-. Each paragraph of text should go in between an opening p- and a closing p- tag .

Example for Paragraph:



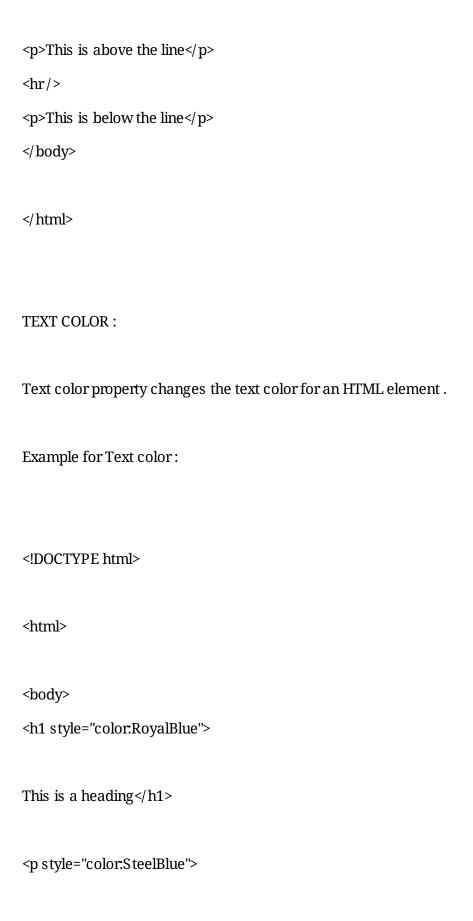
Result for the above example :
LINE BREAK IN HTML :
If you use the br> tag , anything following it starts from the next line . This tag is an example of an empty element, there is no need for opening and closing tags, as there is nothing to go in between them.
Example for Line break:
html
<html></html>
<head></head>
<title>Example for Line Break</td></tr><tr><td></title>
 body>
This
is an example for br>

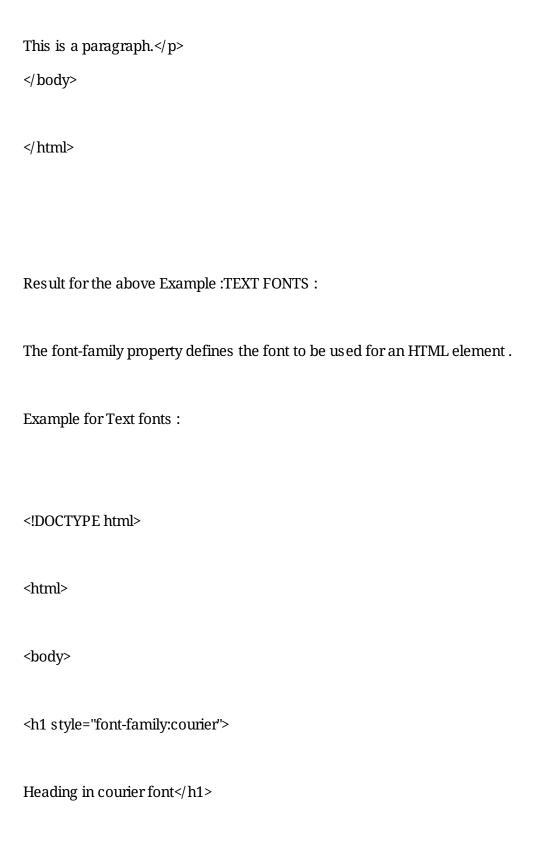
Line Break	
Decult for the above example:	
Result for the above example :	
CENTERING CONTENT:	
To center any content in HTML You can use <center> tag this will to put any content inside that in the center of the page or any table cell.</center>	he
8 a	
Example for Centering content:	
html	
<html></html>	
<head></head>	
\leau\rangle	
<title>Centering content</title>	

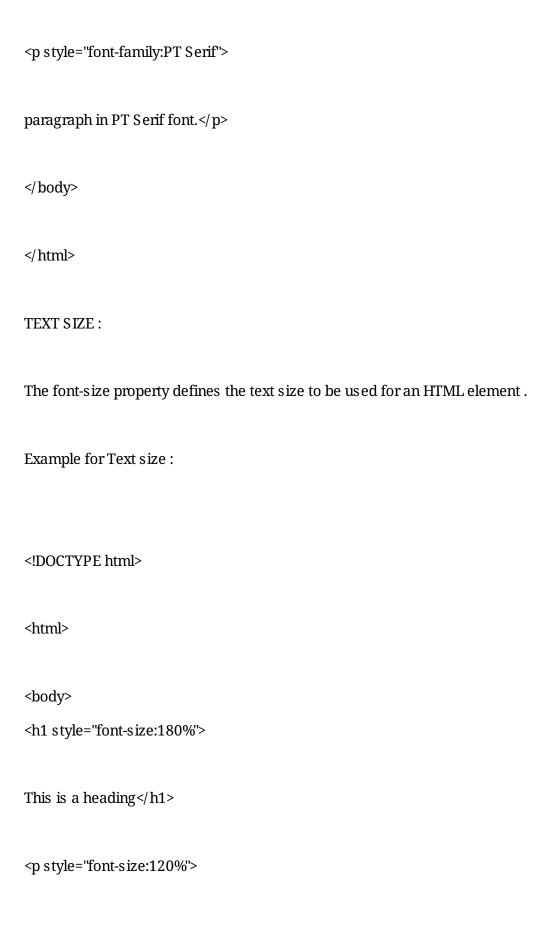
<body></body>
This is not in the center .
<center></center>
This is in the center.
Result for the above example :
PRESERVE FORMATTING:
If want your text to be exact format of how it is written in the HTML document you can use the preformatted tag <pre></pre>
preserve the formatting of the source document.
Example for Preserve formatting:
html

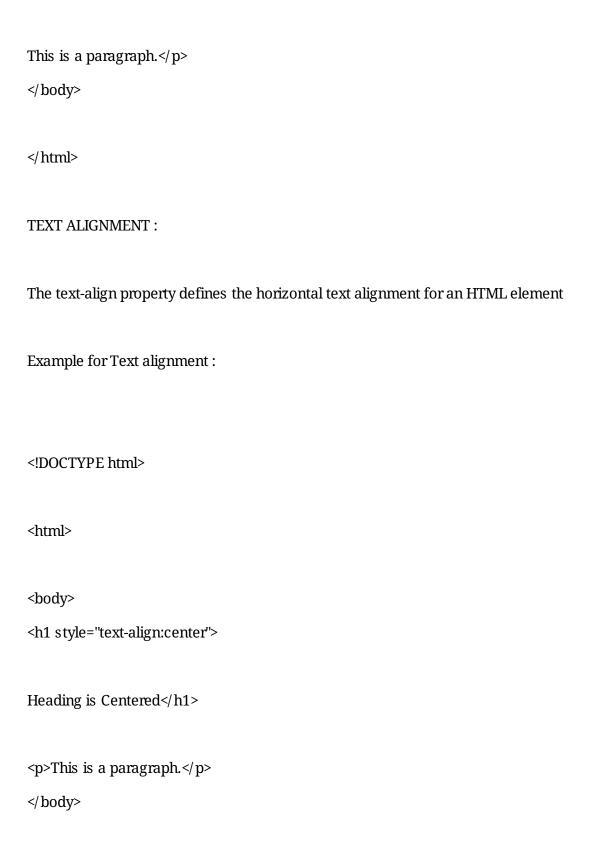
<html></html>
<head></head>
<title>Preserve Formatting</title>
<body></body>
<pre><</pre>
This
is
an
Example for preserve

Result for the above example :
HORIZONTAL LINE:
To create a horizontal line between a section of document the <hr/> > tag can be used it creates a line from the current position in the document to the right margin and breaks the line accordingly.
Example for horizontal line:
html
<html></html>
<head></head>
<title>Horizontal Line </title>
 body>





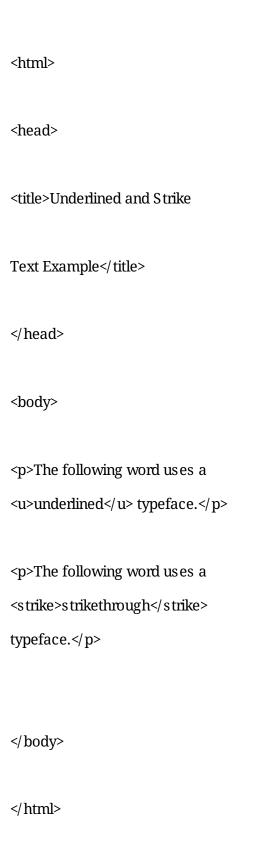




HTML FORMATTING:
In HTML the text can be formatted in many ways with the ability to make text bold, italicized, or underlined , these are few of the option available to indicate how text can appear in HTML .
BOLD FORMATTING:
Bold formatting property changes the element to bold format, anything that appears within <b b=""> element, is displayed in bold .
Example for Bold formatting:
html
<html></html>
<head></head>
<title>Bold Formatting</title>

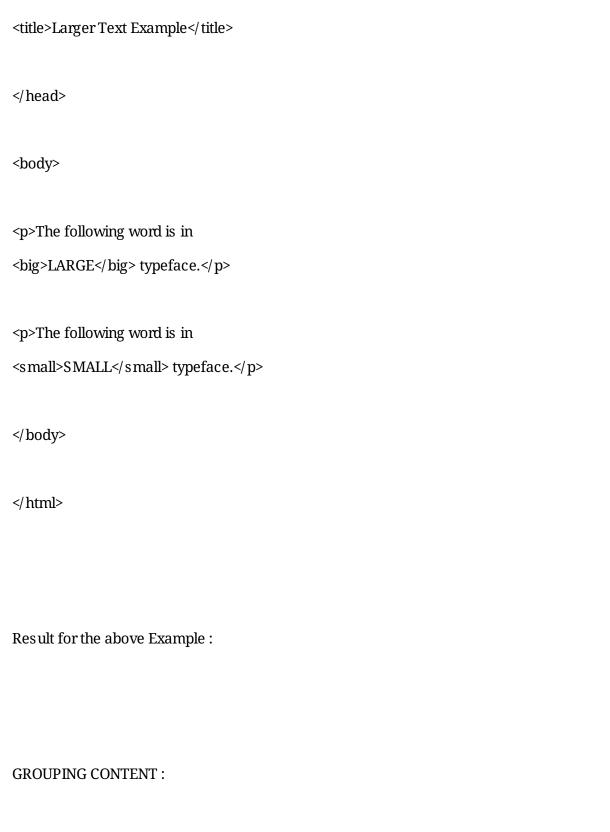
<body></body>
The following word uses a
bold typeface.
Result for the above Example
ITALIC FORMATTING:
Italic formatting property changes the element to bold format anything that appears within <i></i> element is displayed in italicized
Example for Italic Formatting :
html
<html></html>
<head></head>

<title>Italic Text Example</title>
 body>
The following word uses a
<i>i>italicized</i> typeface.
Result for the Above Example :
UNDERLINED & STRIKE:
Underlined and Strike format property changes the element to underlined and strikethrough, anything that appears within <u></u> element is displayed with underline and Anything that appears within <strike></strike> element is displayed with strikethrough.
Example for Underlined and strike :
html



Result for the above Example:
MARKED AND DELETED:
Marked and Deleted format property changes the element to Marked and deleted, anything that appears within <mark></mark> element is displayed as marked text and Anything that appears within element is displayed as deleted text.
Example for Marked and Deleted :
html
<html></html>
<head></head>
<title> Marked & Deleted </title>
ch a dry
 body>
on This is among Marked almost a class
This is <mark>Marked</mark>

This is Deleted
Result for the above Example :
LARGE AND SMALL TEXT:
Large and Small format property changes the element to Larger and small text . The content of the $<$ big> $<$ /big> element is displayed one font size larger than the rest of the text surrounding it . The content of the $<$ small> $<$ /small> element is displayed one font size smaller than the rest of the text surrounding it .
The Example for Large and Small Text:
html
<html></html>
<head></head>



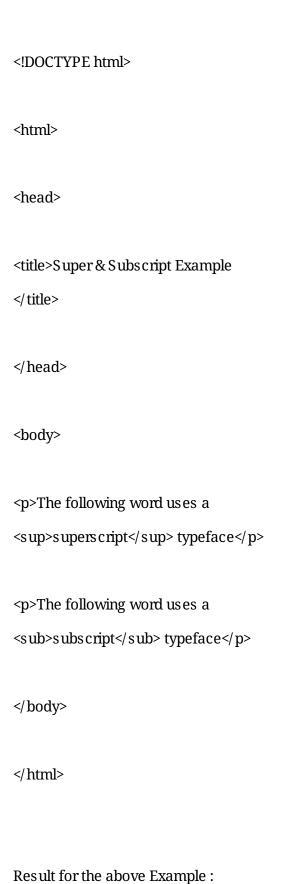
The <div> and elements allow you to group together several elements to create sections or subsections of a page. The <div> tag defines a division or a section in an HTML

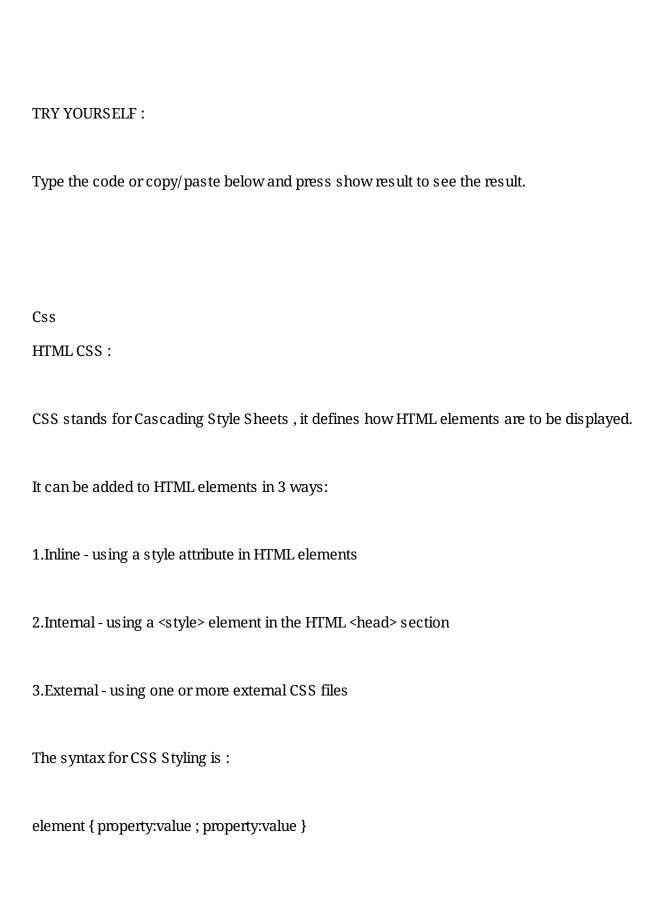
document. The <s pan> element can be used to group inline elements only. So, if you have a part of a sentence or paragraph which you want to group together, you could use the element. Example for Grouping content: <!DOCTYPE html> <html> <body> <div style="color:steelblue"> <h3>This is a heading in a div element</h3> This is some text in a div element.

</div>

This is the example of

span tag
Result for the above Example :
SUPER & SUBSCRIPT:
Superscript and Subscript format property changes the element to Superscript and Subscript The content of the element is displayed in superscript format. The content of the element is displayed in subscript format.
Example of Super & Subscript :





Π	NLINE STYLING:
	nline styling is useful for applying a unique style to a single HTML element . Example for Inline Styling :
<	html
<	chtml>
<	<pre>>body></pre>
<	ch1 style="color:steelblue">
Т	This is inline styling example
<	
<	<pre>// html></pre>
F	Result for the above Example :

INTERNAL STYLING:
An internal style sheet can be used to define a common style for all HTML elements on a page.
Internal styling is defined in the <head> section of an HTML page, using a <style> tag</td></tr><tr><td>Example for Internal styling :</td></tr><tr><td></td></tr><tr><td><!DOCTYPE html></td></tr><tr><td><html></td></tr><tr><td><head></td></tr><tr><td><style></td></tr><tr><td>body {background-color:</td></tr><tr><td>MediumTurquoise }</td></tr><tr><td>h1 {</td></tr><tr><td>color:steelblue;</td></tr><tr><td>font-family:verdana;</td></tr></tbody></table></style></head>

```
font-size:300%;
}
p {
color:DarkOrchid;
font-family:verdana;
font-size:200%;
}
</style>
</head>
<body>
 <h1>This is a heading</h1>
 This is a paragraph.
</body>
</html>
```

 $Result \ for the \ above \ Example:$

EXTERNAL STYLING:	
In External styling the same styles can be used across multiple pages of the site .	
External styles are defined in the <head> section of an HTML page, in the <link/> tag .</head>	
Example for External Styling:	
html	
<html></html>	
<head></head>	
k rel="External" href="style1.css">	
 <bd><bd><h1>This is a heading</h1></bd></bd>	

This is a paragraph.
Result for the above example :
CSS BOX:
This creates a box a around an HTML element, CSS border property defines a visible border
around an element and padding property defines a padding space inside the border, margin property defines a margin space outside the border.
DIODELLA METHIES A HIGIERI SDACE OUISIAE HIE DOIGEL.
property defines a marght space outside the bolder.
Example for CSS Box:
Example for CSS Box:
Example for CSS Box: html
Example for CSS Box:
Example for CSS Box: html
Example for CSS Box: html
Example for CSS Box: html <html></html>

```
p {
 border:5px solid steelblue;
 padding:10px;
 margin:30px;
}
div {
 width: 320px;
 padding: 10px;
 border: 5px solid Turquoise;
 margin: 30px;
}
</style>
</head>
<body>
CSS BOX EXAMPLE
<div>
p> This a Box p>
</ div>
```

Result for the above Example
NAVIGATION BAR
A navigation bar is a section of a graphical user interface intended to aid visitors in accessing
information. Navigation bars are implemented in file browsers, web browsers and as a design element of some web sites
Vertival Navigation Bar
In the vertical navigation bar all the content will be in vertical format.
Example For Vertical Navigation Bar
html
<html></html>
<head></head>

```
<style>
ul {
  list-style-type: none;
  margin: 0;
  padding: 0;
  width: 200px;
  background-color: #f1f1f1;
}
li a {
  display: block;
  color: #000;
  padding: 8px 0 8px 16px;
  text-decoration: none;
}
li a.active {
  background-color: steelblue;
  color: white;
}
li a:hover:not(.active) {
  background-color: turquoise;
```

```
color: white;
}
</style>
</head>
<body>
<h2>Vertical Navigation Bar</h2>
In this example, Active class is
in a Steelblue background color and
a white text.
<a class="active" href="#home">
Home</a>
<a href="#Content">Content</a>
<a href="#contact">Contact</a>
<a href="#about">About</a>
```

Result for the above Example
Fixed Vertical Navigation Bar
In fixed Vertical Nave Bar, the nav bar will be fixed in the same position even if the content of the page is scrolled down.
Example for Fixed Vertical Nav Bar
html
<html></html>
<head></head>
<style></td></tr><tr><td>body {</td></tr><tr><td>margin: 0;</td></tr></tbody></table></style>

```
}
ul {
  list-style-type: none;
  margin: 0;
  padding: 0;
  width: 26%;
  background-color: #f1f1f1;
  position: fixed;
  height: 100%;
  overflow: auto;
}
li a {
  display: block;
  color: #000;
  padding: 8px 0 8px 16px;
  text-decoration: none;
}
li a.active {
  background-color: steelblue;
  color: white;
}
```

```
li a:hover:not(.active) {
 background-color: turquoise;
 color: white;
}
</style>
</head>
<body>
<a class="active" href="#home">
Home</a>
<a href="#news">News</a>
<a href="#contact">Contact</a>
<a href="#about">About</a>
<div style="margin-left:26%;</pre>
padding:2px 16px;height:1000px;">
```

<h2>Fixed Side Nav Bar</h2>

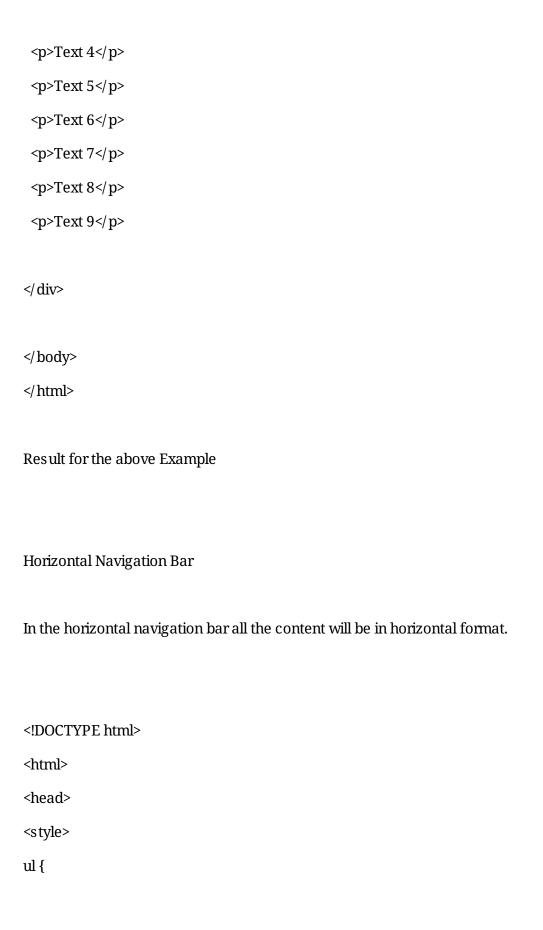
<h3>Try to scroll this area, and see how the sidenav sticks to the page</h3>

Notice that this div element has a left margin of 26%. This is because the side navigation is set to 26% width. If you remove the margin, the sidenav will overlay/sit on top of this div.

Also notice that we have set overflow:auto to sidenay. This will add a scrollbar when the sidenay is too long (for example if it has over 50 links inside of it).

Text 1
Text 2

Text 3



```
list-style-type: none;
  margin: 0;
  padding: 0;
  overflow: hidden;
  background-color: #333;
}
li {
  float: left;
}
li a {
  display: block;
  color: white;
  text-align: center;
  padding: 14px 16px;
  text-decoration: none;
}
li a:hover:not(.active) {
  background-color: turquoise;
}
.active {
  background-color: steelblue;
```

```
}
</style>
</head>
<body>
<h3> Horizontal Navigation Bar </h3>
In this example, Active class is
in a Steelblue background color and
a white text.
<a class="active" href="#home">
Home</a>
<a href="#news">Content</a>
<a href="#contact">Contact</a>
<a href="#about">About</a>
```

```
</body>
</html>
Result for the above Example
Fixed Horizontal Nav Bar
<!DOCTYPE html>
<html>
<head>
<s tyle>
body {margin:0;}
ul {
 list-style-type: none;
 margin: 0;
 padding: 0;
 overflow: hidden;
 background-color: #333;
```

```
position: fixed;
  top: 0;
  width: 100%;
}
li {
  float: left;
}
li a {
  display: block;
  color: white;
  text-align: center;
  padding: 14px 16px;
  text-decoration: none;
}
li a:hover:not(.active) {
  background-color: turquoise;
}
.active {
  background-color: steelblue;
}
```

```
</style>
</head>
<body>
<a class="active" href="#home">
Home</a>
<a href="#news">News</a>
<a href="#contact">Contact</a>
<a href="#about">About</a>
<div style="padding:20px;margin-top:</pre>
30px;background-color:lightgrey;
height:1500px;">
<h1>Fixed Top Navigation Bar</h1>
<h2>S croll this page to see the
effect</h2>
```

<h2> Nav bar will stay at

the top of the page while

scrolling</h2>

Some text

div
Result for the above Example
DROPDOWN
A drop-down menu is a graphical control element, similar to a list box, that allows the user to
choose one value from a list. When a drop-down list is inactive, it displays a single value. When activated, it displays (drops down) a list of values, from which the user may select one.
dedivated, it displays (drops down, a list of values, from which the discrimity select one.
Constant Para Describerary
Example For Dropdown
html
<html></html>
<head></head>
<style></td></tr><tr><td></td></tr><tr><td>.dropdown1 {</td></tr><tr><td>position: relative;</td></tr><tr><td>display: inline-block;</td></tr><tr><td></td></tr></tbody></table></style>

```
}
.dropdown1-content {
  display: none;
  position: absolute;
  background-color: lightgrey;
  min-width: 160px;
  box-shadow: 0px 8px 16px 0px
  rgba(0,0,0,0.2);
  padding: 12px 16px;
}
.dropdown1:hover.dropdown1-content {
  display: block;
}
.dropbtn {
  background-color: steelblue;
  color: white;
  padding: 16px;
  font-size: 16px;
```

```
border: none;
 curs or: pointer;
}
.dropdown {
 position: relative;
  display: inline-block;
}
.dropdown-content {
  display: none;
 position: absolute;
 background-color: #f9f9f9;
 min-width: 160px;
  box-shadow: 0px 8px 16px 0px
  rgba(0,0,0,0.2);
}
.dropdown-content a {
  color: black;
  padding: 12px 16px;
  text-decoration: none;
  display: block;
```

```
}
.dropdown-content a:hover
{background-color: #f1f1f1}
.dropdown:hover.dropdown-content {
 display: block;
}
.dropdown:hover.dropbtn {
 background-color: turquoise;
}
</style>
</head>
<body>
<h2>Dropdown Menu</h2>
Move the mouse over the button to
open the dropdown menu.
<div class="dropdown">
<button class="dropbtn">Dropdown
</button>
```

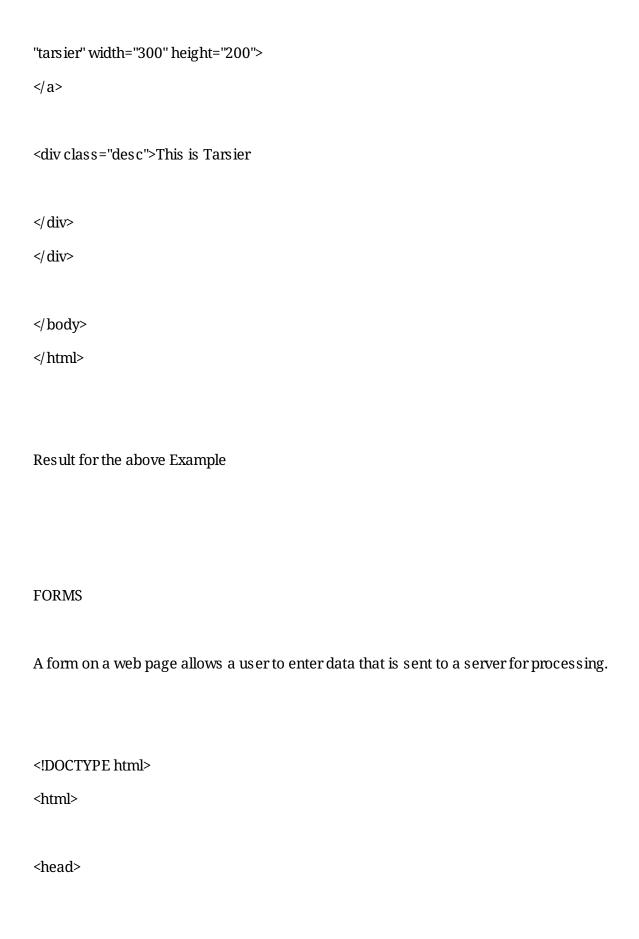
```
<div class="dropdown-content">
<a href="#">Link 1</a>
<a href="#">Link 2</a>
<a href="#">Link 3</a>
</div>
</ div>
<h2>Hoverable Dropdown</h2>
Move the mouse over the text
below to open the dropdown
content.
<div class="dropdown1">
 <span>Mouse over me</span>
 <div class="dropdown1-content">
  Hoverable Dropdown
 </ div>
```

div	
Result for the above Example	
IMAGE GALLERY	
Example for Image Gallery	
html	
<html></html>	
<head></head>	
Touc	
<style></td><td></td></tr></tbody></table></style>	

```
div.img {
 margin: 10px;
 border: 1px solid #ccc;
 float: left;
 width: 120px;
 height: 200px;
}
div.img:hover{
 border. 3px solid steelblue;
}
div.img img {
 width: 100%;
 height: 100px;
}
div.desc {
 padding: 15px;
 text-align: center;
}
</style>
</head>
```

```
<body>
<div class="img">
<a target="_blank" href=
"img_tiger.jpg">
<img src="img_tiger.jpg" alt="tiger"</pre>
width="300" height="200">
</a>
<div class="desc">This is a Tiger
</ div>
</div>
<div class="img">
<a target="_blank" href=
"img_olm.jpg">
<img src="img_olm.jpg" alt="olm"</pre>
width="300" height="200">
</a>
```

```
<div class="desc">This is a Olm
</div>
</ div>
<div class="img">
<a target="_blank" href=
"img_pygmy.jpg">
<img src="img_pygmy.jpg" alt="pygmy"</pre>
width="300" height="200">
</a>
<div class="desc">This is a Pygmy
Marmoset
</ div>
</ div>
<div class="img">
<a target="_blank" href=
"img_tars ier.jpg">
<img src="img_tarsier.jpg" alt=</pre>
```



```
<style>
<!-- This is for Padded field -->
input[type=text] {
  width: 100%;
  padding: 12px 20px;
  margin: 8px 0;
  box-sizing: border-box;
}
<!-- This is for Bordered Field -->
input[type=text1] {
width: 100%;
padding: 12px 20px;
margin: 8px 0;
box-sizing: border-box;
border: 4px solid steelblue;
border-radius: 4px;
}
```

<!-- This is for image Field -->

```
input[type=text2] {
width: 100%;
box-sizing: border-box;
border: 2px solid #ccc;
border-radius: 4px;
font-size: 16px;
background-color: white;
background-image: url
('sicon.png');
background-position: 10px 10px;
background-repeat: no-repeat;
padding: 12px 20px 12px 40px;
}
<!-- This is for Animated Field -->
input[type=text3] {
width: 130px;
box-sizing: border-box;
border: 3px solid steelblue;
```

```
border-radius: 4px;
font-size: 16px;
background-color: white;
background-image: url('sicon.png');
background-position: 10px 10px;
background-repeat: no-repeat;
padding: 12px 20px 12px 40px;
-webkit-transition: width 0.4s
ease-in-out;
transition: width 0.4s ease-in-out;
}
input[type=text3]:focus {
 width: 60%;
}
</style>
</head>
<body>
<h3>Padded Text fields:</h3>
<form>
```

```
<label for="fname">First Name
</label>
<input type="text" id="fname"</pre>
name="fname">
<label for="fname">Last Name</label>
<input type="text" id="lname"</pre>
name="lname">
</form>
<h3> Bordered Text Fields </h3>
<form>
<label for="fname">First Name</label>
<input type="text1" id="fname"</pre>
name="fname">
<label for="lname">Last Name</label>
<input type="text1" id="lname"</pre>
```

```
name="lname">
</form>
<h3>Text Fields with icon/image </h3>
<form>
<input type="text2" name="search"</pre>
placeholder="Search..">
</form>
<h3> Animated Text Field </h3>
<form>
 <input type="text3" name="search"</pre>
placeholder="Search..">
```

Result for the above Example
Padded Text fields:
First Name Last Name
Bordered Text Fields
First Name Last Name
Text Fields with icon/image

Animated Text Field

STYLING TEXT AREA & SELECT MENU

```
<!DOCTYPE html>
<html>
<head>
<style>
select {
  width: 60%;
  padding: 16px 20px;
  border: 3px solid steelblue;
  background-color: turquoise;
}
textarea {
  width: 60%;
  height: 150px;
  padding: 12px 20px;
```

```
box-sizing: border-box;
 border: 3px solid steelblue;
 border-radius: 10px;
 background-color: #f8f8f8;
 font-size: 16px;
 resize: none;
}
</style>
</head>
<body>
<h3>Styled Select Menu</h3>
<form>
<s elect id="country" name="country">
<option value="ind">India
<option value="ind">China
<option value="ind">Italy</option>
</select>
</form>
```

<h3> Styling Text Area </h3>
<form></form>
<textarea></td></tr><tr><td>some text</td></tr><tr><td>some text</td></tr><tr><td></td></tr><tr><td></td></tr><tr><td></textarea>

Result for the above Example
Styled Select Menu
Styling Text Area
ANIMATION&TRANSITION
Animation
An animation lets an element gradually change from one style to another, we can change as many CSS properties and many times as we want.
To use CSS3 animation, we must first specify some keyframes for the animation. Keyframes hold what styles the element will have at certain times.
When we specify CSS styles inside the @keyframes rule, the animation will gradually change from the current style to the new style at certain times.
To get an animation to work, we must bind the animation to an element.
html

```
<html>
<head>
<style>
div {
width: 200px;
height: 150px;
background-color: steelblue;
position: relative;
-webkit-animation-name: example;
-webkit-animation-duration: 4s;
-webkit-animation-iteration-count:3;
animation-name: example;
animation-duration: 4s;
animation-iteration-count: 3;
}
@-webkit-keyframes example {
0% {background-color:steelblue;
left:0px; top:0px;}
25% {background-color:yellow;
left:200px; top:0px;}
50% {background-color:blue;
```

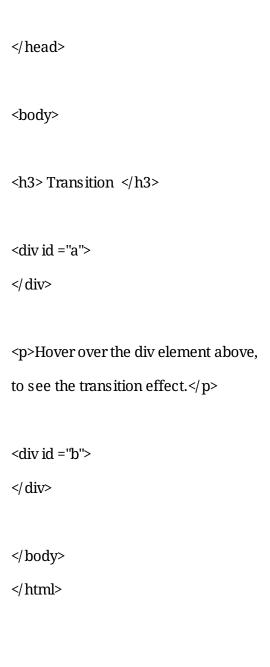
```
left:200px; top:200px;}
75% {background-color:green;
left:0px; top:200px;}
100% {background-color.orange;
left:0px; top:0px;}
}
</style>
</head>
<body>
<h3>ANIMATION</h3> 
<div></div>
</body>
</html>
Result for the above Example
```

Transition

Transitions allows you to change property values smoothly from one value to another, over a given duration. To create a transition effect, you must specify two things, the CSS property you want to add an effect to and the duration of the effect. If the duration part is not specified, the transition will have no effect, because the default value is 0.

```
<!DOCTYPE html>
<html>
<head>
<style>
#a {
  width: 100px;
  height: 100px;
  background: steelblue;
  -webkit-transition: width 2s;
  transition: width 2s;
}
#a:hover {
  width: 400px;
}
```

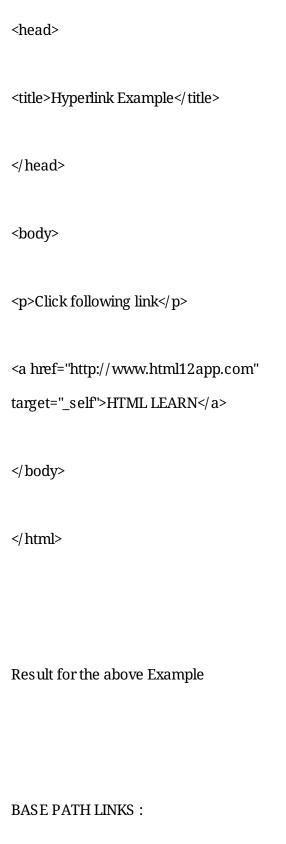
```
#b {
width: 100px;
height: 100px;
background: turquoise;
-webkit-transition: width 2s,
height 2s, -webkit-transform 2s;
transition: width 2s, height 2s,
transform 2s;
}
#b:hover {
width: 300px;
height: 300px;
-webkit\text{-}transform: rotate (180 deg);\\
transform: rotate(180deg);
}
</style>
```



Result For Above Example

Transition

Hover over the div element above, to see the transition effect.
TRY YOURSELF:
Type the code or copy/paste below and press show result to see the result.
HTML LINKS:
A webpage can contain various links that take you directly to other pages and even specific parts of a given page, these links are known as hyperlinks. Hyperlinks allow visitors to navigate between Web sites by clicking on words, phrases, and images.
HTML link Syntax:
link text
Example for HTML links:
html
<html></html>

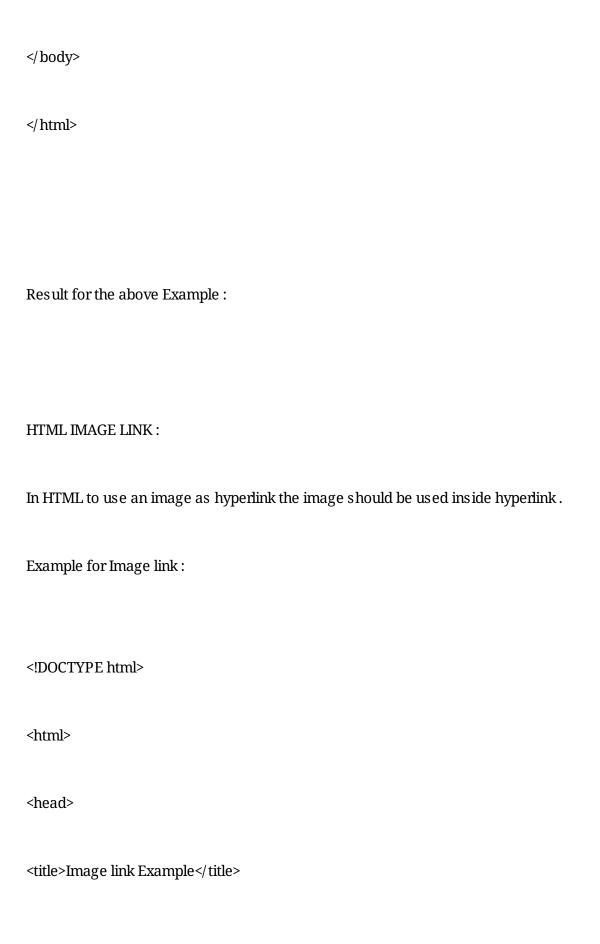


If you link HTML documents related to the same website, it is not required to give a complete URL for every link. You can get rid of it if you use tag in your HTML document header. This tag is used to give a base path for all the links.

Example for Base path links :
html
<html></html>
<head></head>
<title>Base Link Example</title>
 <base href="http://www.html12.com/"/>
 body>
Click following link
<a href="/html/index.htm" target="</td">
"_blank">LEARN HTML

Result for the	above Example
TARGET ATTE	RIBUTE:
This attribute	is used to specify the location where linked document is opened
Attributes	Description
_blank Opens	the linked document in a new window or tab.
_self Opens	the linked document in the same frame.
_parent	Opens the linked document in the parent frame.
_top Opens	the linked document in the full body of the window.
targetframe	Opens the linked document in a named frame.
Example for A	ttributes :
ht</td <td>ml></td>	ml>
<html></html>	

```
<head>
<title>Attributes Example</title>
<br/>base href=
"http://www.HTML12app.com/">
</head>
<body>
Click the following links 
<a href="/html/index.htm" target=
"_blank">Opens in New tab</a>
<a href="/html/index.htm" target=
"_self">Opens in Self frame</a>
<a href="/html/index.htm" target=
"_parent">Opens in Parent frame</a>
<a href="/html/index.htm" target=
"_top">Opens in full Body</a>
```

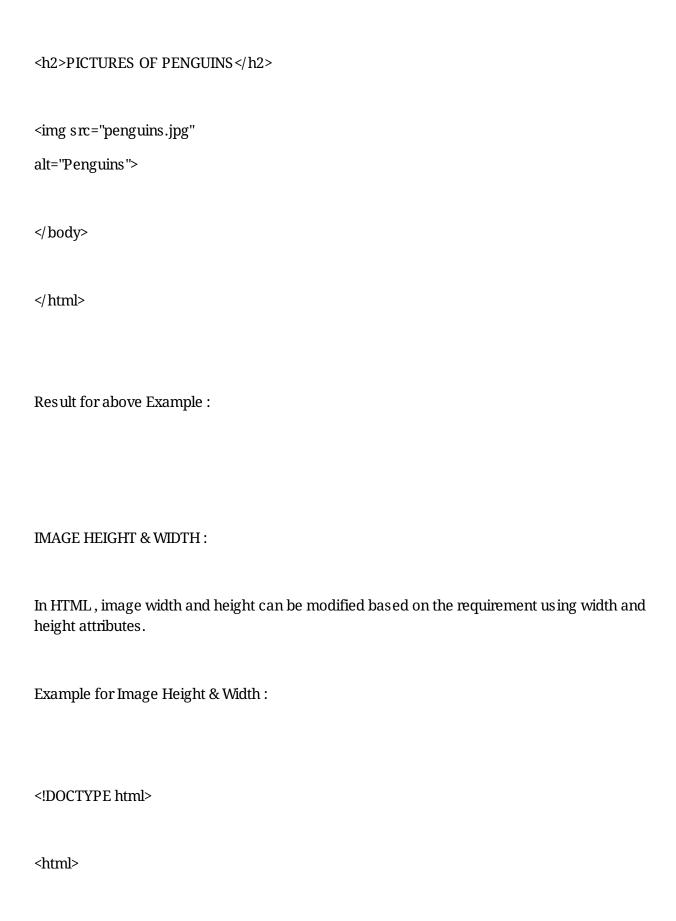


```
</head>
<body>
Click following link
<a href="http://www.html12app.com"
target="_self">
<img src="/images/logo.png"</pre>
alt="LEARN HTML" border="0"/>
</a>
</body>
</html>
Result for the above Example:
```

TRY YOURSELF:

Type the code or copy/ paste below and press show result to see the result.
HTML IMAGES:
There are images in every website now days it increases the visual look of the website , we will see how to use images in \mbox{HTML} .
Image Syntax:

1. In HTML, images are defined with the tag.
2. The src attribute defines the url (location) of the image.
3. The alt attribute specifies an alternate text for an image, if the image cannot be displayed.
HTML image Example :
html
<html></html>
 body>



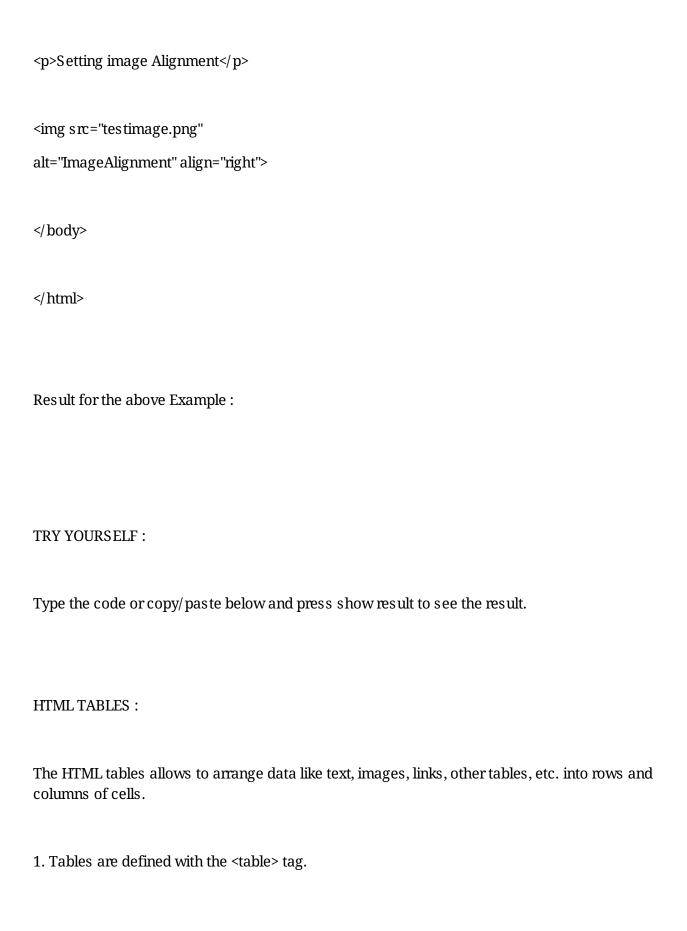
<head></head>
<title>Set Image Width and Height </title>
<body></body>
Setting image width & height
<img <="" alt="TestImage" src="test.png" td=""/>
width="200" height="100">
Result of the above Example :

SET IMAGE LOCATION:

By default, the browser expects to find the image in the same folder as the web page, if images is stored in a sub-folder it should be referred to that particular folder. Example for Image location: Assuming the image location is in "pic/penguins.png" <!DOCTYPE html> <html> <head> <title>IMAGE LOCATION</title> </head> <body> IMAGE LOCATION <img src="pic/penguins.png"</pre> alt="PENGUINS"> </body>

</html>

Result for the above Example :
IMAGE ALIGNMENT :
By default image will align at the left side of the page, but by using align attribute it can be set in the center or right.
Example for Image Alignment :
html
<html></html>
<head></head>
<title>Image Alignment</title>
 body>



2. Tables are divided into table rows with the tag.
3. Table rows are divided into table data with the tag.
4. A table row can also be divided into table headings with the .
Example for HTML Tables:
html
<html></html>
<head></head>
<style></td></tr><tr><td>table, th, td {</td></tr><tr><td>border: 1px solid black;</td></tr><tr><td>border-collapse: collapse;</td></tr><tr><td>}</td></tr><tr><td></style>
 body>

```
Country
capital
India
New delhi
Germany
Berlin
New zealand
Wellington
```

```
</body>
</html>
Result for the above Example:
Table with Cell padding:
Cell padding specifies the space between the cell content and its borders, If not specified a
padding, the table cells will be displayed without padding.
Example for Cell Padding:
<!DOCTYPE html>
<html>
<head>
<style>
table, th, td {
 border: 1px solid black;
 border-collapse: collapse;
}
th, td {
```

```
padding: 15px;
}
</style>
</head>
<body>
Country
 capital
India
 New delhi
Germany
 Berlin
```

```
New zealand
 Wellington
The cell padding is set
to 15px.
</body>
</html>
Result for the above Example:
TABLE WITH BORDER SPACING:
Border spacing specifies the space between the cells.
```

Example for Border Spacing:

```
<!DOCTYPE html>
<html>
<head>
<style>
table, th, td {
 border: 1px solid black;
 padding: 5px;
}
table {
 border-spacing: 15px;
}
</style>
</head>
<body>
>
 Country
 capital
```

```
India
New delhi
Germany
Berlin
New zealand
Wellington
 border-spacing is set
to 15px.
```

```
</body>
</html>
Result for the above Example:
CELL THAT SPAN MANY COLUMNS:
To make a cell span more than one column, colspan attribute should be used.
Example for Cell that span many columns:
<!DOCTYPE html>
<html>
<head>
<style>
table, th, td {
 border: 1px solid black;
 border-collapse: collapse;
}
```

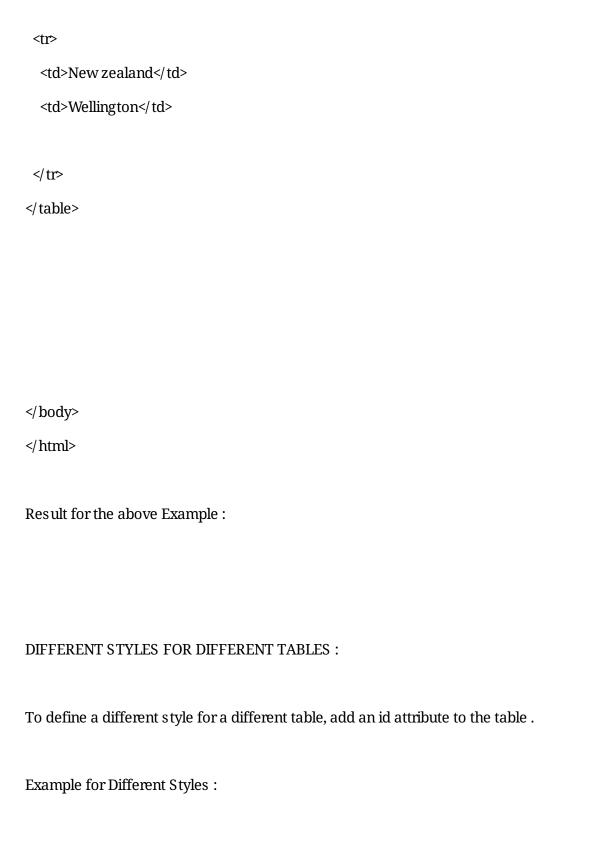
```
th, td {
 padding: 5px;
 text-align: left;
}
</style>
</head>
<body>
<h2>Cell that spans two columns:</h2>
Name
 Telephone
xyz
 044 67 154
 91 72 455
</body>
</ html>
```

Result for the above Example: **CELL THAT SPAN MANY ROWS:** To make a cell span more than one row, use the rowspan attribute. Example for cell that span many rows: <!DOCTYPE html> <html> <head> <style> table, th, td { border: 1px solid black; border-collapse: collapse; } th, td { padding: 5px; text-align: left;

```
}
</style>
</head>
<body>
<h2>Cell that spans two rows:</h2>
Name:
xyz
Telephone:
 044 17 674
91 12 6785
</body>
</ html>
```

```
Result for the above Example:
TABLE WITH CAPTION:
To add a caption to a table, use the <caption> tag.
Example for Table with caption:
<!DOCTYPE html>
<html>
<head>
<style>
table, th, td {
 border: 1px solid black;
 border-collapse: collapse;
}
th, td {
 padding: 5px;
 text-align: left;
}
</style>
</head>
```

```
<body>
<caption> CAPITALS </caption>
Country
capital
India
New delhi
Germany
Berlin
```

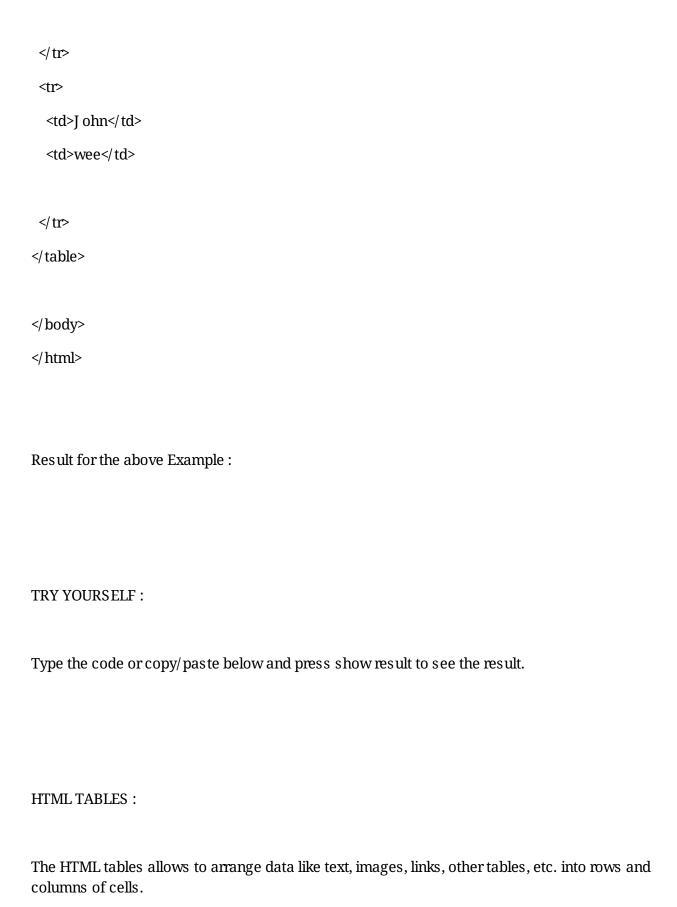


```
<!DOCTYPE html>
<html>
<head>
<style>
table {
 width:50%;
}
table, th, td {
 border: 1px solid black;
 border-collapse: collapse;
}
th, td {
 padding: 5px;
 text-align: left;
}
table#t01 tr:nth-child(even) {
 background-color: #6B9BC3;
}
table#t01 tr:nth-child(odd) {
 background-color:#6DDAD6;
}
table#t01 th {
 background-color: #6DDAD6;
  color: black;
```

```
}
</style>
</head>
<body>
First Name
Last Name
>
jack
jck
>
Eve
Adam
J ohn
```

```
wee
 </body>
</html>
Result for the above Example:
TABLE COLOR
To define color for the borders, and the text and background color of elements
Example for Table color:
<!DOCTYPE html>
<html>
<head>
<style>
table, td, th {
 border: 1px solid steelblue;
}
```

```
th {
 background-color: #6DDAD6;
 color: black;
}
</style>
</head>
<body>
First Name
 Last Name
jack
 jck
>
 Eve
 Adam
```



1. Tables are defined with the tag.
2. Tables are divided into table rows with the tag.
3. Table rows are divided into table data with the tag.
4. A table row can also be divided into table headings with the .
Example for HTML Tables:
html
<html></html>
<head></head>
<style></td></tr><tr><td>table, th, td {</td></tr><tr><td>border. 1px solid black;</td></tr><tr><td>border-collapse: collapse;</td></tr><tr><td>}</td></tr><tr><td></td></tr><tr><td></style>

```
<body>
Country
capital
India
New delhi
Germany
Berlin
New zealand
Wellington
```



```
border-collapse: collapse;
}
th, td {
 padding: 15px;
}
</style>
</head>
<body>
Country
 capital
India
 New delhi
>
```

```
Germany
 Berlin
New zealand
 Wellington
The cell padding is set
to 15px.
</body>
</html>
Result for the above Example:
```

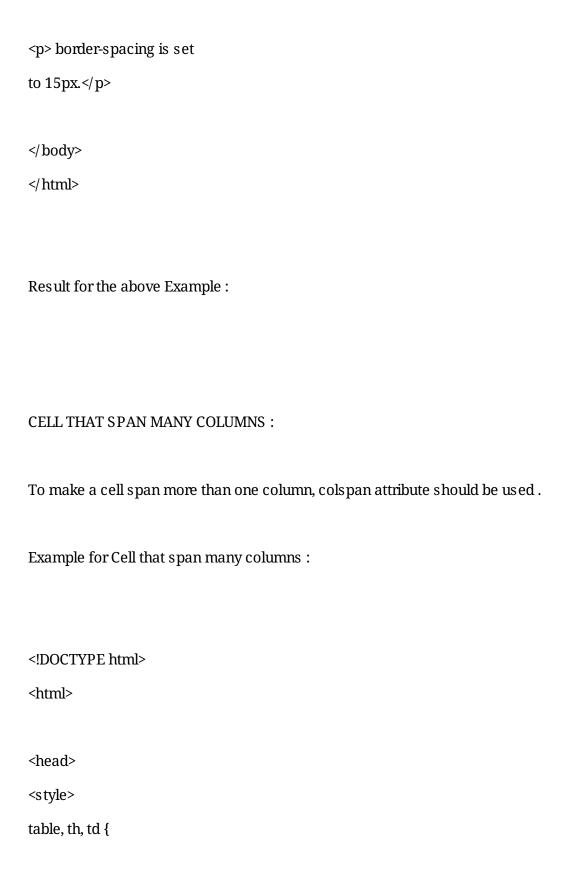
TABLE WITH BORDER SPACING:

Border spacing specifies the space between the cells.

Example for Border Spacing:

```
<!DOCTYPE html>
<html>
<head>
<style>
table, th, td {
 border: 1px solid black;
 padding: 5px;
}
table {
 border-spacing: 15px;
}
</style>
</head>
<body>
```

```
Country
capital
>
India
New delhi
Germany
Berlin
New zealand
Wellington
```



```
border: 1px solid black;
 border-collapse: collapse;
}
th, td {
 padding: 5px;
 text-align: left;
}
</style>
</head>
<body>
<h2>Cell that spans two columns:</h2>
Name
 Telephone
>
 xyz
 044 67 154
 91 72 455
```

```
</body>
</html>
Result for the above Example:
CELL THAT SPAN MANY ROWS:
To make a cell span more than one row, use the rowspan attribute.
Example for cell that span many rows:
<!DOCTYPE html>
<html>
<head>
<style>
table, th, td {
 border: 1px solid black;
 border-collapse: collapse;
}
```

```
th, td {
 padding: 5px;
 text-align: left;
}
</style>
</head>
<body>
<h2>Cell that spans two rows:</h2>
Name:
 xyz
Telephone:
 044 17 674
>
 91 12 6785
```

```
</body>
</html>
Result for the above Example:
TABLE WITH CAPTION:
To add a caption to a table, use the <caption> tag.
Example for Table with caption:
<!DOCTYPE html>
<html>
<head>
<style>
table, th, td {
 border: 1px solid black;
 border-collapse: collapse;
}
th, td {
 padding: 5px;
 text-align: left;
```

```
}
</style>
</head>
<body>
<caption> CAPITALS </caption>
>
 Country
 capital
India
 New delhi
Germany
 Berlin
```

New zealand
Wellington
Result for the above Example :
DIFFERENT STYLES FOR DIFFERENT TABLES :
To define a different style for a different table, add an id attribute to the table .

Example for Different Styles:

```
<!DOCTYPE html>
<html>
<head>
<style>
table {
 width:50%;
}
table, th, td {
 border: 1px solid black;
 border-collapse: collapse;
}
th, td {
 padding: 5px;
 text-align: left;
}
table#t01 tr:nth-child(even) {
 background-color: #6B9BC3;
}
table#t01 tr:nth-child(odd) {
 background-color:#6DDAD6;
}
```

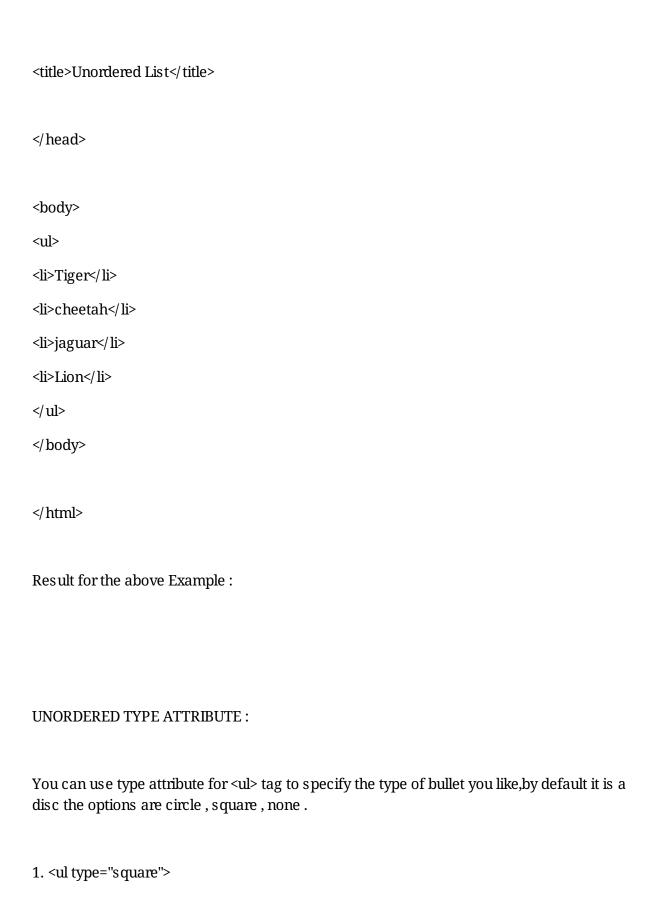
```
table#t01 th {
 background-color: #6DDAD6;
 color: black;
}
</style>
</head>
<body>
First Name
 Last Name
jack
 jck
Eve
 Adam
```

J ohn
wee
Result for the above Example :
TABLE COLOR
To define color for the borders, and the text and background color of elements
Example for Table color:
html
<html></html>
<head></head>
<style></td></tr></tbody></table></style>

```
table, td, th {
 border. 1px solid steelblue;
}
th {
 background-color: #6DDAD6;
 color: black;
}
</style>
</head>
<body>
First Name
 Last Name
jack
 jck
```

Eve
Adam
J ohn
wee
Result for the above Example :
TRY YOURSELF:
Type the code or copy/ paste below and press show result to see the result.

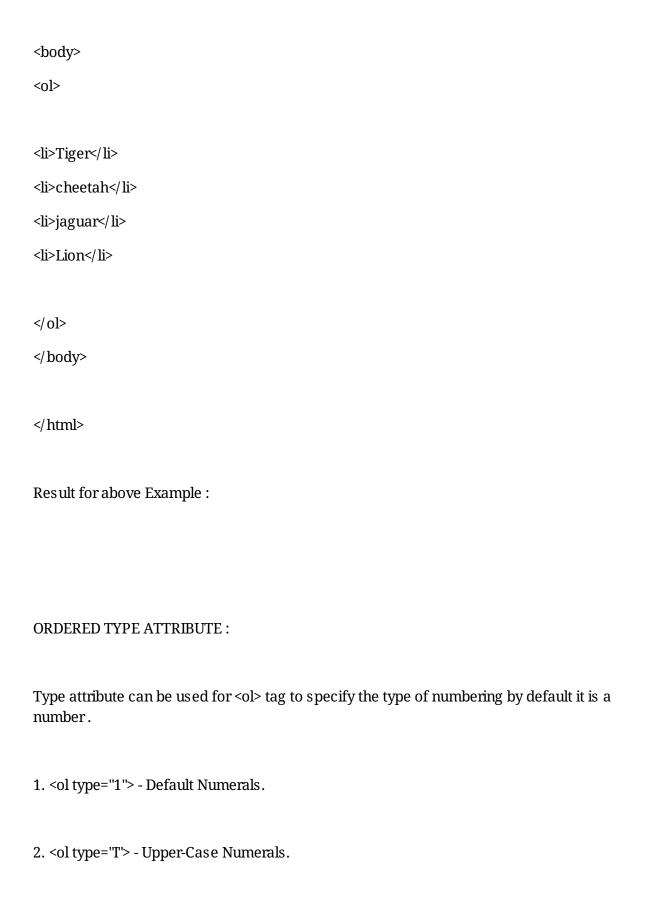
HTML LIST:
HTML offers three types of lists they are :
1.Unordered list: This can be created using tag,this will list items using plain bullets.
$ 2. Ordered\ list: This\ can be\ created\ using n\ tag, this\ will\ use\ different\ schemes\ of\ numbers\ to\ list\ items. $
3.Definition list: This can be created using <dl> tag,this arranges your items in the same way as they are arranged.</dl>
UNORDERED LIST:
An unordered list is a collection of items that have no special order or sequence. This list is created by using HTML tag and each list starts with tag , each item in the list is marked with a bullet .
Example for Unordered List:
html
<html></html>
<head></head>



```
2. 
3. 
4. 
Example for Type Attribute:
<!DOCTYPE html>
<html>
<head>
<title>TYPE ATTRIBUTE</title>
</head>
<body>
<h4>S quare attribute example </h4>
 Tiger
 Lion
```

```
<h4>Disc attribute example </h4>
ul type="disc">
 Tiger
 Lion
 <h4>circle attribute example </h4>
ul type="circle">
 Tiger
 Lion
 <h4>none attribute example </h4>
ul type="none">
 Tiger
 Lion
```

Result for above Example :
ORDERED LIST:
An Ordered list is a list of items in a numbered list. This list is created by using tag. The numbering starts at one and is incremented by one for each successive ordered list element tagged with .
Example for Ordered List:
html
<html></html>
<head></head>
<title>Ordered List</title>



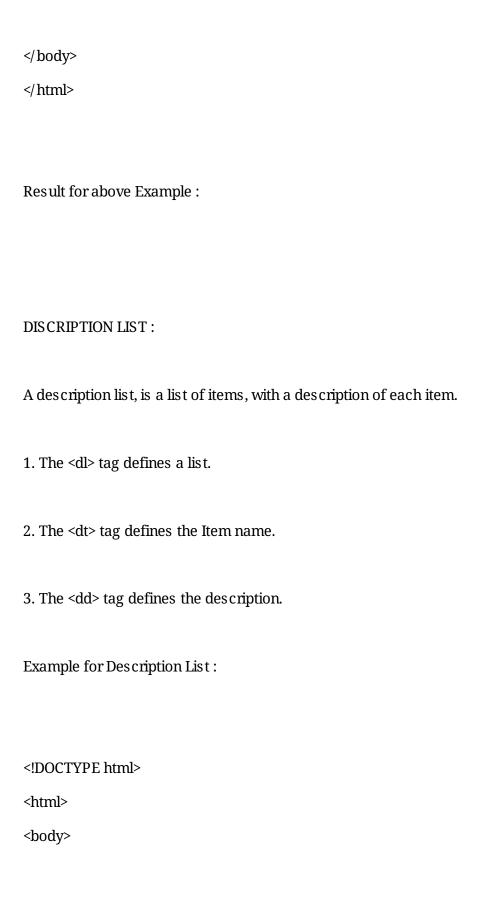
```
3.  - Lower-Case Numerals.
4.  - Lower-Case Letters.
5.  - Upper-Case Letters.
Example for Ordered type Attribute:
<!DOCTYPE html>
<html>
<head>
<title>HTML Ordered List</title>
</head>
<body>
<h4> Default Numerals </h4>

    type="1">

 Tiger
 Lion
```

<h4>Upper-Case Numerals</h4>

```
Tiger
Lion
<h4> Lower-Case Numerals </h4>
Tiger
Lion
<h4>Lower-Case Letters </h4>
Tiger
Lion
<h4>Upper-Case Letters </h4>
Tiger
Lion
```



<h2> Description List</h2>
<dl></dl>
<dt>Tiger</dt>
<dd>Tiger is Endangered</dd>
<dt>Lion</dt>
<dd>Lion is the king of jungle</dd>
Result for above Example :
HORIZONTAL LIST:
HTML lists can be styled in many different types , horizontal list is one of the type .
Example for Horizontal list :
html

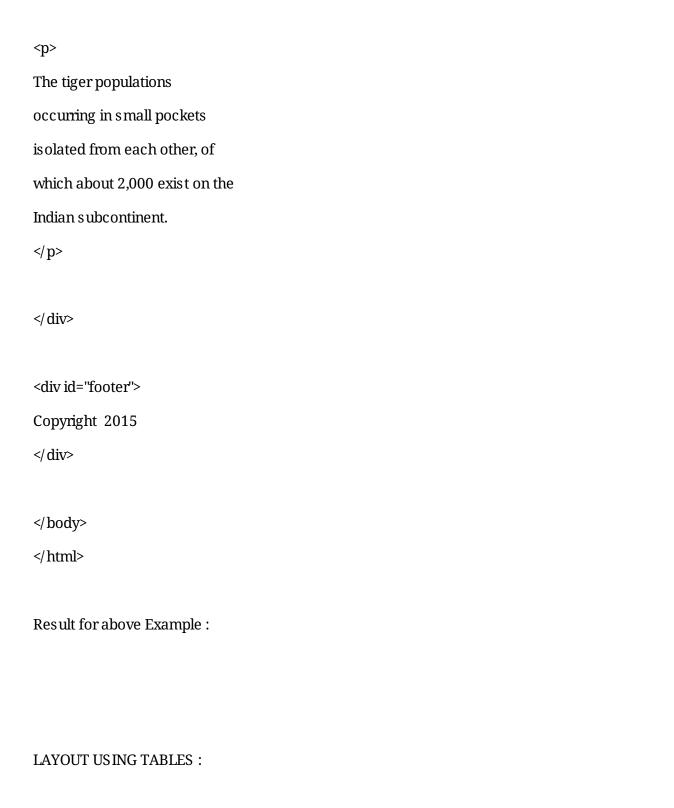
```
<html>
<head>
<style>
ul#list li {
 display:inline;
}
</style>
</head>
<body>
<h2>Horizontal List</h2>
<ul id="list">
Tiger
cheetah
jaguar
Lion
```

Result for above Example :
TRY YOURSELF :
Type the code or copy/ paste below and press show result to see the result.
HTML LAYOUT :
A webpage layout gives a structure to the website, layout is very important to give better look to the website.
WEB SITE LAYOUT :
Header: Header Defines a header for a document or a section .

Navigation: Navigation Defines a container for navigation links.
Content : Defines a section of the page with document or article and other information .
Sidebar: Defines content aside from the main content of the page.
Footer: Defines a footer for a document or a section.
LAYOUT USING div ELEMENT:
The div element is used in this layout
it is a block level element used for
grouping HTML elements.
Example for div Element :
html
<html></html>
<head></head>
<style></td></tr><tr><td>#header {</td></tr><tr><td>background-color:steelblue;</td></tr><tr><td>color:white;</td></tr></tbody></table></style>

```
text-align:center;
 padding:5px;
}
#nav {
 line-height:30px;
 background-color:#48D1CC;
  color:white;
 height:350px;
  width:110px;
 float:left;
 padding:5px;
}
#section {
  width:350px;
 float:left;
 padding:10px;
}
#footer{
 background-color:steelblue;
  color:white;
  clear:both;
  text-align:center;
 padding:5px;
}
</style>
```

```
</head>
<body>
<div id="header'>
<h1>BIG CATS</h1>
</div>
<div id="nav">
Tiger<br>
Lion<br>
Cheetah<br>
</ div>
<div id="section">
<h2>Tiger</h2>
The tiger (Panthera tigris)
is the largest cat species,
reaching a total body length
of up to 3.38 m (11.1 ft) over
curves and weighing up to 388.7
kg (857 lb) in the wild.
```



The layout using Tables are the simplest and most popular way of creating layouts. These tables are arranged in columns and rows, so it can utilized in many ways according to the need

•

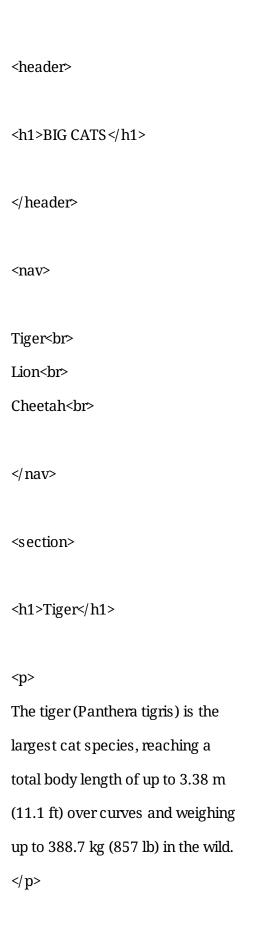
Example for Layout using Tables:

```
<!DOCTYPE html>
<html>
<head>
<title>Layout using Tables</title>
</head>
<body>
>
<center>
<h1>BIG CATS</h1>
</re></re>
```

```
<b>Main Menu</b><br/>
Tiger<br/>
Lion<br/>
Cheetah
<td bgcolor="#eee" width="100"
height="200">
The tiger (Panthera tigris)
is the largest cat species
>
<center>
Copyright 2015
</re></re>
```

```
</body>
</html>
Result for above Example:
LAYOUT USING HTML5:
HTML5 offers new semantic and dynamic elements that define different parts of a web page
with a modern look and feel.
Example for Layout using HTML5:
<!DOCTYPE html>
<html>
<head>
<style>
header{
 background-color:steelblue;
 color:white;
 text-align:center;
 padding:5px;
}
```

```
nav {
  line-height:30px;
  background-color:#48D1CC;
  height:300px;
  width:100px;
  float:left;
  padding:5px;
}
section {
  width:350px;
  float:left;
  padding:10px;
}
footer {
  background-color:steelblue;
  color:white;
  clear:both;
  text-align:center;
  padding:5px;
}
</style>
</head>
<body>
```



<footer></footer>
Copyright 2015
Result for above Example :
TRY YOURSELF:
Type the code or copy/ paste below and press show result to see the result.
HTML LAYOUT :
A webpage layout gives a structure to the website, layout is very important to give better look to the website.

WEB SITE LAYOUT: Header: Header Defines a header for a document or a section. Navigation: Navigation Defines a container for navigation links. Content: Defines a section of the page with document or article and other information. Sidebar: Defines content aside from the main content of the page. Footer: Defines a footer for a document or a section. LAYOUT USING div ELEMENT: The div element is used in this layout it is a block level element used for grouping HTML elements. Example for div Element:

<!DOCTYPE html>

```
<html>
<head>
<style>
#header{
 background-color:steelblue;
  color:white;
  text-align:center;
 padding:5px;
}
#nav {
 line-height:30px;
 background-color:#48D1CC;
  color:white;
 height:350px;
 width:110px;
 float:left;
 padding:5px;
}
#section {
  width:350px;
 float:left;
 padding:10px;
}
#footer{
```

```
background-color:steelblue;
 color:white;
  clear.both;
  text-align:center;
 padding:5px;
</style>
</head>
<body>
<div id="header">
<h1>BIG CATS</h1>
</div>
<div id="nav">
Tiger<br>
Lion<br>
Cheetah<br>
</ div>
<div id="section">
<h2>Tiger</h2>
```

```
The tiger (Panthera tigris)
is the largest cat species,
reaching a total body length
of up to 3.38 m (11.1 ft) over
curves and weighing up to 388.7
kg (857 lb) in the wild.
The tiger populations
occurring in small pockets
is olated from each other, of
which about 2,000 exist on the
Indian subcontinent.
</div>
<div id="footer">
Copyright 2015
</ div>
</body>
</html>
```

Result for above Example :
LAYOUT USING TABLES:
The layout using Tables are the simplest and most popular way of creating layouts . These tables are arranged in columns and rows, so it can utilized in many ways according to the need .
Example for Layout using Tables:
html
<html></html>
<head></head>
<title>Layout using Tables</title>
 body>
<center></center>

```
<h1>BIG CATS</h1>
</re>
<b>Main Menu</b><br/>
Tiger<br/>
Lion<br/>
Cheetah
<td bgcolor="#eee" width="100"
height="200">
The tiger (Panthera tigris)
is the largest cat species
```

>

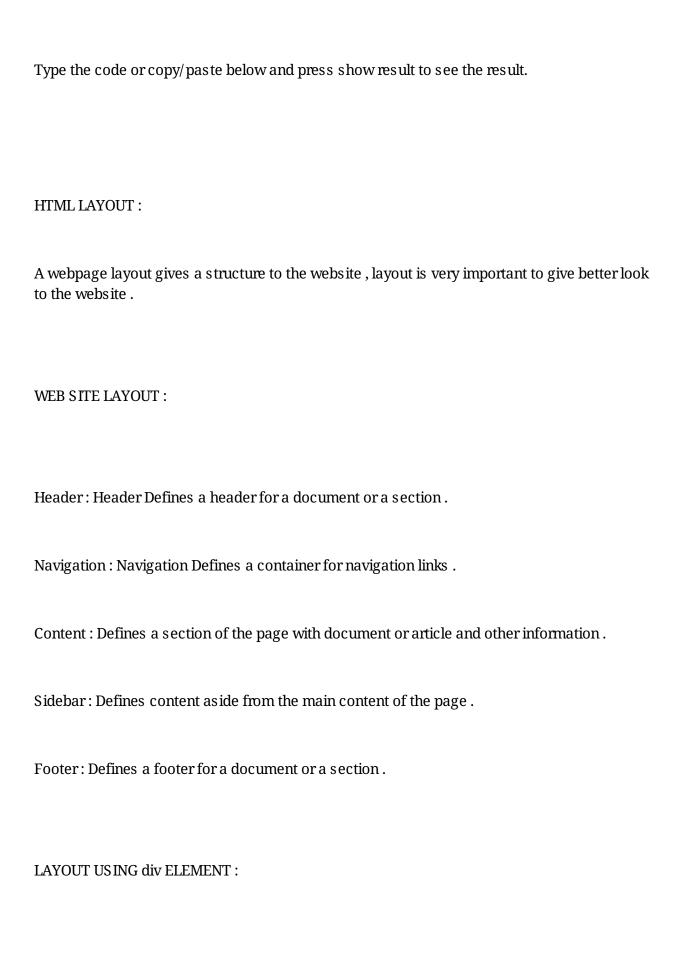
<center></center>
Copyright 2015
<pre></pre>
Result for above Example :
LAYOUT USING HTML5:
${\it HTML5}$ offers new semantic and dynamic elements that define different parts of a web page with a modern look and feel .
Example for Layout using HTML5:
html
<html></html>
<head></head>

```
<style>
header{
 background-color:steelblue;
  color:white;
  text-align:center;
 padding:5px;
}
nav {
 line-height:30px;
 background-color:#48D1CC;
 height:300px;
 width:100px;
 float:left;
 padding:5px;
}
section {
  width:350px;
 float:left;
 padding:10px;
}
footer {
  background-color:steelblue;
  color:white;
 clear.both;
  text-align:center;
```

```
padding:5px;
}
</style>
</head>
<body>
<header>
<h1>BIG CATS</h1>
</header>
<nav>
Tiger<br>
Lion<br>
Cheetah<br>
</nav>
<section>
<h1>Tiger</h1>
```

```
The tiger (Panthera tigris) is the
largest cat species, reaching a
total body length of up to 3.38 m
(11.1 ft) over curves and weighing
up to 388.7 kg (857 lb) in the wild.
</section>
<footer>
Copyright 2015
</footer>
</body>
</html>
Result for above Example:
```

TRY YOURSELF:



```
The div element is used in this layout
  it is a block level element used for
  grouping HTML elements.
Example for div Element:
<!DOCTYPE html>
<html>
<head>
<style>
#header{
 background-color:steelblue;
  color:white;
  text-align:center;
 padding:5px;
}
#nav {
 line-height:30px;
 background-color:#48D1CC;
  color:white;
 height:350px;
  width:110px;
 float:left;
 padding:5px;
```

```
}
#section {
 width:350px;
 float:left;
 padding:10px;
}
#footer{
 background-color:steelblue;
  color:white;
 clear.both;
 text-align:center;
 padding:5px;
}
</style>
</head>
<body>
<div id="header">
<h1>BIG CATS</h1>
</ div>
<div id="nav">
Tiger<br>
Lion<br>
```

```
Cheetah<br>>
</ div>
<div id="section">
<h2>Tiger</h2>
The tiger (Panthera tigris)
is the largest cat species,
reaching a total body length
of up to 3.38 m (11.1 ft) over
curves and weighing up to 388.7
kg (857 lb) in the wild.
The tiger populations
occurring in small pockets
is olated from each other, of
which about 2,000 exist on the
Indian subcontinent.
</ div>
```

```
>
<center>
<h1>BIG CATS</h1>
</re></re>
<trvalign="top">
<b>Main Menu</b><br/>
Tiger<br/>
Lion<br/>
Cheetah
<td bgcolor="#eee" width="100"
height="200">
The tiger (Panthera tigris)
```



HTML5 offers new semantic and dynamic elements that define different parts of a web page with a modern look and feel .

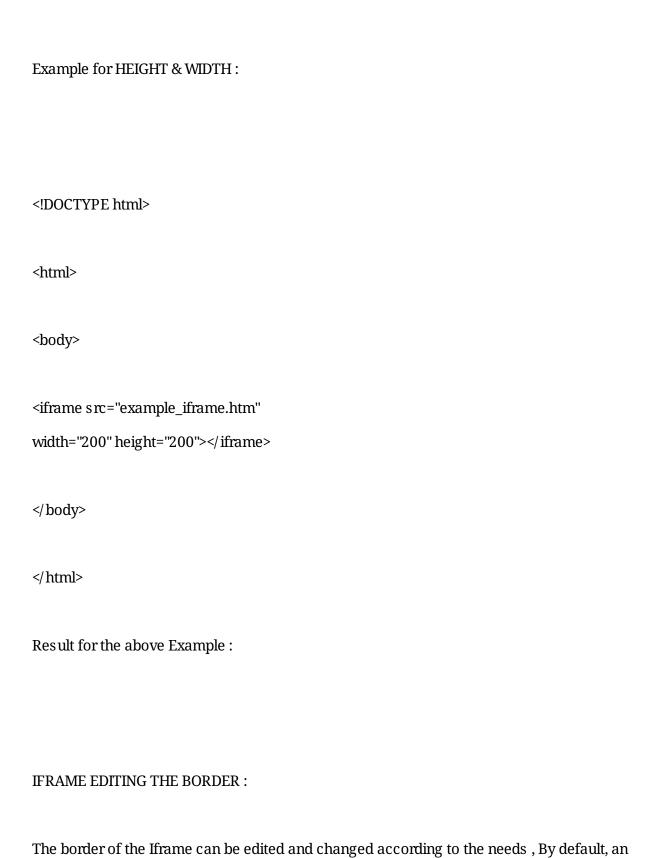
Example for Layout using HTML5:

```
<!DOCTYPE html>
<html>
<head>
<style>
header{
  background-color:steelblue;
  color:white;
  text-align:center;
  padding:5px;
}
nav {
  line-height:30px;
  background-color:#48D1CC;
  height:300px;
  width:100px;
  float:left;
  padding:5px;
}
section {
  width:350px;
  float:left;
```

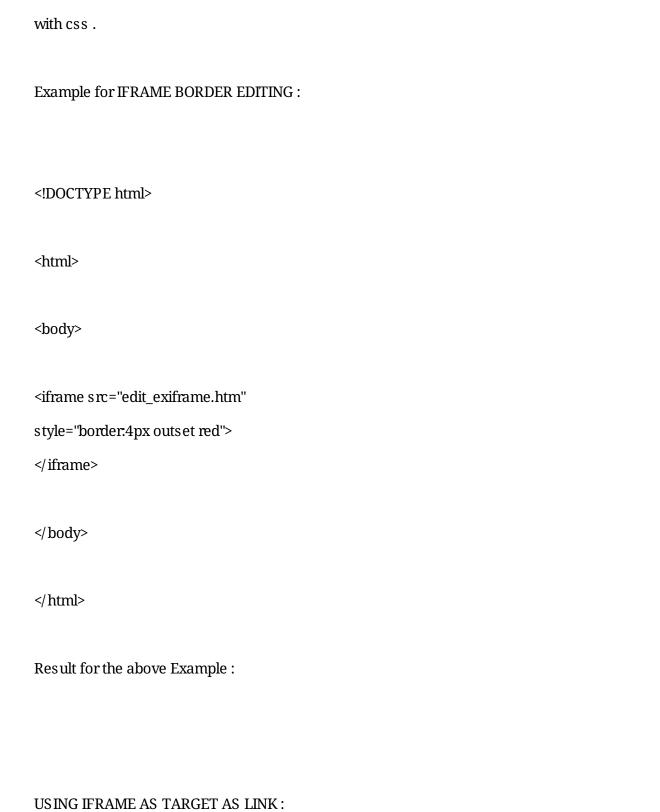
```
padding:10px;
}
footer {
 background-color:steelblue;
 color:white;
  clear:both;
 text-align:center;
 padding:5px;
}
</style>
</head>
<body>
<header>
<h1>BIG CATS</h1>
</header>
<nav>
Tiger<br>
Lion<br>
Cheetah<br>
```

```
</nav>
<section>
<h1>Tiger</h1>
The tiger (Panthera tigris) is the
largest cat species, reaching a
total body length of up to 3.38 m
(11.1 ft) over curves and weighing
up to 388.7 kg (857 lb) in the wild.
</section>
<footer>
Copyright 2015
</footer>
</body>
</html>
```

Result for above Example:
TDV VOLIDE FLE
TRY YOURSELF:
Type the code or copy/paste below and press show result to see the result.
HTML IFRAMES:
An IFrame (Inline Frame) is an HTML document embedded inside another HTML document on
a website, which is displaying a web page within a web page. The IFrame HTML element is
often used to insert content from another source, it can be configured with its own scrollbar independent of the surrounding page's scrollbar.
Comtax
Syntax:
<iframe rc="URL" s=""></iframe>
IFRAME HEIGHT & WIDTH:
Use the height and width attributes to specify the size of the IFRAMES ,the attribute values are
specified in pixels by default, but they can also be in percent.



iframe has a black border around it. The Iframe border size, color and style can be changed



An iframe can be used as the target frame for a link ,the target attribute of the link must refer to the name attribute of the iframe

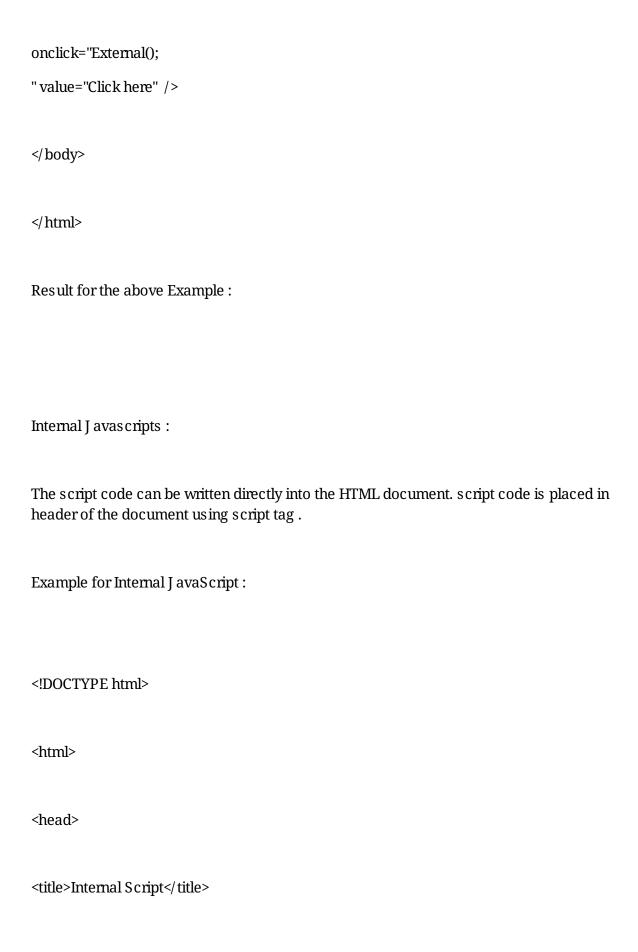
```
Example for IFRAME as Target Link:
<!DOCTYPE html>
<html>
<body>
<iframe width="100%" height="300px"</pre>
src="d_iframe.htm" name="iframe_ex">
</iframe>
<a href="http://www.html12app.com">a href="http://www.html12app.com</a>
/demo12" target="iframe_ex">
IFRAME-TARGET</a>
When the target of a link matches
the name of an iframe, the link will
open in the iframe.
```

</body>

Result for the above Example :
TRY YOURSELF:
Type the code or copy/paste below and press show result to see the result.
HTML J AVASCRIPTS:
A script is a small piece of program that can add interactivity to the website. For example, a script could generate a pop-up alert box message, or provide a dropdown menu. This script could be written using J avascript or VBScript , various small functions, called event handlers can be written using any of the scripting language and then you can trigger those functions using HTML attributes.
The <s cript=""> tag is used to define a clientside script, such as a J avaScript.</s>
EXTERNAL & INTERNAL S CRIPTS:
External J avas cripts:

If the functionality to be defined is used in various HTML documents then it's better to keep that functionality in a separate J avascript file and then include that file in your HTML documents. A J avascript file will have extension as .js and it will be included in HTML files using script tag.

Example for External J avascript :
html
<html></html>
<head></head>
<title>External Script</title>
<script src="/html/External.js" type="text/javascript"></script>
 <bdy><h2>Example for External Script</h2></bdy>
<input <="" td="" type="button"/>



```
<script type="text/javascript">
function internal(){
alert("Internal Script");
}
</script>
</head>
<body>
<h2>Example for Internal script</h2>
<input type="button"</pre>
onclick="internal();
"value="Click here"/>
</body>
</html>
```

Result for the above Example:

EVENT HANDLER:

Event handlers are simple defined functions which can be called against any mouse or keyboard event.

Example for Event handler

```
<!DOCTYPE html>
<html>
<head>
<title>Event Handlers </title>
<script type="text/javascript">
function EventHandler(){
  alert("Event Handler Example");
}
</script>
</head>
```

<body>

<pre></pre>
Bring your mouse here to see
the alert message
Result for the above Example:
THE NOSCRIPT TAG:
The Noscript tag provide alternative info to the users whose browsers don't support scripts
and for those users who have disabled script option their browsers. This can be done using the Noscript tag
Example for Nos cript tag:
html

```
<html>
<body>
<s cript>
document.getElementById("demo")
.innerHTML = "NOSCRIPT TAG!";
</script>
<noscript> Sorry, your browser
does not support J avaScript!
</noscript>
A browser without support for
J avaScript will show the text
written inside the noscript
element.
</body>
</html>
```

Result for the above Example:

J AVAS CRIPT VARIABLES

J avaScript variables are containers for storing data values. Variable should be assigned some values The (=) equal sign is called assignment operator. In J avaScript, the equal sign (=) is an "assignment" operator, not an "equal to" operator, you assign the value of what is on the right side of the = sign to whatever is on the left side of the = sign, you cannot perform operations with empty variables.

J avaScript variables can hold numbers like 200, and text values like 'Tiger'.

In programming, text values are called text strings.

Strings are written inside double or single quotes. Numbers are written without quotes.

If you put quotes around a number, it will be treated as a text string.

J AVAS CRIPT IDENTIFIERS

All J avaScript variables must be identified with unique names.

These unique names are called identifiers. Identifiers can be short names (like x and y), or more descriptive names (age, sum, totalVolume). The general rules for constructing names for variables (unique identifiers) are:

Names can contain letters, digits, underscores, and dollar signs.

Names must begin with a letter.

Names can also begin with \$ and @.

Names are case sensitive (L and l are different variables) Reserved words (like J avaScript keywords) cannot be used as names.

J AVASCRIPT OPERATORS

OPERATOR DISCRIPTION

- + Addition
- Subtraction
- * Multiplication
- / Division
- % Modulus
- ++ Increment
- Decrement
- == equal to
- === equal value and equal type
- != not equal
- !== not equal value
- > greater than
- < less than
- >= greater than or equal to
- <= less than or equal to
- ? ternary operator

Example for J avascript Variables

<!DOCTYPE html>

<html>

```
<body>
<h1>J avaScript Variables</h1>
In this example, L, M, N, O are
variables 
<s cript>
var L = 4;
var M = 6;
var N = L + M;
var O = L * M;
document.getElementById("sample")
.innerHTML = O;
</script>
You can declare many variables in
one statement, Start the statement
```

```
with var and separate the variables
by comma.
<s cript>
var Animal = "tiger", weight = 200;
document.getElementById("sample 1")
.innerHTML = Animal + "weight is "
+ weight + " kg ";
</script>
</body>
</html>
Result for the above Example:
```

J AVASCRIPT FUNCTION

A J avaScript function is a block of code designed to perform a particular task, a J avaScript function is executed when "something" invokes it (calls it).

When J avaScript reaches a return statement, the function will stop executing, if the function was invoked from a statement, J avaScript will "return" to execute the code after the invoking statement.

```
Javascript Function Syntax
function name(parameter1, parameter2){
code to be executed }
A J avaScript function is defined with the function keyword, followed by a name, followed by
parentheses ().
Function names can contain letters, digits, underscores, and dollar signs.
The parentheses may include parameter names separated by commas: (parameter1,
parameter2, parameter3 ...)
The code to be executed, by the function, is placed inside curly brackets {}
Example For J avaScript Function
<!DOCTYPE html>
<html>
<body>
This example calls a function
which performs a calculation,
```

```
and returns the result:
<s cript>
function myFunction(L, M) {
 return L * M;
}
document.getElementById("sample")
.innerHTML = myFunction(6, 3);
</script>
This example calls a function to
convert from Seconds to Minutes:
<s cript>
function tominutes(f) {
 return f/60+" minutes ";
}
document.getElementById("sample1")
```



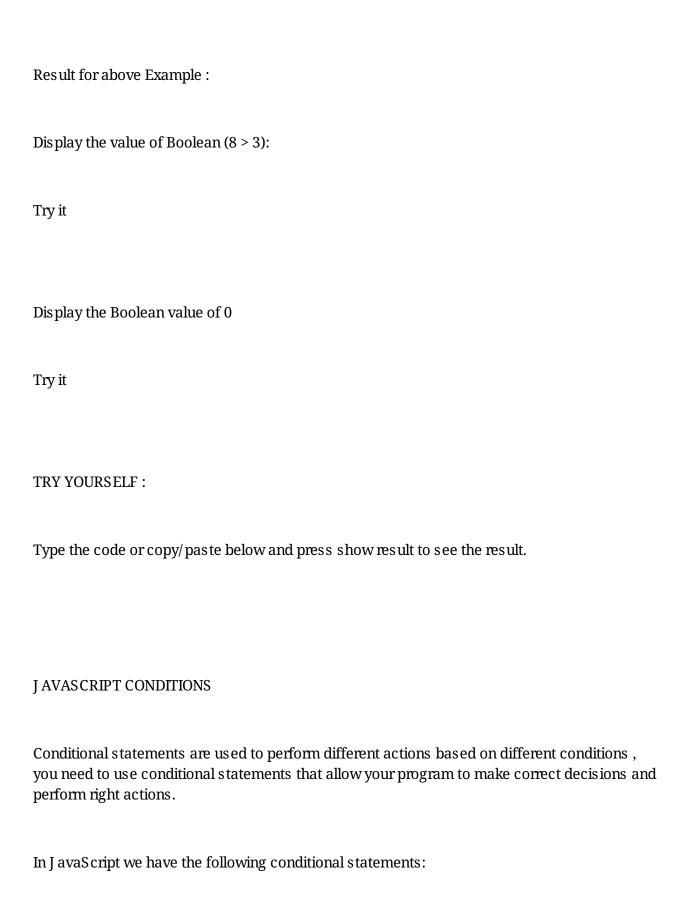
```
Example for Boolean
<!DOCTYPE html>
<html>
<body>
Display the value of Boolean
(8 > 3):
<button onclick="myBoolean()">Try it
</button>
<s cript>
function myBoolean() {
document.getElementById("sample")
.innerHTML = Boolean(8 > 3);
}
</script>
```

The Boolean value of undefined is false

The Boolean value of null is false

The Boolean value of NaN is false

```
Dis play the Boolean value of 0 < p
<button onclick="myboolean()">Try it
</button>
<s cript>
function myboolean() {
 var x = 0;
document.getElementById("sample1")
.innerHTML = Boolean(x);
}
</script>
</body>
</html>
```



Use if to specify a block of code to be executed, if a specified condition is true

Use else to specify a block of code to be executed, if the same condition is false

Use else if to specify a new condition to test, if the first condition is false

Use switch to specify many alternative blocks of code to be executed

if Statement

if statement is used to specify a J avaScript code to be executed if a condition is true, here a J avaScript expression is evaluated, If the resulting value is true then the given statements are executed. If the expression is false, then no statement would be not executed.

```
if Statement Syntax
if (condition) {
code to be executed if the condition is true }
else Statement
The else statement is used to specify a J avascript code to be executed if the condition is false.
else Statement Syntax
if (condition) {
code to be executed if the condition is true } else {
code to be executed if the condition is false }
else if Statement
```

The else if statement is used to specify a new condition, if the first condition is false, the Else If statement is an extension to the If Statement that allows you to create as many conditional statements as you want.

```
else if Syntax
if (condition1) {
code to be executed if condition1 is true } else if (condition2) {
code to be executed if the condition1 is false and condition2 is true }
else {
code to be executed if the condition1 is false and condition2 is false }
Exampe for javaScript Conditions
<!DOCTYPE html>
<html>
<body>
<h3>This is the example of if
Statement </h3>
Click the button to know your
driving eligibility
```

```
<button onclick="myFunction()">
Try it</button>
<s cript>
function myFunction() {
var message;
var age = 23;
if (age > 19) {
message="you are eligible to drive";
}
document.getElementById("demo")
.innerHTML = message;
}
</script>
```

```
<h3>This is the example of else
Statement </h3>
Click the button to know your
driving eligibility
<button onclick="myFunction1()">
Try it</button>
<s cript>
function myFunction1() {
var message1;
var age = 1;
if (age > 19) {
message1="you are eligible to drive";
} else {
message1= "not eligible to drive";
```

```
}
document.getElementById("demo1")
.innerHTML = message1;
}
</script>
<h3>This is the example of else if
Statement </h3>
Click the button to know your
driving eligibility
<button onclick="myFunction2()">
Try it</button>
<s cript>
```

function myFunction2() {

```
var message2;
var age = 19;
if (age < 19) {
message2 = "not eligible to drive";
} else if (age > 19) {
message2="you are eliglibe to drive";
}else {
message2="you have just turned 19!";
}
document.getElementById("demo2")
.innerHTML = message2;
}
</script>
</body>
</html>
```

Result for the above Example:

This is the example of if Statement
Click the button to know your driving eligibility
Try it
This is the example of else Statement
Click the button to know your driving eligibility
Try it
This is the example of else if Statement
Click the button to know your driving eligibility
Try it
J AVASCRIPT SWITCH

The switch statement is used to give an expression to evaluate several different statements to execute based on the value of the expression. The interpreter checks each case against the value of the expression until a match is found. If nothing matches, a default condition will be used.

J AVASCRIPT SWITCH SYNTAX

```
switch(expression) {
  case n: Code Statment
  break;
  case n: Code Statment
  break;
  default: Default Code Statment
}
```

The switch expression is evaluated once.

The value of the expression is compared with the values of each case.

If there is a match, the associated block of code is executed.

The break statements indicate the end of a particular case, this will stop the execution of more code and case testing.

The default keyword specifies the code to run if there is no case match.

Example For J avaScript Switch

```
<h3>Enter your grade to know
your marks </h3>
<s cript>
var grade='U';
document.write("GradeMarks Range :");
switch (grade)
{
case 'S': document.write
("91 to 100 Marks");
break;
case 'A': document.write
("81 to 90 Marks");
break;
case 'B': document.write
("71 to 80 Marks");
```

```
break;
case 'C': document.write
("61 to 70 Marks");
break;
case 'U': document.write(" Failed");
break;
default: document.write
("Unknown Grade<br/>")
}
</script>
</body>
</html>
```

Result for the above Example :

J AVAS CRIPT LOOP

While writing a HTML program, you may encounter a situation where you need to perform an action over and over again. In such situations, you would need to write loop statements to reduce the number of lines.

Different Kinds of Loops J avaScript supports different kinds of loops they are: for-loops through a block of code a number of times. for/in - loops through the properties of an object. while - loops through a block of code while a specified condition is true. do/while - also loops through a block of code while a specified condition is true. Syntax For J avaScript loop For Loop: for (statement 1; statement 2; statement 3) { code to be executed } While Loop: while (condition) {

```
code to be executed
}
Example for For Loop
<!DOCTYPE html>
<html>
<body>
<h3> Example for For Loop </h3>
Click the button to loop through
a block of code five times.
<button onclick="Function()">
Try it</button>
<s cript>
function Function() {
vartext = "";
var i;
```

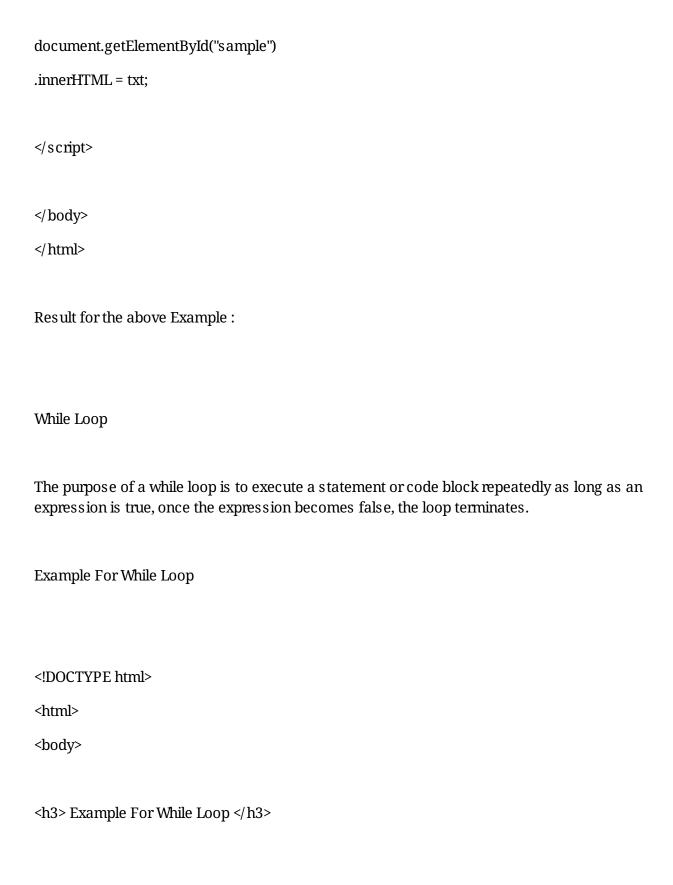
```
for (i = 1; i < 6; i++) {
text += "The number is " +i+ "<br>";
}
document.getElementById("Sample")
.innerHTML = text;
}
</script>
</body>
</html>
Result for the above Example:
Example for For Loop
Click the button to loop through a block of code five times.
Try it
J avaScript For/In Loop
```

The for/in loop is used to loop through an object's properties. In each iteration, one property from object is assigned to variable name and this loop continues till all the properties of the

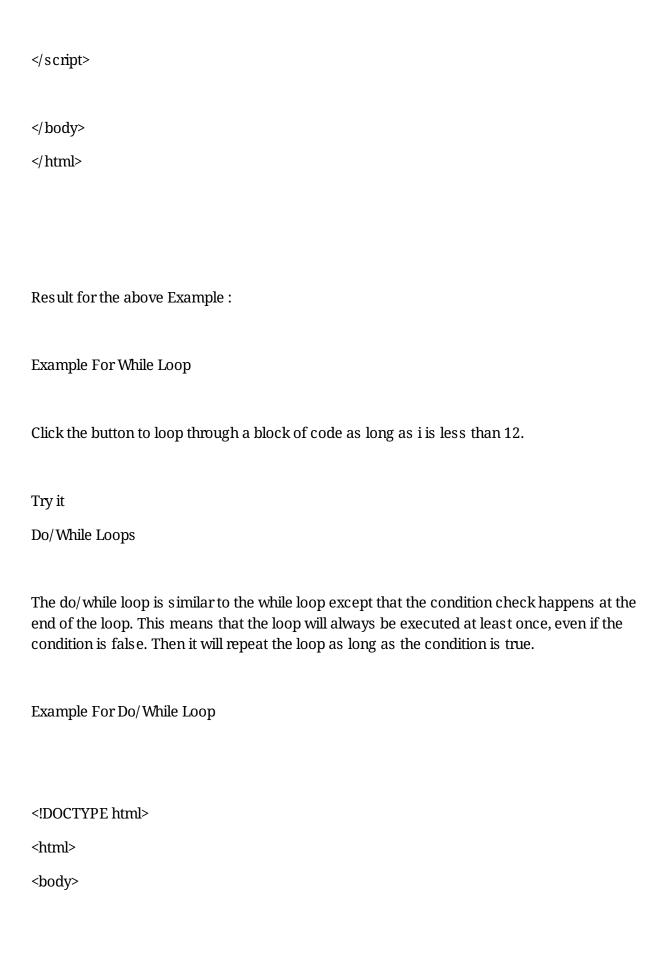
```
object are exhausted.
```

Example for For/ In Loop

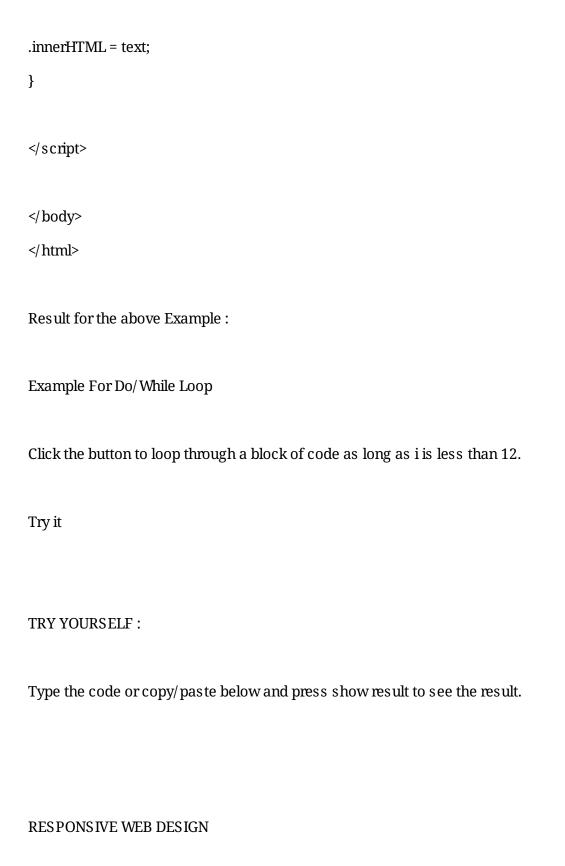
```
<!DOCTYPE html>
<html>
<body>
<h3>Example for For/In Loop </h3>
<s cript>
var txt = '"';
var pers on = {name:"J ohn",
gender:'Male", age:28};
var x;
for (x in person) {
 txt += person[x] + " ";
}
```



```
Click the button to loop through
a block of code as long as i is
less than 12.
<button onclick="Function()">
Try it</button>
<s cript>
function Function() {
vartext = "";
vari=1;
while (i < 12) {
text += "<br/>br>The number is " + i;
i++;
 }
document.getElementById("sample")
.innerHTML = text;
}
```



```
<h3>Example For Do/While Loop </h3>
Click the button to loop through
a block of code as long as i is
less than 12.
<button onclick="Function()">
Try it</button>
<s cript>
function Function() {
var text = '"'
vari=1;
do {
text += "<br/>br>The number is " + i;
i++;
}
while (i < 12)
document.getElementById("sample")
```



Responsive web design provides an optimal experience, easy reading and easy navigation with a minimum of resizing on different devices such as desktops, mobiles and tabs, Responsive web design uses only HTML and CSS, it is not a program or a J avaScript. When you use CSS and HTML to resize, hide, shrink, enlarge, or move the content to make it look good on any screen it is called Responsive Web Design.

Web pages can be viewed using many different devices like desktops, tablets, and phones. Your web page should look good, and be easy to use, regardless of the device Web pages should not leave out information to fit smaller devices, but rather adapt its content to fit any device.

VIEWPORT

The viewport is the user's visible area of a web page, the viewport varies with the device, and will be smaller on a mobile phone than on a computer screen. Before tablets and mobile phones, web pages were designed only for computer screens, and it was common for web pages to have a static design and a fixed size.

When we started surfing the internet using tablets and mobile phones, fixed size web pages were too large to fit the viewport. To fix this, browsers on those devices scaled down the entire web page to fit the screen.

Rules For Viewport

Do Not use large fixed width elements, For example, if an image is displayed at a width wider than the viewport it can cause the viewport to scroll horizontally. Remember to adjust this content to fit within the width of the viewport.

Do NOT let the content rely on a particular viewport width to render well, since screen

dimensions and width in CSS pixels vary widely between devices, content should not rely on a particular viewport width to render well.

Use CSS media queries to apply different styling for small and large screens, Setting large absolute CSS widths for page elements, will cause the element to be too wide for the viewport on a smaller device. Instead, consider using relative width values, such as width: 100% Also, be careful of using large absolute positioning values. It may cause the element to fall outside the viewport on small devices.

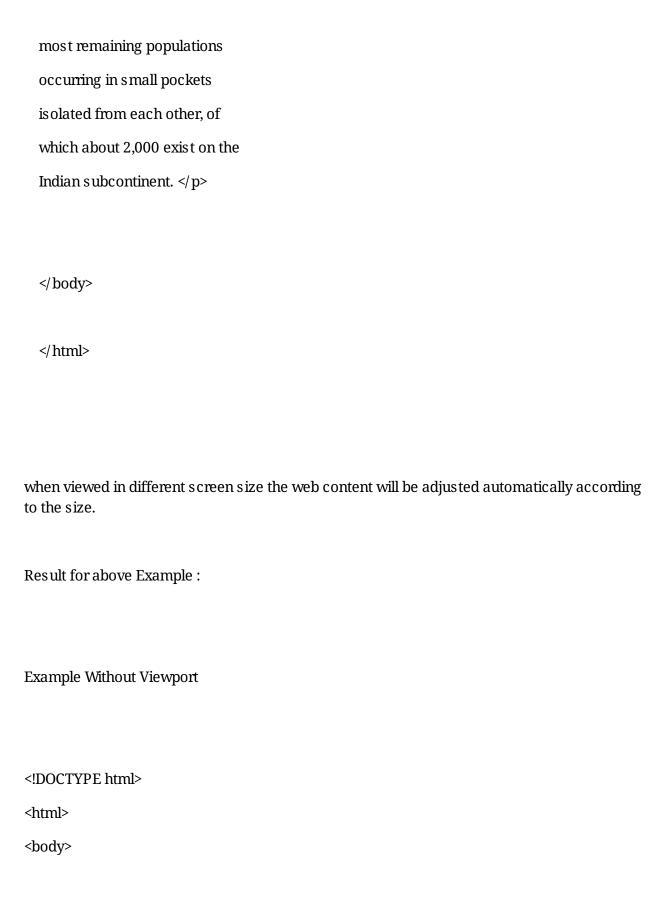
Example With Viewport

```
<!DOCTYPE html>
<html>
<head>
<meta name="viewport" content=
"width=device-width, initial-scale=
1.0">
<style>

img {
max-width:100%;
height:auto;
}
```

div {

```
background-color: #F9FFFF;
width: 272px;
padding: 10px;
border: 5px solid steelblue;
margin: 1px;
}
</style>
</head>
<body>
<h3> Tiger </h3>
<img src="Img_tiger.jpg"</pre>
alt="Tiger" style="width:500px;
height:450px">
 The tiger (Panthera tigris)
is the largest cat species,
reaching a total body length
of up to 3.38 m (11.1 ft) over
curves and weighing up to 388.7
kg (857 lb) in the wild. with
```



```
<h3> Tiger </h3>
```

```
<img src="Img_tiger.jpg"
alt="Basic Html" style="width:500px;
height:450px">
```

The tiger (Panthera tigris)
is the largest cat species,
reaching a total body length
of up to 3.38 m (11.1 ft) over
curves and weighing up to 388.7
kg (857 lb) in the wild. with
most remaining populations
occurring in small pockets
is olated from each other, of
which about 2,000 exist on the
Indian subcontinent.

```
</body>
```

</html>

Result for above Example:

GRIDVIEW

Many web pages are based on a grid-view, which means that the page is divided into columns, using a grid-view is very helpful when designing web pages. It makes it easier to place elements on the page. A responsive grid-view often has 12 columns, and has a total width of 100%, and will shrink and expand as you resize the browser window.

```
<!DOCTYPE html>
<html>
<head>
<meta name="viewport" content=
"width=device-width, initial-scale=
1.0">

<style>

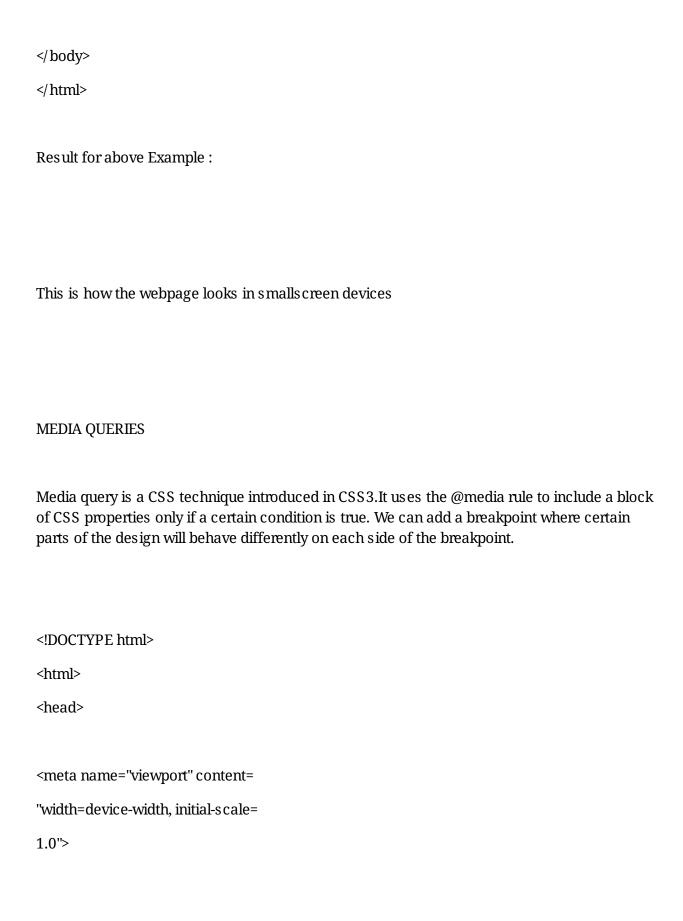
* {
    box-sizing: border-box;
}
.row:after {
```

```
content: "";
  clear: both;
  display: block;
}
[class*="col-"] {
  float: left;
  padding: 15px;
}
.col-1 {width: 8.33%;}
.col-2 {width: 17.16%}
.col-3 {width: 25%;}
.col-4 {width: 33.33%;}
.col-5 {width: 41.66%}
.col-6 {width: 50%;}
.col-7 {width: 58.33%;}
.col-8 {width: 66.66%;}
.col-9 {width: 75%;}
.col-10 {width: 82.33%;}
.col-11 {width: 91.55%;}
.col-12 {width: 100%}
html {
font-family:"Lucida Sans",sans-serif;
}
```

```
.header{
 background-color: steelblue;
  color: white;
 padding: 15px;
}
.menu ul {
 list-style-type: none;
 margin: 0;
 padding: 0;
}
.menu li {
padding: 8px;
margin-bottom: 7px;
background-color:turquoise;
color: #ffffff;
box-shadow: 0 1px 3px rgba
(0,0,0,0.12), 0 1px 2px rgba
(0,0,0,0.24);
}
```

```
.menu li:hover {
 background-color: #0099cc;
}
</style>
</head>
<body>
<div class="header">
<h1>Cats</h1>
</div>
<div class="row">
<div class="col-3 menu">
</
Tiger
Cheetah
Puma
```

```
panther
</ div>
<div class="col-9">
<h1>Tiger</h1>
The tiger (Panthera tigris)
is the largest cat species,
reaching a total body length
of up to 3.38 m (11.1 ft) over
curves and weighing up to 388.7
kg (857 lb) in the wild. with
most remaining populations
occurring in small pockets
is olated from each other, of
which about 2,000 exist on the
Indian subcontinent.
</div>
</div>
```



```
<style>
*{
  box-sizing: border-box;
}
.row:after {
  content: "";
  clear: both;
  display: block;
}
[class*="col-"] {
  float: left;
  padding: 15px;
}
html {
font-family:"Lucida Sans",sans-serif;
}
```

```
.header{
 background-color: #9933cc;
  color: #ffffff;
 padding: 15px;
}
.menu ul {
 list-style-type: none;
 margin: 0;
 padding: 0;
}
.menu li {
padding: 8px;
margin-bottom: 7px;
background-color:#33b5e5;
color: #ffffff;
box-shadow: 0 1px 3px rgba
(0,0,0,0.12), 0 1px 2px
rgba(0,0,0,0.24);
```

}

```
.menu li:hover {
background-color: #0099cc;
}
.aside {
 background-color: #33b5e5;
padding: 15px;
color: #ffffff;
text-align: center;
font-size: 14px;
box-shadow: 0 1px 3px rgba
(0,0,0,0.12), 0 1px 2px
rgba(0,0,0,0.24);
}
.footer{
 background-color: #0099cc;
  color: #ffffff;
  text-align: center;
 font-size: 12px;
 padding: 15px;
}
```

```
/* For mobile phones: */
[class*="col-"] {
  width: 100%;
}
@media only screen and
(min-width:600px) {
 /* For tablets: */
  .col-m-1 {width: 8.33%;}
  .col-m-2 {width: 16.66%}
  .col-m-3 {width: 25%}
  .col-m-4 {width: 33.33%}
  .col-m-5 {width: 41.66%}
  .col-m-6 {width: 50%}
  .col-m-7 {width: 58.33%;}
  .col-m-8 {width: 66.66%}
  .col-m-9 {width: 75%;}
  .col-m-10 {width: 83.33%}
  .col-m-11 {width: 91.66%}
  .col-m-12 {width: 100%}
}
```

```
@media only screen and
(min-width: 768px) {
 /* For desktop: */
  .col-1 {width: 8.33%;}
  .col-2 {width: 16.66%}
  .col-3 {width: 25%;}
  .col-4 {width: 33.33%;}
  .col-5 {width: 41.66%;}
  .col-6 {width: 50%;}
  .col-7 {width: 58.33%;}
  .col-8 {width: 66.66%;}
  .col-9 {width: 75%;}
  .col-10 {width: 83.33%}
  .col-11 {width: 91.66%}
  .col-12 {width: 100%}
}
</style>
</head>
<body>
<div class="header">
<h1>Cats</h1>
```

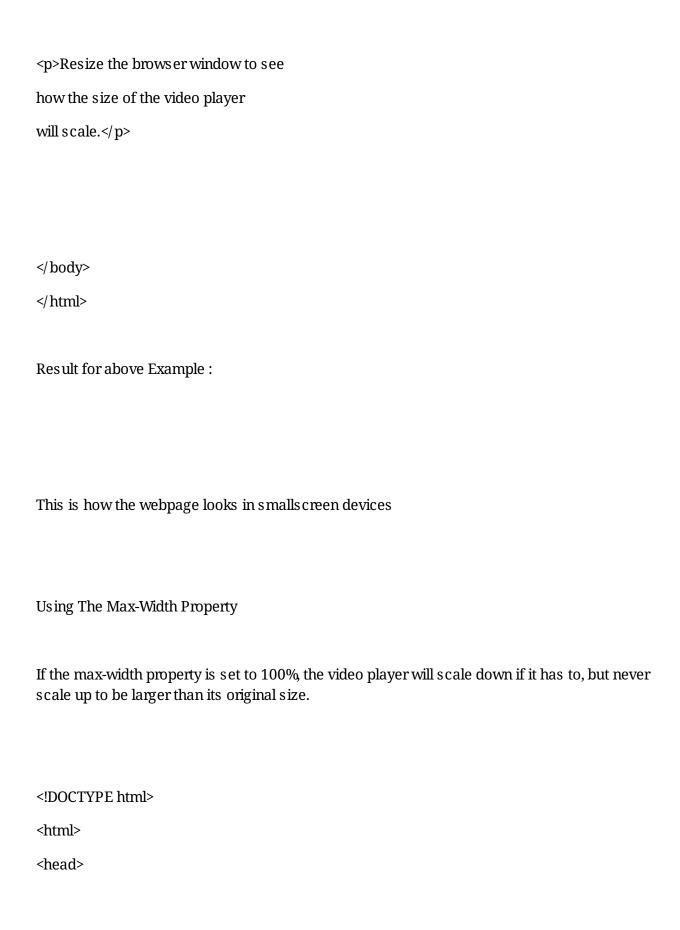
```
</div>
<div class="row">
<div class="col-3 col-m-3 menu">
Tiger
Cheetah
Panther
Lion
</div>
<div class="col-6 col-m-9">
<h1>Tiger</h1>
The tiger (Panthera tigris)
is the largest cat species,
reaching a total body length
of up to 3.38 m (11.1 ft) over
curves and weighing up to 388.7
kg (857 lb) in the wild. with
most remaining populations
occurring in small pockets
is olated from each other, of
which about 2,000 exist on the
Indian subcontinent.
```

```
</div>
<div class="col-3 col-m-12">
<div class="aside">
<h2>Tiger</h2>
Tiger is the largest cat
<h2>Cheetah</h2>
Cheetah is the fastest cat
<h2>Lion</h2>
Lion is the King 
</div>
</div>
</ div>
<div class="footer">
Resize the browser window to see
how the content respond to the
resizing.
</div>
</body>
</html>
```

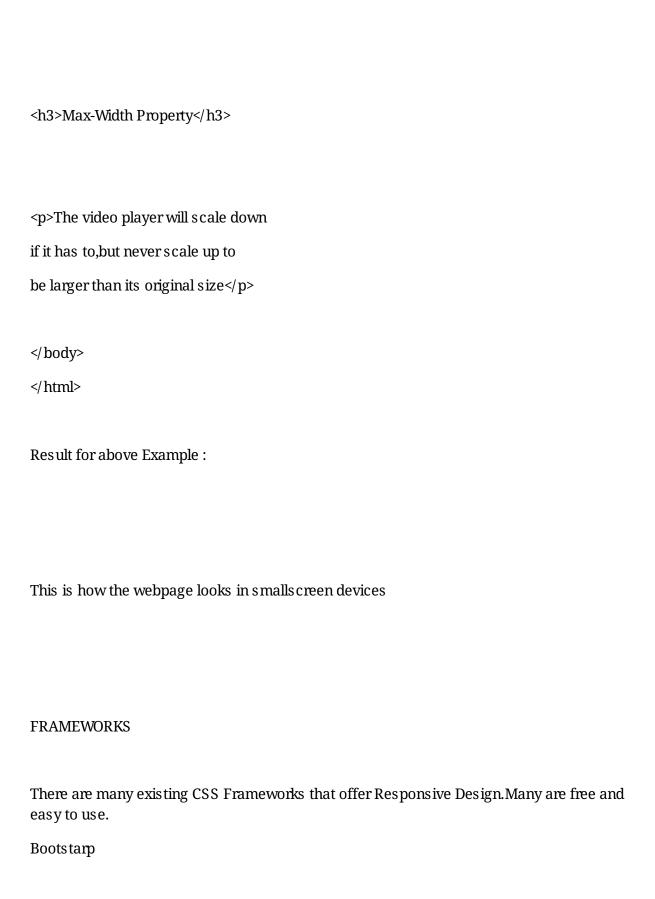
Result for above Example:

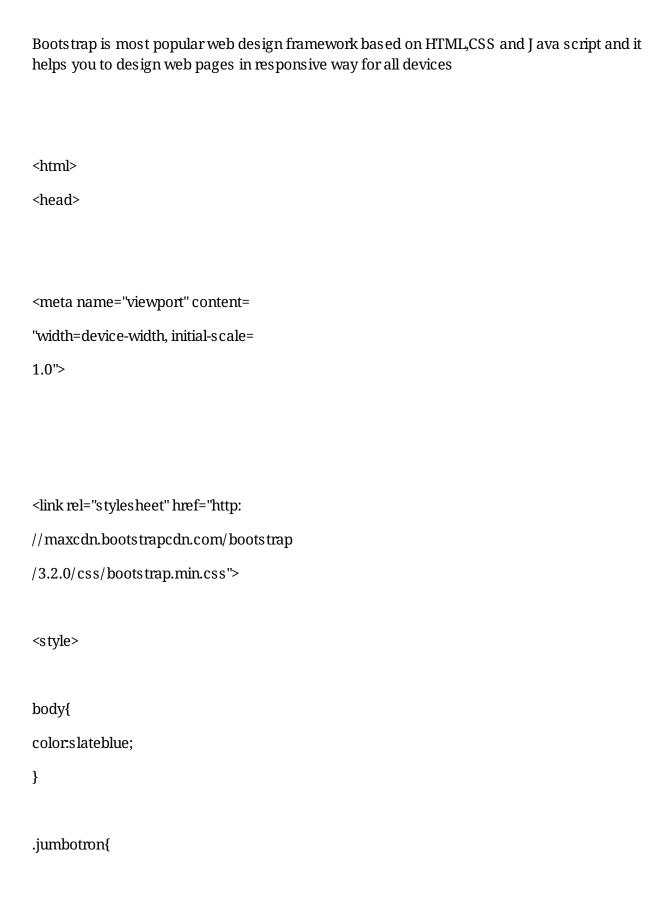
This is how the webpage looks in smalls creen devices
RES PONS IVE VIDEOS
In Responsive Webpage the video in the webpage will be Scaled and adjusted according to Size of the Screen
Using The Width Property
If the width property is set to 100%, the video player will be responsive and scale up and down, the video player can be scaled up to be larger than its original size.
html
<html></html>
<head></head>
<meta content="</td" name="viewport"/>
'width=device-width, initial-scale=
1.0">

```
<style>
video {
 width: 100%;
 height: auto;
}
</style>
</head>
<body>
<video width="400" controls>
<source src="mo.mp4"</pre>
type="video/mp4">
<source src="mo.ogg"</pre>
type="video/ogg">
Your brows er does not support HTML5
video.
</video>
```



```
<meta name="viewport" content=</pre>
'width=device-width, initial-scale=
1.0">
<style>
video {
 max-width: 100%;
 height: auto;
}
</style>
</head>
<body>
<video width="400" controls>
<source src="mo.mp4"</pre>
type="video/mp4">
<source src="mo.ogg"</pre>
type="video/ogg">
Your brows er does not support
HTML5 video.
</rideo>
```





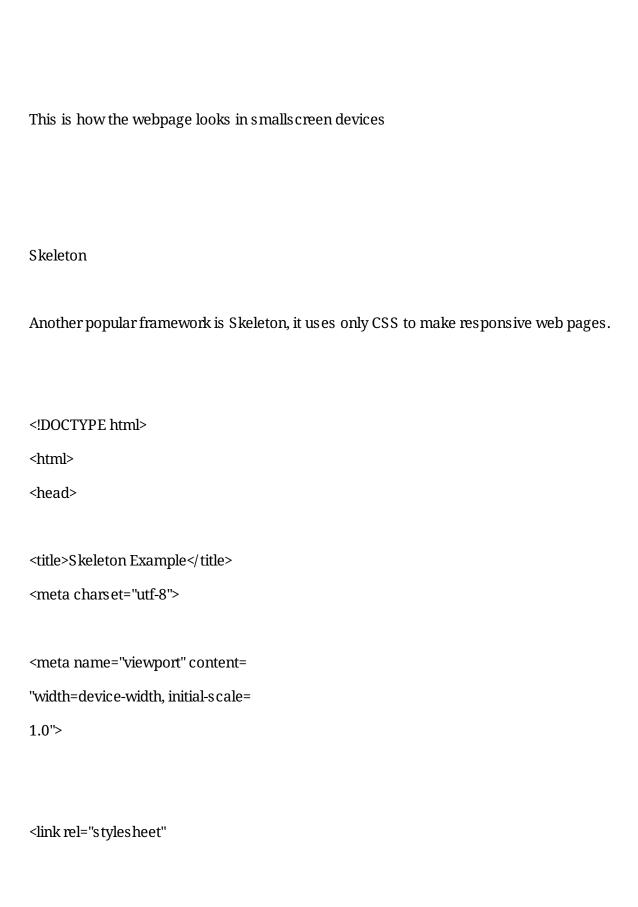
```
background-color:turquoise;
}
</style>
</head>
<body>
<div class="container">
<div class="jumbotron">
<h1>Cats </h1>
</div>
<div class="row">
<div class="col-md-4">
<h2>Tiger</h2>
 The tiger (Panthera tigris)
is the largest cat species,
```

reaching a total body length
of up to 3.38 m (11.1 ft) over
curves and weighing up to 388.7
kg (857 lb) in the wild. with
most remaining populations
occurring in small pockets
is olated from each other, of
which about 2,000 exist on the
Indian subcontinent.

<div class="col-md-4">

<h2>Lion</h2>
The lion (Panthera leo) is one
of the five big cats in the genus
Panthera and a member of the family
Felidae, it is the second-largest
living cat after the tiger. lions
live for 10�14 years in the wild,
although in captivity they can live
more than 20 years.

```
</div>
<div class="col-md-4">
<h2>Cheetah</h2>
The cheetah (Acinonyx jubatus) is
a big cat in the subfamily Felinae
that inhabits most of Africa and
parts of Iran. It is the only extant
member of the genus Acinonyx. The
cheetah can run as fast as 109.4 to
120.7 km/h (68.0 to 75.0 mph),faster
than any other land animal. 
</div>
</body>
</html>
Result for above Example:
```



```
href="skeleton.css">
k rel="stylesheet"
href="normalize.css">
</head>
<body>
<div class="container">
<h1>THE CATS</h1>
<div class="row">
<div class="one-half column">Tiger
The tiger (Panthera tigris)
is the largest cat species,
reaching a total body length
of up to 3.38 m (11.1 ft) over
curves and weighing up to 388.7
\ensuremath{\,\text{kg}} (857 lb) in the wild. with
most remaining populations
occurring in small pockets
is olated from each other, of
```

```
which about 2,000 exist on the
Indian subcontinent. 
</div>
<div class="one-half column">Lion
The lion (Panthera leo) is one
of the five big cats in the genus
Panthera and a member of the family
Felidae, it is the second-largest
living cat after the tiger. lions
live for 10�14 years in the wild,
although in captivity they can live
more than 20 years.
</div>
</ div>
</div>
</body>
</html>
```

Result for above Example :
This is how the webpage looks in smallscreen devices
TRY YOURSELF :
Type the code or copy/paste below and press show result to see the result.