IWT module-2 part-2(BKPanda) Intro to CSS style

CSS can be added to HTML documents in 3 ways:

- **Inline** by using the style attribute inside HTML elements
- **Internal** by using a <style> element in the <head> section
- **External** by using a < link > element to link to an external CSS file

Inline CSS

• An inline CSS is used to apply a unique style to a single HTML element.

```
Syntax
<tagname style="property:value;">
e.g <h1 style="color:blue;">A Blue Heading</h1>
style="background-color:tomato;">This is a paragraph.
<h1 style="font-family:verdana;">This is a heading</h1>
<h1 style="font-size:300%;">This is a heading</h1>
<h1 style="text-align:center;">Centered Heading</h1>
```

- Use background-color for background color
- Use color for text colors
- Use font-family for text fonts
- Use font-size for text sizes
- Use text-align for text alignment
- border property defines a border around an HTML element
- margin property defines a margin (space) outside the border.
- padding property defines a padding (space) between the text and the border ex

```
<!doctype>
<html>
<head>
    <title>Internal style demo</title>
</head>
<body>
<h1 style="color:blue;font-family:verdana;font-size:200%;border:2px solid powderblue; padding: 30px; margin: 50px; background-color:rgb(25,25,71);">This is a heading</h1>
This is a paragraph.
</body>
</html>
```

HTML colors are specified with predefined color names, or with RGB, HEX, HSL, RGBA, or HSLA values.

Common Color names: Tomato, Orange, DodgerBlue, MediumSeaGreen, Gray, SlateBlue, Violet, LightGray

Internal CSS

- An internal CSS is used to define a style for a single HTML page.
- An internal CSS is defined in the <head> section of an HTML page, within a <style> element.

e.g

```
<!DOCTYPE html>
<html>
<head>
<style>

h1 {
    color: blue;
    font-family: verdana;
    font-size: 300%;
    border: 2px solid powderblue;
    padding: 30px;
    margin: 50px;
    background-color:rgb(25, 25, 71);
}
```

```
h2 {
        color: blue;
        font-family: verdana;
        font-size: 300%;
        border: 2px solid powderblue;
        padding: 30px;
        margin: 50px;
       background-color:rgba(255, 99, 71, 0.2);); note a in rgba represents transparency
       p {
        color: white;
        font-family: courier;
        font-size: 160%;
        border: 5px dashed red;
        padding: 30px;
        margin: 50px;
       background-color:DodgerBlue;
  </style>
</head>
<body>
<h1>This is a heading</h1>
<h2>This is a heading2</h2>
This is a paragraph.
</body>
</html>
```

<u>note about colors:</u> rgb(red, green, blue). Each parameter (red, green, and blue) defines the intensity of the color with a value between 0 and 255. This means that there are 256 x 256 x 256 = 16777216 possible colors! To display black, set all color parameters to 0, like this: rgb(0, 0, 0). To display white, set all color parameters to 255, like this: rgb(255, 255, 255)

rgba(*red*, *green*, *blue*, *alpha*). The alpha parameter is a number between 0.0 (fully transparent) and 1.0 (not transparent at all):

In HTML, a color can be specified using a hexadecimal value in the form: #*rrggbb*: Where rr (red), gg (green) and bb (blue) are hexadecimal values between 00 and ff (same as decimal 0-255). example, #ff0000 is displayed as red, because red is set to its highest value (ff), and the other two (green and blue) are set to 00. To display black, set all color parameters to 00, like this: #000000. To display white, set all color parameters to ff, like this: #fffff

In HTML, a color can be specified using hue, saturation, and lightness (HSL) in the form: **hsl(hue, saturation, lightness).** Hue is a degree on the color wheel from 0 to 360. 0 is red, 120 is green, and 240 is blue. Saturation is a percentage value. 0% means a shade of gray, and 100% is the full color. Lightness is also a percentage value. 0% is black, and 100% is white. E.g. **hsl(240, 100%, 50%)**

Block and inline elements

Every HTML element has a default display value, depending on what type of element it is. There are two display values: **block and inline.**

Block-level Elements

A block-level element always starts on a new line, and the browsers automatically add some space (a margin) before and after the element. A block-level element always takes up the full width available (stretches out to the left and right as far as it can).

Two commonly used block elements are: and <div>.

The element defines a paragraph in an HTML document.

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

Here are the block-level elements in HTML:

<address></address>	<figcaption></figcaption>	<noscript></noscript>
<article></article>	<figure></figure>	<u><01></u>
<aside></aside>	<footer></footer>	<u></u>
 blockquote>	<u><form></form></u>	<u><pre></pre></u>
<canvas></canvas>	<h1>-<h6></h6></h1>	<section></section>
<u><dd></dd></u>	<header></header>	
<div></div>	<u><hr/></u>	<tfoot></tfoot>
<u><dl></dl></u>	<u></u>	<u></u>
<u><dt></dt></u>	<main></main>	<video></video>
<fieldset></fieldset>	<nav></nav>	

Inline Elements

An inline element does not start on a new line. An inline element only takes up as much width as necessary. An inline element cannot contain a block-level element!

Inline elements:

<u><a></u>		<small></small>
<u><abbr></abbr></u>	<input/>	
<acronym></acronym>	<u><kbd></kbd></u>	
<u></u>	<u><label></label></u>	<u></u>
 bdo> <big></big>	<u><map></map></u>	
 button>	<object></object>	<textarea></th></tr><tr><th><cite></th><th><output></th><th><time></th></tr><tr><th><code></th><th><u><q></u></th><th><u><tt></u></th></tr><tr><th><u><dfn></u></th><th><samp></th><th><var></th></tr><tr><th><u></u></th><th><script></th><th></th></tr><tr><th><u></u>
<<u>i></u></th><th><select></th><th></th></tr><tr><th></th><td></td><td></td></tr></tbody></table></textarea>

<u>The <div></u> element: The <div> element is often used as a container for other HTML elements. The <div> element has no required attributes, but style, class and id are common. When used together with CSS, the <div> element can be used to style blocks of content:

London

London is the capital city of England. It is the most populous city in the United Kingdom, with a metropolitan area of over 13 million inhabitants.

Standing on the River Thames, London has been a major settlement for two millennia, its history going back to its founding by the Romans, who named it Londinium.

<u>The Element:</u> The element is an inline container used to mark up a part of a text, or a part of a document. The element has no required attributes, but style, class and id are common.

When used together with CSS, the element can be used to style parts of the text:

```
<!DOCTYPE html>
<html>
<body>
This is an inline span <span style="border: 1px solid black">Hello World</span> element inside a paragraph.
The SPAN element is an inline element, and will not start on a new line and only takes up as much width as necessary.
</body>
</body>
</html>
```

<u>o/p</u>

This is an inline span Hello World element inside a paragraph.

The SPAN element is an inline element, and will not start on a new line and only takes up as much width as necessary.

Lists

Types:

i. Unorderedii. Orderediii. Definitioniv. nested

Unordered Lists(bulleted)

e.g

- abc
- def
- geh
- ijk

The list items are marked with bullets. An unordered list starts with the tag. Each list item starts with the tag.

```
<html>
<body>
<h4>An Unordered List:</h4>

Coffee
Tea
Milk

/body>
</html>
```

Inside a list item, you can put paragraphs, line breaks, images, links, other lists, and so on. You can display different kinds of bullets in an unordered list by using the **type attribute**.

```
<html>
<body>
<h4>Disc bullets list:</h4>
ul type="disc">
    Apples
    Bananas
    Lemons
<h4>Circle bullets list:</h4>
ul type="circle">
    Apples
    Bananas
    Lemons
<h4>Square bullets list:</h4>
ul type="square">
    Apples
    Bananas
    Lemons
</body
</html>
```

Ordered Lists

- 1. abc
- 2. def
- 3. geh
- 4. ijk

An ordered list is also a list of items; the list items are numbered sequentially rather than bulleted. An ordered list starts with the tag. Each list item starts with the tag.

```
<body>
                  <h4>An Ordered List:</h4>
                  < 01>
                        Coffee
                        Tea
                        Milk
                  </body>
                  </html>
You can display different kinds of ordered lists by using the type attribute
                  <html>
                  <body>
                  <h4>Letters list:</h4>

    type="A">

                        Apples
                        Bananas
                        Lemons
                  <h4>Lowercase letters list:</h4>

    type="a">

                        Apples
                        Bananas
                        Lemons
                  <h4>Roman numbers list:</h4>

    type="I">

                        Apples
                        Bananas
                        Lemons
                  </01>
                  <h4>Lowercase Roman numbers list:</h4>

    type="i">

                        Apples
                        Bananas
                        Lemons
                  </body>
                  </html>
Definition Lists
It is a list of items (terms), together with a description of each item (term).
A definition list starts with a <dl> tag (definition list). Each term starts with a <dt> tag (definition term).
Each description starts with a <dd> tag (definition description).
                  <html>
                  <body>
                  <h4>A Definition List:</h4>
                  < dl>
                        <dt>Coffee</dt>
                              <dd>Black hot drink</dd>
                        <dt>Milk</dt>
                              <dd>White cold drink</dd>
                  </dl>
                  </body>
                  </html>
```

<html>

A Definition List:

Coffee
Black hot drink
Milk
White cold drink

Inside the <dd> tag you can put paragraphs, line breaks, images, links, other lists, and so on.

Nested Lists(List within a list)

A nested list is a list within another list. Usually the second list is indented another level and the item markers will appear differently than the original list,

```
<html>
<body>
<h4>A nested List:</h4>

Coffee
Tea

li>Black tea
Green tea

</bd>
</br>
</body>
</html>
```

Output

A nested List:

• Coffee
• Tea
• Black tea
• Green tea
• Milk

Nested lists can be several levels deep,

```
<html>
<body>
<h4>A nested List:</h4>
Coffee
   Tea
     Black tea
       Green tea
           <ul>
               China
               Africa
           Milk
</body>
</html>
```

A nested List:

- Coffee
- Tea
 - o Black tea
 - o Green tea

 - China
 Africa

Milk

Summary

TAG	DESCRIPTION	
	Defines an ordered list	
<	Defines an unordered list	
< i>	Defines a list item	
<dl></dl>	Defines a definition list	
<dt></dt>	Defines a term (an item) in a definition list	
<dd></dd>	Defines a description of a term in a definition list	
<dir></dir>	Deprecated. Use instead	
<mcnu></mcnu>	Deprecated. Use instead	

Links

A link is the "address" to a document (or a resource) located on the World Wide Web or elsewhere within your own Web server. **i.e hyperlink** is a reference (an address) to a resource on the Web. Hyperlinks can point to any resource on the Web: an HTML page, an image, a sound file, a movie, and so on.

An HTML **anchor** is a term used to define a hyperlink destination inside a document.

The anchor element <a> defines both hyperlinks and anchors.

Syntax

The start tag contains attributes about the link.

```
<a href="url">Link text</a>
```

The element content (Link text) defines the part to be displayed. The element content doesn't have to be text. You can link from an image or any other HTML element.

href Attribute

The href attribute defines the link "address".

Example.

```
<a href="lastpage.htm"> </a>
<a href="http://www.microsoft.com/"></a>
<a href="#myportion"></a>
```

Link can be

• To external document

E.g

• To a html document kept in a specific folder

• To some other part of same document

Note: The target attribute is used to control how the browser responds when you click on the link. The options for target are:

OPTION	DESCRIPTION
_blank	Opens the linked document in a new window
_self	Opens the linked document in the same frame as it was clicked (this is default)
_parent	Opens the linked document in the parent frameset
_top	Opens the linked document in the full body of the window
framename	Opens the linked document in a named frame

Name Attribute(to link internal navigation in the same page or...)

syntax

```
<a name="portionname">
e.g <a name="index">
a namtion may look like this
```

href link to this portion may look like this

```
<a href="#index"></a>
```

Named anchors are not displayed in any special way by the browser because they are invisible to the reader. Named anchors are sometimes used to create a table of contents at the beginning of a large document.

If a browser cannot find a named anchor that has been specified, it goes to the top of the document. No error occurs.

Note: Always add a trailing slash to subfolder references. If you link like this:

href="http://www.abc.com/html", you will generate two HTTP requests to the server because the server will add a slash to the address and create a new request like this: href="http://www.abc.com/html/".

Example

```
<html>
<body>
<h1>Link demo</h1><br>
<a name="index"><<h2>Index</h2></a><br>
<a href="http://www.gita.edu.in/">My College</a><br>
<a href="myprofile.html">My Profile</a><br>
<a href="#C1"> Chapter 1.</a><br>
<a href="#C2"> Chapter 2.</a><br>
<a href="#C2"> Chapter 3.</a><br>
<a href="#C3"> Chapter 3.</a><br>
```

```
<a name ="C1"><h2>Chapter 1</h2></a><br
This chapter explains ba bla bla
      ba bla bla
      ba bla bla
      ba bla bla
      ba bla bla
<a href="#index"> Go to Index page</a>
<a name ="'C2"><h2>Chapter 2</h2></a><br
This chapter explains ba bla bla
      ba bla bla
      ba bla bla
      ba bla bla
      ba bla bla
<a href="#index"> Go to Index page</a>
<a name ="C3"><h2>Chapter 3</h2></a><br
This chapter explains ba bla bla
      ba bla bla
      ba bla bla
      ba bla bla
      ba bla bla
<a href="#index"> Go to Index page</a>
</body>
</html>
```

Note: for navigating within the same page you can also use id attribute

E,g

<h1 id = "features">My 3 Favorite Bugs</h1> destination (internal)

Go to Favorite Features for link to go to destination A hyperlink can also reference an internal link in *another* document by specifying the document name followed by a pound sign and the id value, as in: href = "filename.html#id"

For example, to link to a tag with the id attribute booklist in books.html, href is assigned "books.html#booklist". You can send the browser to an internal link on another website by appending the pound sign and id value of an element to any URL, as in: href = "*URL*/filename.html#*id*"

mailto: Link

The following example demonstrates how to link to an e-mail address and generate a new e-mail message in your default e-mail application (this works only if you have mail installed).

```
<html>
  <body>

This is a mail link:
  <a href="mailto:someone@microsoft.com?subject=Hello%20again">Send Mail</a>

  <b>Note:</b> Spaces between words should be replaced by %20 to <b>ensure</b>
  that the browser will display your text properly.

  </body>
  </html>
```

More example with cc bcc etc. <html> <body> > This is another mailto link: href="mailto:someone@microsoft.com?cc=someoneelse@microsoft.com&bcc=andsomeoneel se2@microsoft.com&subject=Summer%20Party&body=You%20are%20invited%20 to%20a%20big%20summer%20party!">Send mail! >
b>Note: Spaces between words should be replaced by %20 to ensure that the browser will display your text properly. </body> </html> An Image Link: you can use image as a link also. E.g. <html> <body> Create a link attached to an image: No border around the image, but still a link: </body> </html>

A file path describes the location of a file in a web site's folder structure.

File Path

A file path describes the location of a file in a web site's folder structure.

File paths are used when linking to external files, like:

- Web pages
- Images
- Style sheets
- JavaScripts

Path Description

 The "picture.jpg" file is located in the same folder as the current page
 The "picture.jpg" file is located in the images folder in the current folder
 The "picture.jpg" file is located in the images folder at the root of the
current web

 The "picture.jpg" file is located in the images folder at the root of the
current web

The "picture.jpg" file is located in the folder one level up from the current folder

HTML Images

img Tag and the src Attribute

</body>

In HTML, images are defined with the tag. The img tag is empty, which means that it contains attributes only and it has no closing tag. To display an image on a page, you need to use the src attribute. src stands for "source". The value of the src attribute is the URL of the image you want to display on your page.

```
The syntax of defining an image:
                                    <img src="url" />
```

The URL points to the location or address where the image is stored. An image file named "boat gif" located in the directory "images" on "www.anc.com" has the URL: http://www.abc.com/images/boat.gif

The browser puts the image where the image tag occurs in the document. If you put an image tag between two paragraphs, the browser shows the first paragraph, then the image, and then the second paragraph

```
<html>
                    <body>
                    >
                    An image:
                    <img src="constr4.gif" width="144" height="50" />
                    </body>
                    </html>
Ex-2
                    <html>
                    <body>
                    An image from another folder:
                    <img src="/images/chrome.gif" width="33" height="32" />
                    An image from ABC.com:
                    <img src="http://www.abc.com/images/w3 green.jpg" width="104" height="142" />
                    </body>
                    </html>
Background Images
                    <html>
                           <body background="background.jpg">
                                  <h3>Look: A background image!</h3>
                                  Soth gif and jpg files can be used as HTML backgrounds.
                                  If the image is smaller than the page, the image will repeat
                                  itself.
                           </body>
                    </html>
you can align images within the text.
       <html>
      <body>
       The text is aligned with the image <img src="hackanm.gif" align="bottom" width="48"</p>
      height="48"/>at the bottom.
       The text is aligned with the image<img src="hackanm.gif" align="middle" width="48"</p>
      height="48"/>in the middle.
       The text is aligned with the image <img src="hackanm.gif" align="top" width="48" height="48"</p>
      \rightarrow at the top.\rightarrow
       <b>Note:</b> The bottom alignment is the default!
       </html>
```

Ex 2

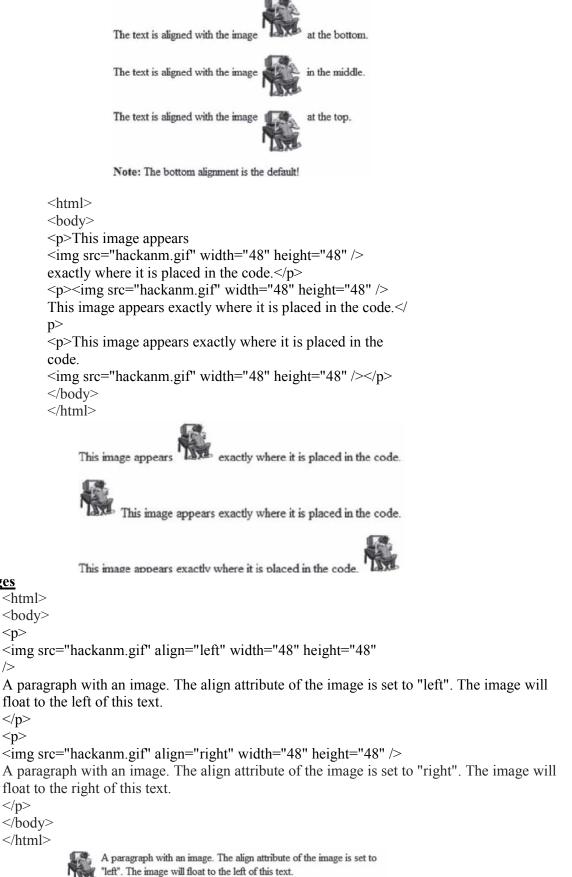
Floating Images

<html> <body> >

>

</body> </html>

p>



A paragraph with an image. The align attribute of the image is set to "right". The image will float to the right of this text.



The width and height attributes allow the page to render properly and more efficiently before the image is downloaded. Without them, the page will render once, then re-render when each image is loaded. The image will be scaled to fit the stated height and width

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

<img src="hackanm.gif" width="20" height="20" />

<img src="hackanm.gif" width="45" height="45" />

<img src="hackanm.gif" width="70" height="70" />

<img src="hackanm.gif" width="70" height="70" />

You can make an image smaller or larger by changing the values of the height and width attributes.
</body>
</html>
```



alt Attribute

The alt attribute is used to define an alternate text for an image. The alt attribute tells the reader what he or she is missing on a page if the browser can't load images. The browser will then display the alternate text instead of the image.

The value of the alt attribute is an author-defined text: It is a good practice to include alternate text for every image on a page to improve the display and usefulness of your document for people who have text-only browsers.

```
<html>
<body>
An image:
<img src="../constr4.gif" alt="Site_Under_Construction" width="200" height="50" />

</body>
</html>
```



Creating an Image Map

The following example demonstrates how to create an image map with clickable regions. Each of the regions is a hyperlink

```
<html> <body>
Click on the sun or on one of the planets to watch it closer:
<img src="planets.gif" width="145" height="126" alt="Planets" usemap="#planetmap" />
<map name="planetmap">
<area shape="rect" coords="0,0,82,126" alt="Sun" href="sun.htm" />
<area shape="circle" coords="90,58,3" alt="Mercury" href="mercur.htm" />
<area shape="circle" coords="124,58,8" alt="Venus" href="venus.htm" />
</map>
</body> </html>
```

HTML Tables

Tables are an excellent way to organize and display information on a page. Tables are defined using the ... tag.

A table is divided into rows with the
 'tr>tag, and each row is divided into data cells or columns using the tag. td stand for "table data," which is the content of a data cell. A data cell can contain text, images, lists, paragraphs, forms, horizontal rules, tables, and so on. Table rows can be header rows or data rows. Header rows are in tags ...

A basic table includes the following tags:

attributes are: align→left/right/center, valign→top/bottom/middle, width→no of pixel/percentage, border→border property of table, cellpadding→spacing within a cell, cellspacing, colspan→how many cols the cell will occupy,rowspan→ how many row the cell will occupy, bgcolor→background color of cell/row/table etc, background→background image of cell or/table etc.

Additional tags: caption with attribute align-bottom/top to show the pace of table caption

- >> starts with a table tag.
- row starts with a tr tag.
- **▶** table data (cell) starts with a td tag or > for heading.

Lets we have to display the following 2 tables

MY TABLE				
COL1	COL2	COL3		
111	2222	333		
AAAA	22	22		
AAAA	44	55		
BBBB	def			

Vertical headers:

```
First Name: Bill Gates
Telephone: | 555 777 1854
Telephone: |555 777 1855
      <!DOCTYPE html>
      <html>
           <head>
               <title>Table</title>
          </head>
          <body>
               <caption align=top> MY TABLE</caption>
               <th>COL1
                    <th><COL2</th>
                    <th>COL3</th>
               111
                    2222
                    333
               AAAA
                    22
                    22
               44
                    55
```

```
BBBB
          def
       <h4>Vertical headers:</h4>
       First Name:
              Bill Gates
          Telephone:
              555 777 1854
          >
              Telephone:
              555 777 1855
          </body>
</html>
```

The border attribute controls the appearance of the table's borders or lines. The default border is 0, so if you do not specify a border attribute, the table is displayed without any borders

```
<html>
<body>
<h4>With a normal border:</h4>
First
Row
Second
Row
<h4>With a thick border:</h4>
First
Row
Second
Row
<h4>With a very thick border:</h4>
First
Row
Second
Row
</body>
</html>
```

With a normal border:



With a thick border:



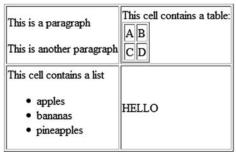
With a very thick border:



Table cells with no content do not display very well in most browsers. To avoid this, add a nonbreaking space () to empty data cells to ensure the borders are visible

How to display elements inside other elements

</body>



```
<html> <body>
 This is a paragraph
         This is another paragraph
     This cell contains a table:
      A
             B
         C
         D
        This cell contains a list
         apples
         bananas
         pineapples
     HELLO
 </html>
```

create more white space between the cell content and its borders(cell padding)

```
<html>
<body>
<h4>Without cellpadding:</h4>
First
Row
Second
Row
<h4>With cellpadding:</h4>
First
Row
Second
Row
</body>
</html>
```

Without cellpadding:



With cellpadding:



Increase the distance between the cells(cell spacing)

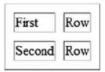
```
<html>
<body>
<h4>Without cellspacing:</h4>

First
Row
Second
Row
<h4>With cellspacing:</h4>
First
Row
Second
Row
</body>
</html>
```

Without cellspacing:



With cellspacing:



Add a background to a table(bgcolor,background)

```
<h4>A background color:</h4>
First
Row
Second
Row
<h4>A background image:</h4>
First
Row
Second
Row
</body>
</html>
```

Add background to one or more table cells.

```
<html>
<body>
<h4>Cell backgrounds:</h4>
First
Row
Second
Row
</body>
</html>
```

Use the frame attribute to control the borders around the table.

```
<html>
<body>
<h4>With frame="border":</h4>
First
Row
Second
Row
<h4>With frame="box":</h4>
```

```
Row
Second
Row
<h4>With frame="void":</h4>
First
Row
Second
Row
<html>
<body>
                With frame="border":
                 First Row
                 Second Row
                With frame="box":
                 First Row
                 Second Row
                With frame="void":
                First Row
                 Second Row
<html>
<body>
<h4>With frame="above":</h4>
First
Row
Second
Row
<h4>With frame="below":</h4>
First
Row
Second
Row
<h4>With frame="hsides":</h4>
First
Row
Second
Row
</body>
</html>
```

First

```
With frame="above":
               First Row
               Second Row
               With frame="below":
               First Row
               Second Row
               With frame="hsides":
               First Row
                Second Row
<html>
<body>
<h4>With frame="vsides":</h4>
First
Row
Second
Row
<h4>With frame="lhs":</h4>
First
Row
Second
Row
<h4>With frame="rhs":</h4>
First
Row
Second
Row
</body>
</html>
              With frame="vsides":
               First Row
               Second Row
              With frame="lhs":
               First Row
               Second Row
              With frame="rhs":
               First Row
```

Second Row

Use the frame and border attributes to control the borders around the table.
https://documents.org/line-

</body>

First row

First row

TAG	DESCRIPTION	
	Defines a table	
	Defines a table header	
	Defines a table row	
>	Defines a table cell	
<caption></caption>	Defines a table caption	
<colgroup></colgroup>	Defines groups of table columns	
<col/>	Defines the attribute values for one or more columns in a table	
<thead></thead>	Defines a table head	
	Defines a table body	
<tfoot></tfoot>	Defines a table footer	