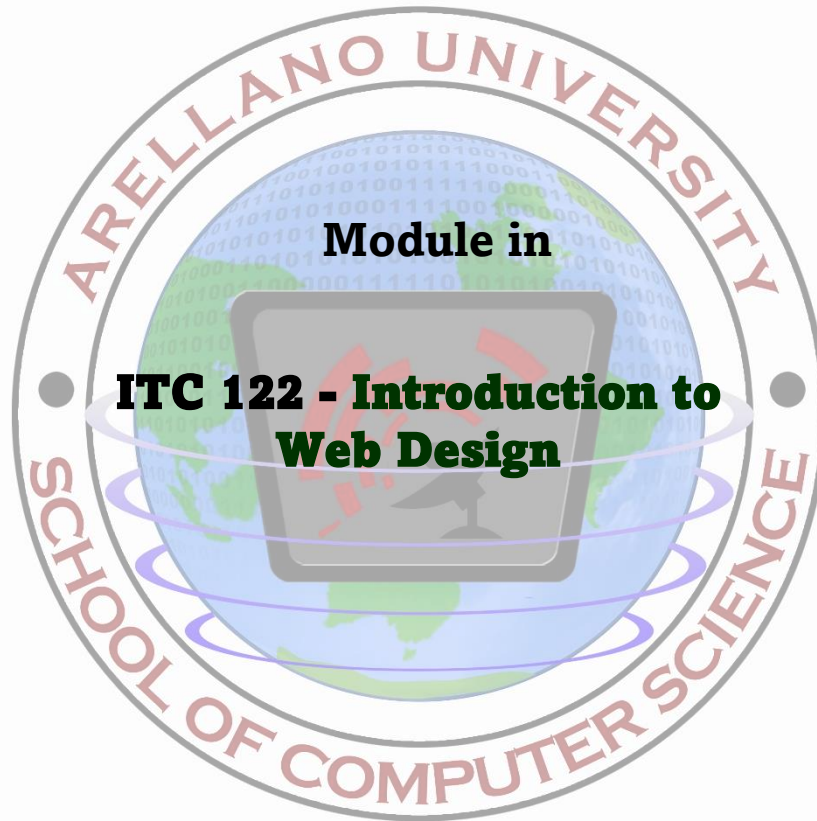


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Module in

**ITC 122 - Introduction to
Web Design**

by:

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Course Title: ITC 122 – INTRODUCTION TO WEB DESIGN**Course Description:**

The course aims to provide the students with the basic knowledge and expertise to construct a sophisticated personal and business web pages using the latest markup language. It emphasizes on the use of HTML and Cascading Style Sheets. It also integrates the use of multimedia elements such as graphics, audio and video. It also discusses web site planning and design (Software Development Life Cycle) along with identifying customer requirements, target audience identification, and web site hosting details.

Learning Outcomes:

At the end of this course, the student will be able to:

1. Understand the guidelines and principles in creating web pages
2. Know and understand the principles of web development and web-design
3. Create sophisticated personal or business websites using HTML and CSS
4. Enhance website by integrating multimedia elements such as images, sounds, and videos
5. Build confidence in presenting and demonstrating individual and group work
6. Present the completed work (website) online through web hosting

Lesson 1: Getting Started with HTML

At the end of the lesson, the learner will be able to:

1. Be oriented on the powerful function of HTML,
2. Understand structure of HTML
3. Have the knowledge on the basic and important HTML tags
4. Create a sample HTML document or Web Page.

Discussion:

Defining HTML

- ⊕ The World Wide Web is based on a programming language called Hyper Text Markup Language (HTML).
- ⊕ HTML is a subset of an existing, more complicated language named SGML.
- ⊕ A markup language uses tags that are inserted into textual documents that explain how information should be formatted onscreen.
- ⊕ All HTML documents are purely text-based. Web browsers, such as Netscape, read the HTML documents and determine how to display that information onscreen.
- ⊕ HTML stands for Hyper Text Markup Language.
- ⊕ HTML was originally developed by Tim Berners-Lee while at CERN, and popularized by the Mosaic browser developed at NCSA
- ⊕ It is the standard by which documents on the Web are presented in browsers like Netscape and Internet Explorer.
- ⊕ As the name implies, HTML is a method for taking standard text and marking it up in such a way that the browser interprets specific tags and displays information in specially formatted ways.
- ⊕ In addition to text styles, HTML is also responsible for telling the browser when text on the page should be considered a link, where to insert graphical elements, and when to insert special elements like image maps, background graphics, mail-to commands, and other special features on the page.

HTML Tags

- ⊕ HTML tags are used to mark-up HTML elements
- ⊕ HTML tags are enclosed with the two symbols “<” and “>”
- ⊕ The enclosing symbols are called “angle brackets”
- ⊕ HTML tags usually have the start tag and the end tag, which is typically written in pair. For example <html> and </html>.
- ⊕ The end tag is characterized by the slash symbol (“/”)
- ⊕ HTML tags are not case sensitive. Which means we can write the tags either capital or small letters. For example, writing is the same as

Basic HTML Tags

HTML documents are text files made up of HTML elements. HTML elements are defined using HTML tags.

Document Type	<HTML> </HTML>	(beginning and end of file)
Header	<HEAD> </HEAD>	(descriptive information, such as title)
Title	<TITLE> </TITLE>	(must be in header)
Body	<BODY> </BODY>	(bulk of the page, or contents)

<HTML>

- ◆ Tells the web browser on the type of document

<HEAD>

- ◆ Technical information about the document is stated

<TITLE>

- ◆ Gives the document a name

<BODY>

- ◆ Where the actual document contents are placed

Important HTMLTags

All HTML documents must contain at least of the following:

▶ `<HTML>`

tags the beginning of an HTML file

▶ `</HTML>`

indicates the end of the HTML document

▶ `<HEAD> </HEAD>`

information enclosed between the start and end tags gives information about your document

▶ `<TITLE> </TITLE>`

text in between these tags specifies your page title and this title will appear at the browser's title bar. Title tag is required for every HTML document as this identifies your document file.

▶ `<BODY> </BODY>`

the whole contents of the HTML document is placed here

My First HTML Document

An HTML files have an .htm or .html file extension name. An HTML file can be created using a simple text editor (such as Notepad).

Step 1. Open Notepad (in Windows) by clicking on the Start Menu, then point to you're your Notepad or Notepad++ Application.

Step 2. Make sure that every HTML file BEGINS with at least the following:
(See Figure 1.1)



Figure 1.1 - Initial contents of the HTML file

Step 3. Begin the text and the rest of your HTML document. Add whatever other HTML tags you need to create your Web Page.

Step 4. Make sure every HTML file ENDS with at least the following:
(See Figure 1.2)

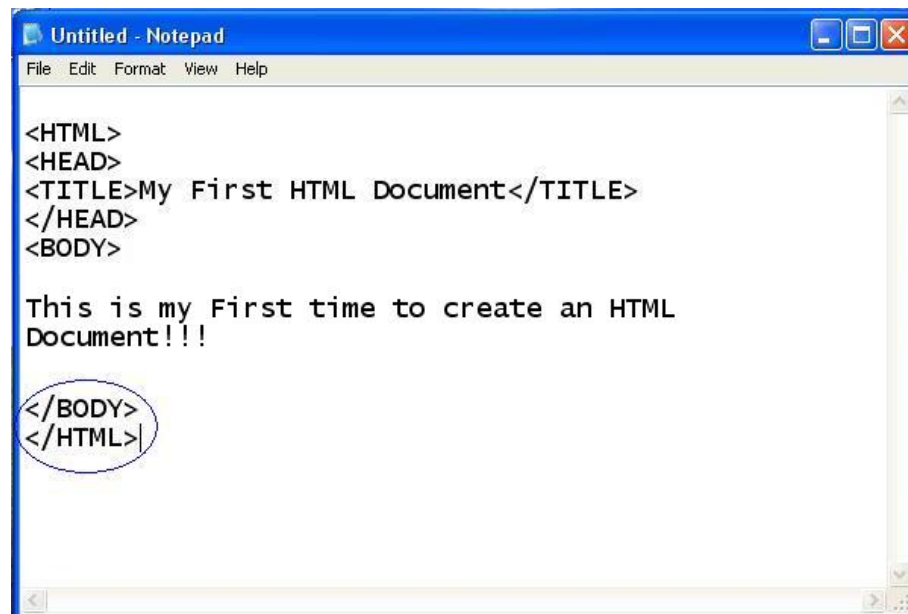


Figure 1.2 - An HTML document must END with these tags.

- Step 5. Every page or so, make sure to save our file. So that when incidence happens like computer hang up or power loss, you will not lose your work and you'll be grateful if you save often.
- Step 6. Whenever you want to save your file, give it the name: <filename.html> and press Enter (the filename should be descriptive about the file contents, such as, myfirstdocument.html.)
- Step 7. Be careful if using Notepad or WordPad because they want to save your file with the extension .txt. Those kind of files will not display properly with browsers. Your file MUST end with .htm or .html to work.
- Step 8. Lastly make sure you omit any spaces in your filename. For example saving your file as my first docu.html will be accepted but it will not be displayed in browsers. So instead, you can use underscore "_" symbol to fill in those spaces, as in my_first_docu.html.

OUTPUT:

Your browser should look like this:

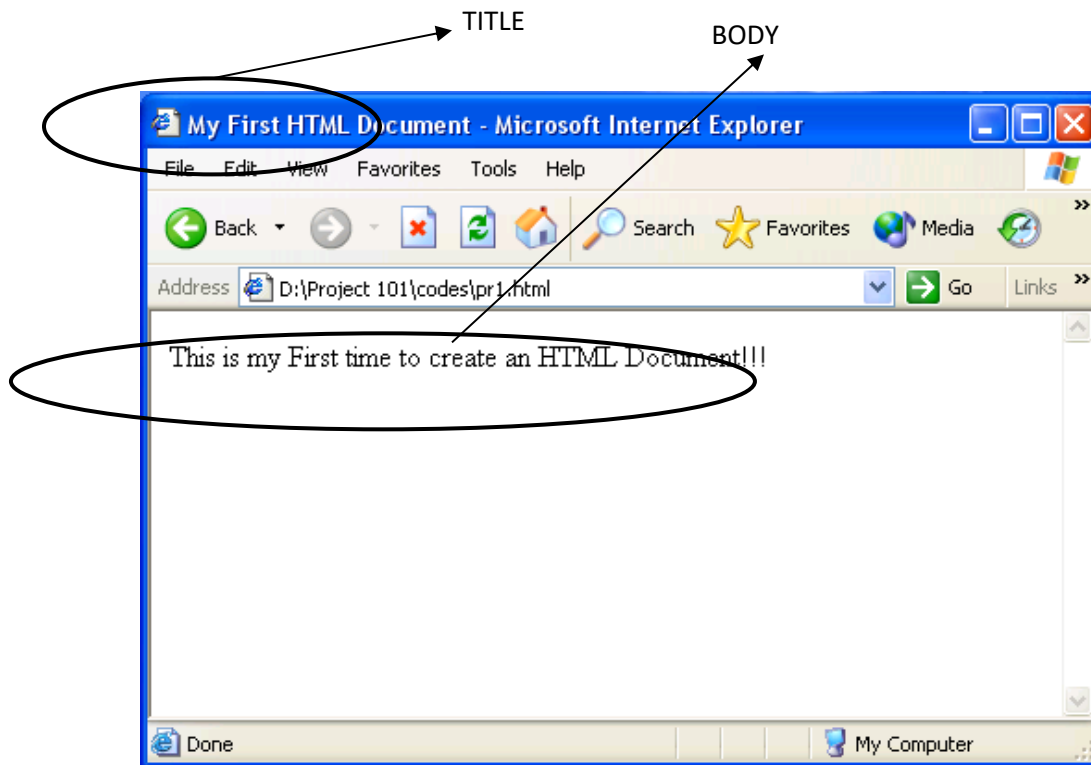


Figure 1.3 – Sample web page output

Enhancing the BODY



`<BODY> </BODY>`

This defines the place where all the actual contents of the HTML document are placed.

Attributes of the Body Tag:



BACKGROUND = "filename and location"

This is used if you want to use an image or picture file as the background of your HTML document.

Wherein the filename is the name of the image or picture file that will be displayed as the background of the HTML document and the location is the place or directory where the image or picture file are located or stored.

Images or pictures that can be used are bitmap images (.bmp), jpeg images (.jpeg/jpg), or even the animated pictures or GIF (Graphics Interchange Format) files (.gif)

● **BGCOLOR = "color or code"**

This defines the background color of your HTML document page.

This usually uses solid or plain colors like "red", "blue", "green", "yellow", etc.

● **TEXT = "color or code"**

This defines the color of the text within your HTML document page.

This also usually uses solid or plain colors like "red", "blue", "green", "yellow", etc.

● **LINK = "color or code"**

This defines the text color of the hypertext link. This is the unvisited link

● **VLINK="color or code"**

This defines the text color of the hypertext link. This is the visited link

● **ALINK="color or code"**

This defines the text color of the hypertext link. This is the active link

<u>COLOR</u>	<u>CODE</u>
black	00 00 00
gray	80 80 80
silver	C0 C0 C0
white	FF FF FF
navy	00 00 80
blue	00 00 FF
green	00 80 00
maroon	80 00 00
red	FF 00 00
turquoise	00 80 80
olive	80 80 80
aqua	00 FF FF
fuschia	FF 00 FF
yellow	FF FF 00

Example 1:

```
Sample1a.html - Notepad
File Edit Format View Help

<html>
<head>
<title>My First Webpage!</title>
</head>
<body background="spiderman.jpg" text="blue" >

<h1>Welcome to my Web Page!!! </h1>

</body>
</html>
```

Figure 1.4 – This example shows the name of the image file and its location.

OUTPUT:

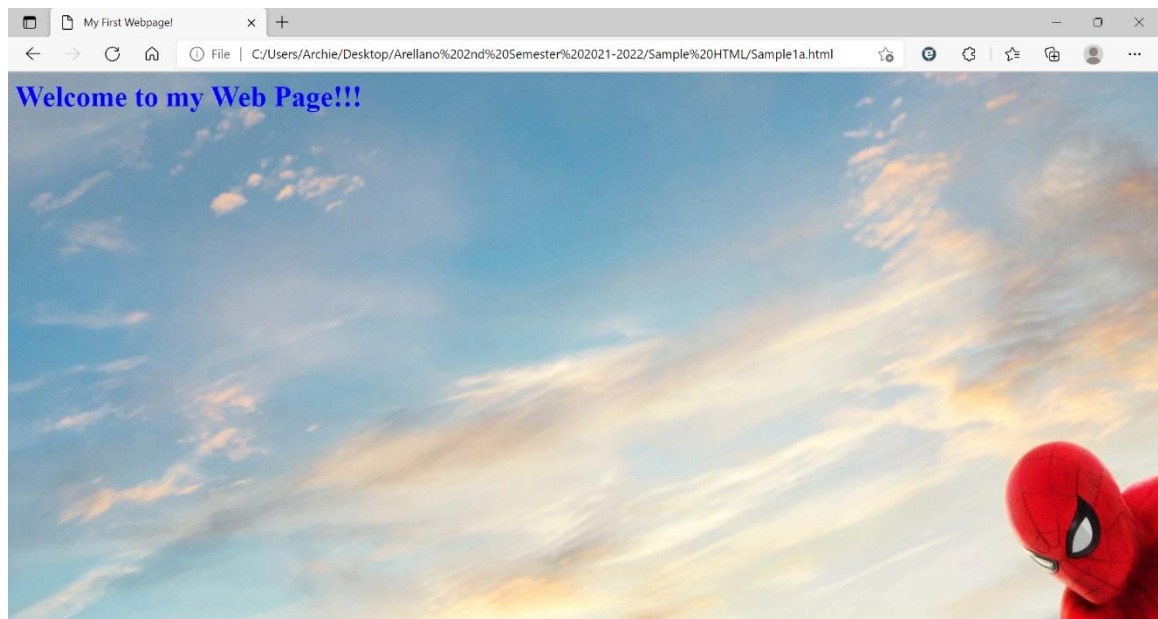
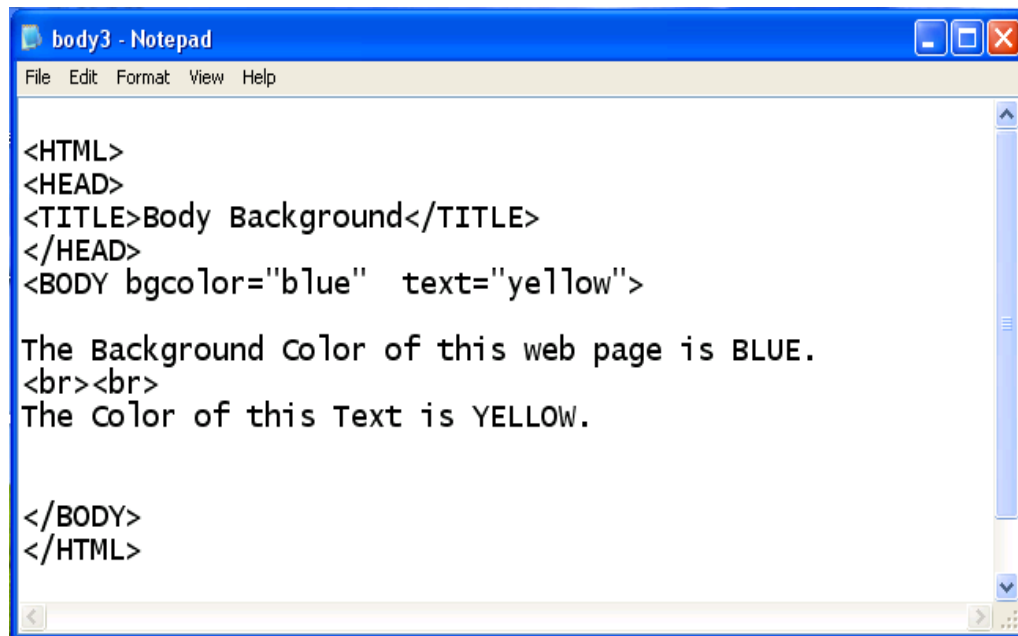


Figure 1.5 – Sample Web Page output showing the image as the background.

Example 2:

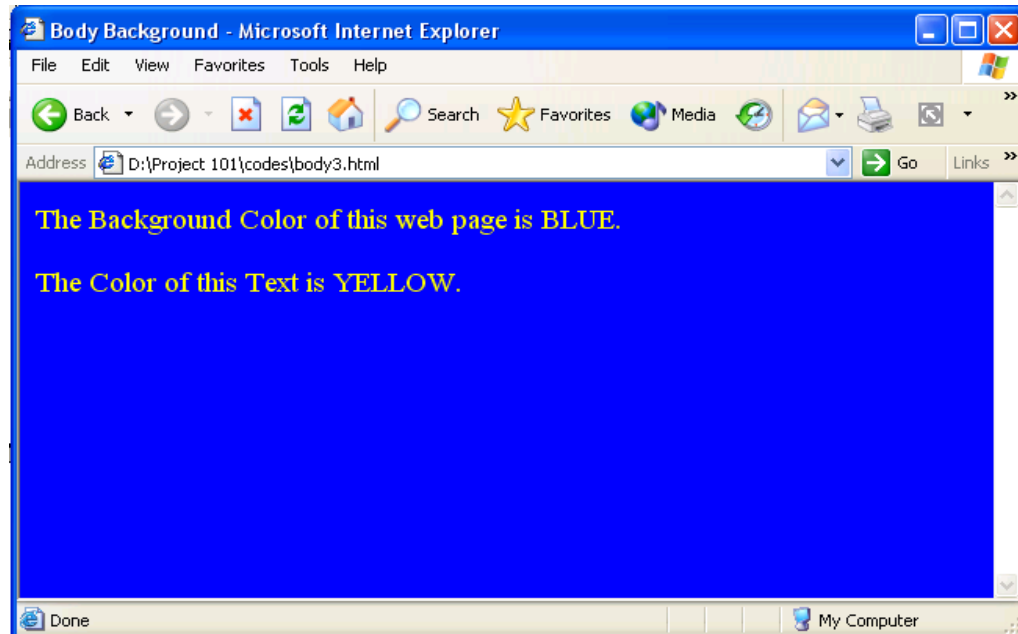


```
<HTML>
<HEAD>
<TITLE>Body Background</TITLE>
</HEAD>
<BODY bgcolor="blue" text="yellow">

The Background Color of this web page is BLUE.
<br><br>
The Color of this Text is YELLOW.

</BODY>
</HTML>
```

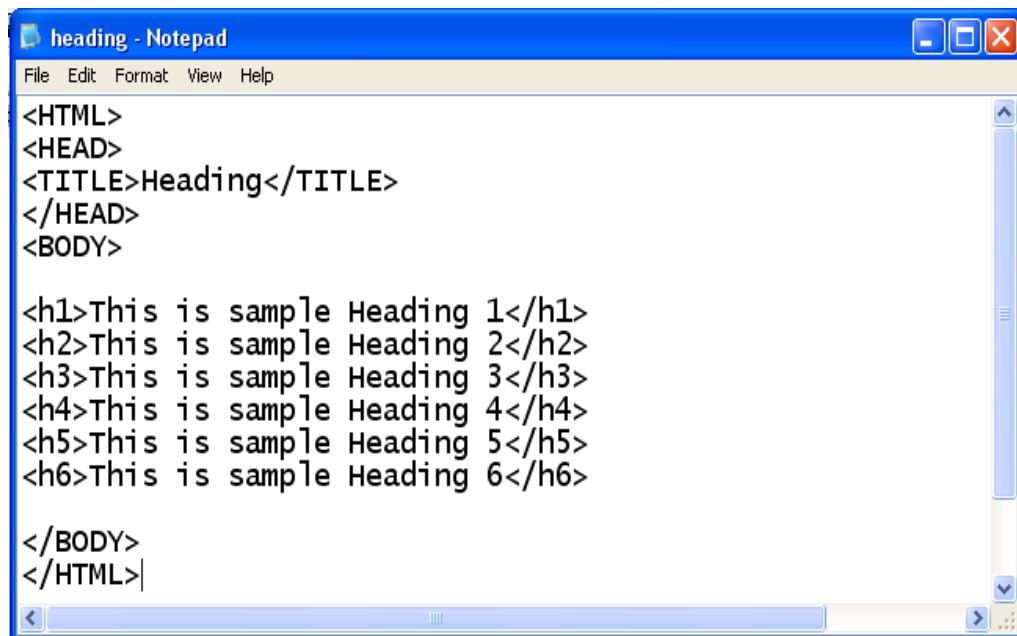
OUTPUT:



HEADINGS

- Headings are defined with the <h1> to <h6> tags
- It has START tag <h1> and END tag </h1>
- The largest heading is defined by <h1> tag and the smallest is <h6>
- It also adds an additional blank line before and after a heading.

Example:

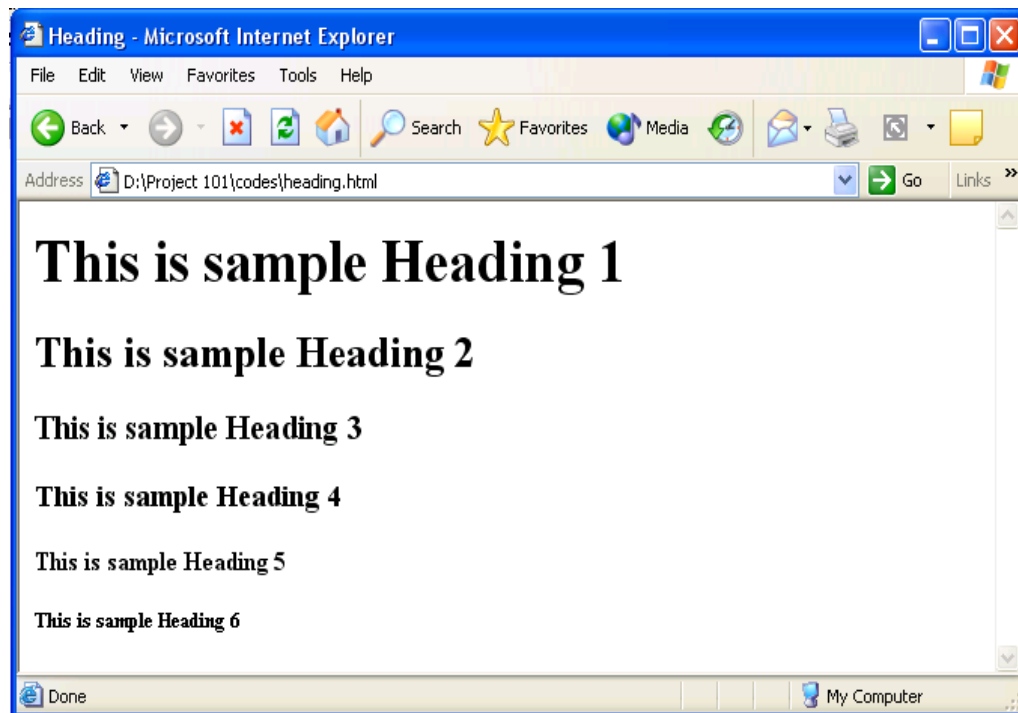


```
<HTML>
<HEAD>
<TITLE>Heading</TITLE>
</HEAD>
<BODY>

<h1>This is sample Heading 1</h1>
<h2>This is sample Heading 2</h2>
<h3>This is sample Heading 3</h3>
<h4>This is sample Heading 4</h4>
<h5>This is sample Heading 5</h5>
<h6>This is sample Heading 6</h6>

</BODY>
</HTML>
```

OUTPUT:



Lesson 2: HTML Text Formatting

At the end of the lesson, the learner will be able to:

1. Learn different ways of formatting text or adding effects to your text.
2. Use the text formatting properly.

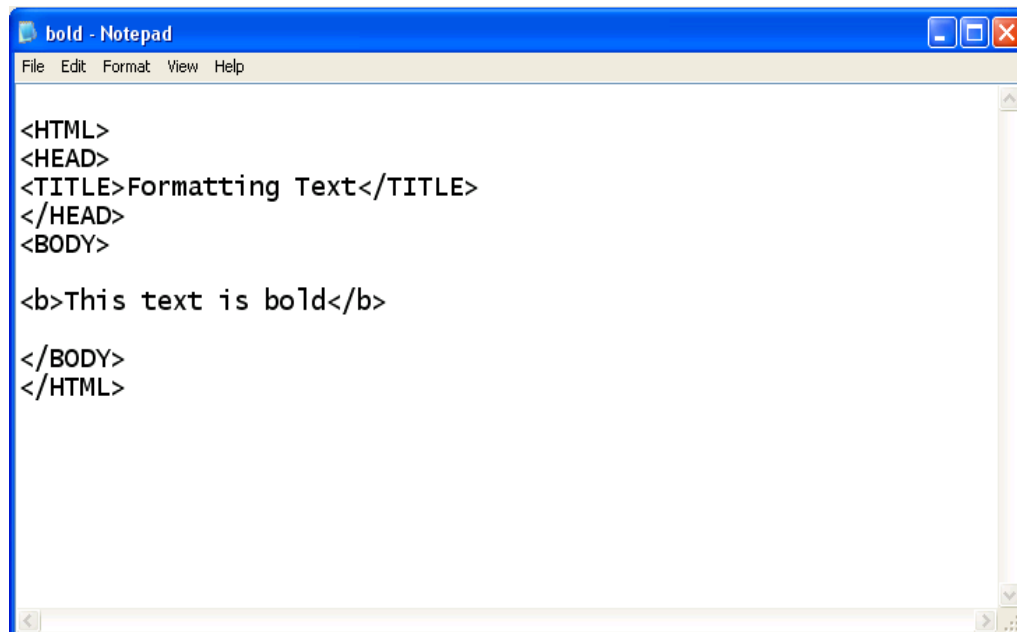
Discussion:

Bold Text

➤ `` ``

- This is used to make text appear darker or heavy.

Example:

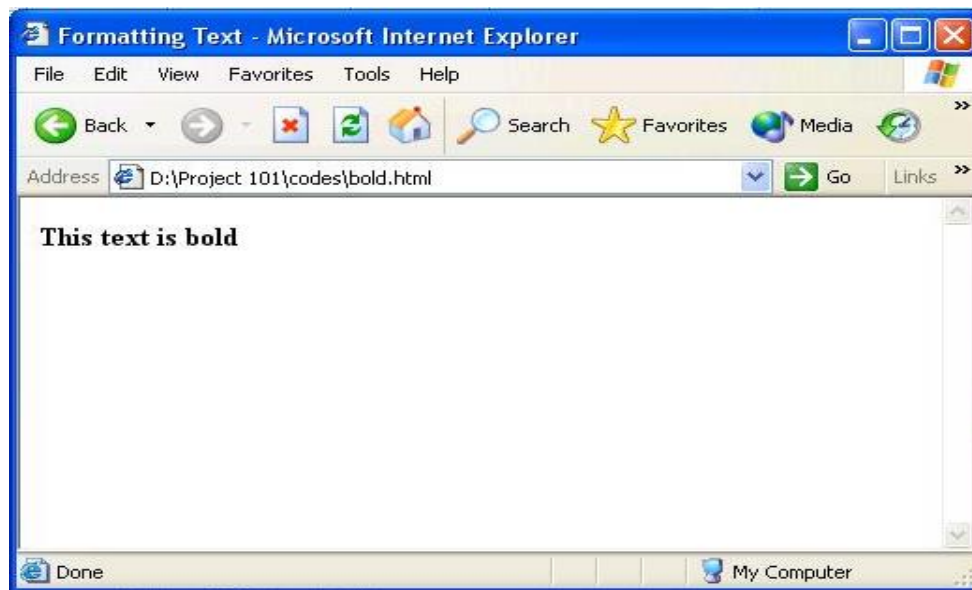


```
<HTML>
<HEAD>
<TITLE>Formatting Text</TITLE>
</HEAD>
<BODY>

<b>This text is bold</b>

</BODY>
</HTML>
```

Output:



Underline Text

➤ `<U>` `</U>`

- This is used to mark text as underlined.

Example:

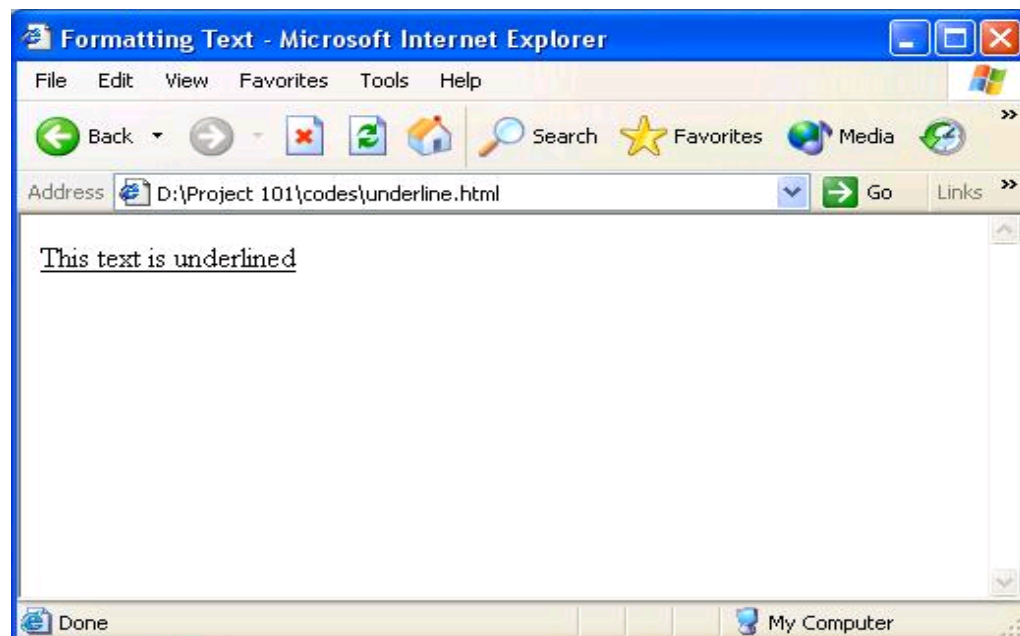
A screenshot of the Notepad application window titled "underline - Notepad". The text area contains the following HTML code:

```
<HTML>
<HEAD>
<TITLE>Formatting Text</TITLE>
</HEAD>
<BODY>

<u>This text is underlined</u>

</BODY>
</HTML>
```

Output:

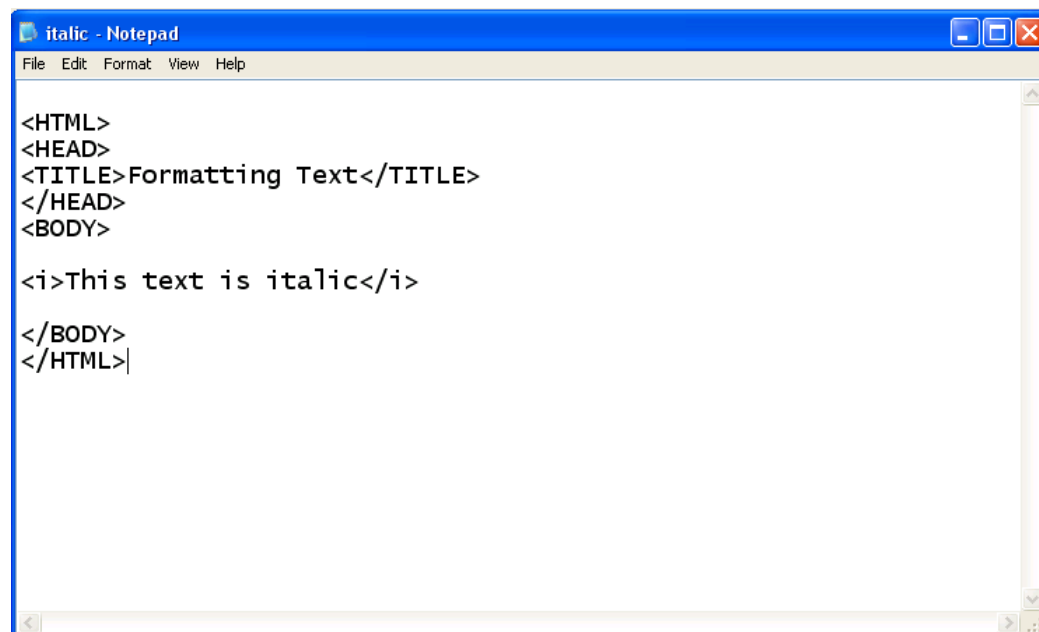


Italic Text

➤ `<i>` `</i>`

- This is used to italicize a text.

Example:

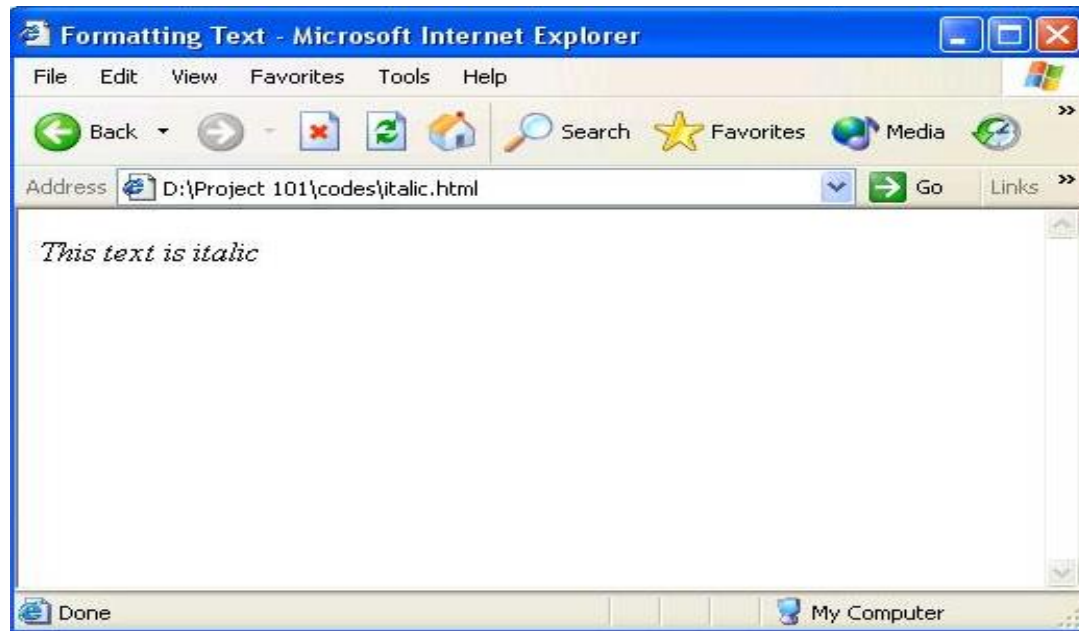


```
<HTML>
<HEAD>
<TITLE>Formatting Text</TITLE>
</HEAD>
<BODY>

<i>This text is italic</i>

</BODY>
</HTML>
```


Output:

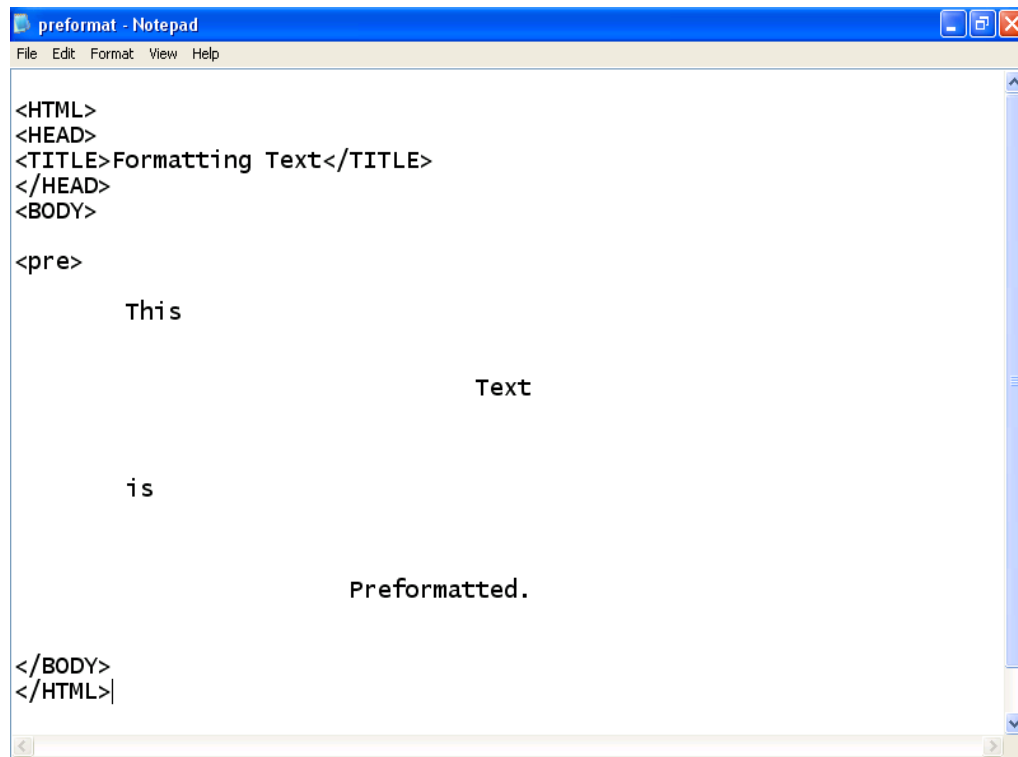


Preformatted Text

➤ **<PRE> </PRE>**

- Text enclosed in these tags is to be presented exactly as entered reserving spacing and line breaks
- Used to insert several blank lines in your document instead of placing lots of

Example:



```
<HTML>
<HEAD>
<TITLE>Formatting Text</TITLE>
</HEAD>
<BODY>

<pre>
    This

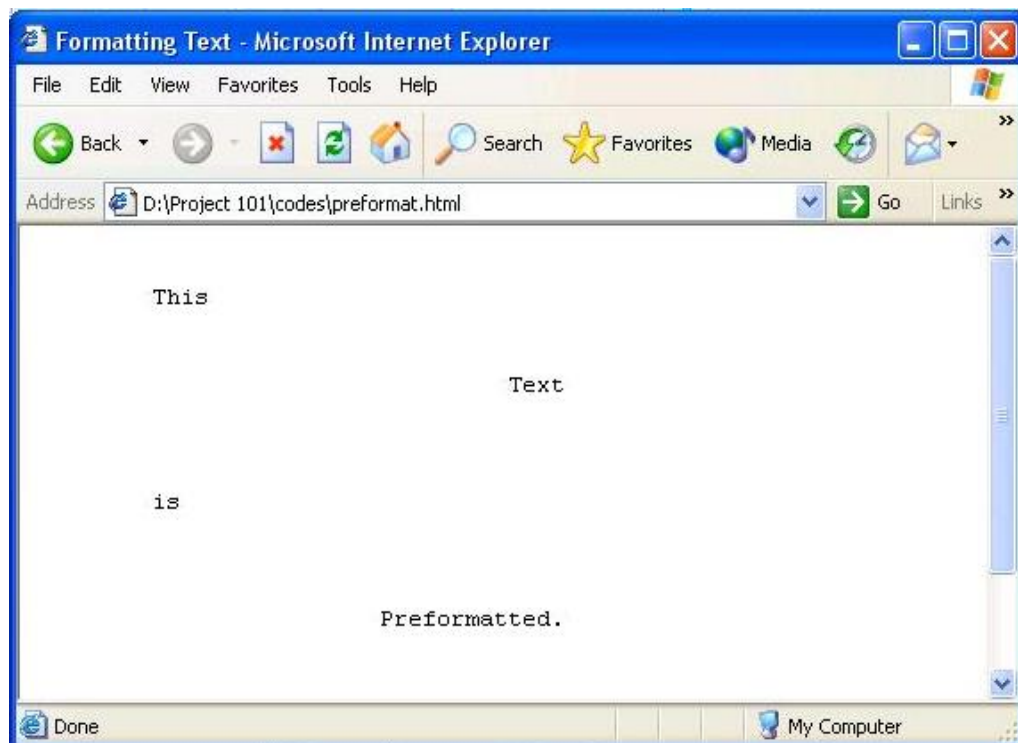
                                Text

    is

                                Preformatted.

</BODY>
</HTML>
```

Output:

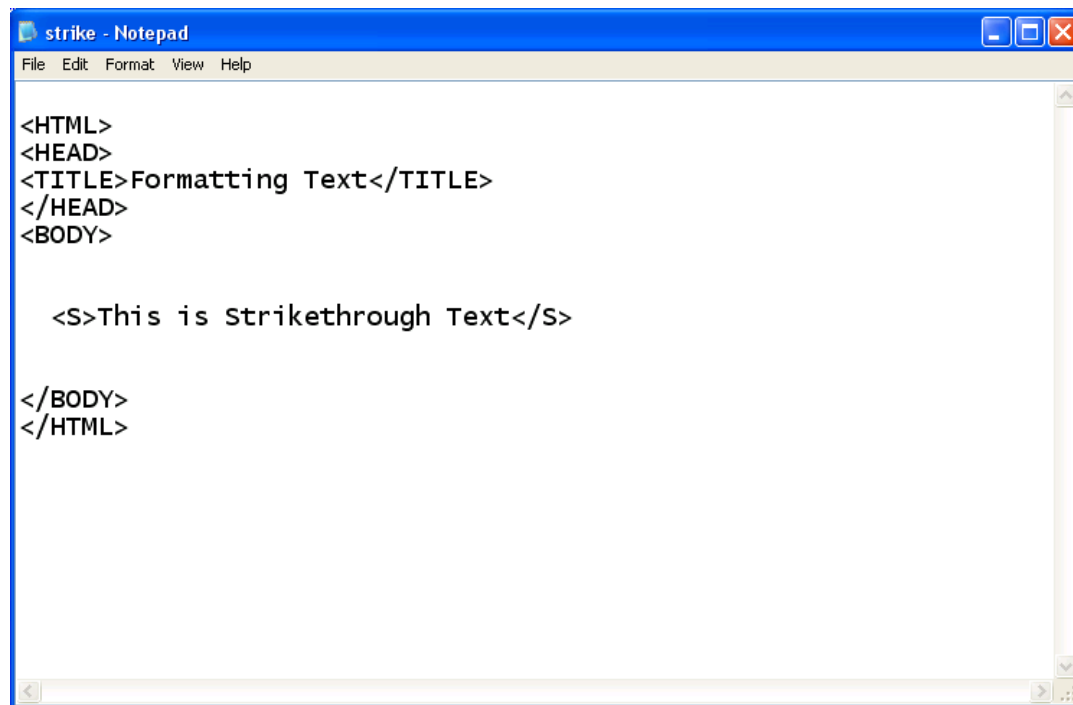


Strikethrough Text

➤ `<S>` `</S>`

- This is used to mark text as strikethrough
- Strikethrough appears like regular text, but with a horizontal line crossing it out

Example:

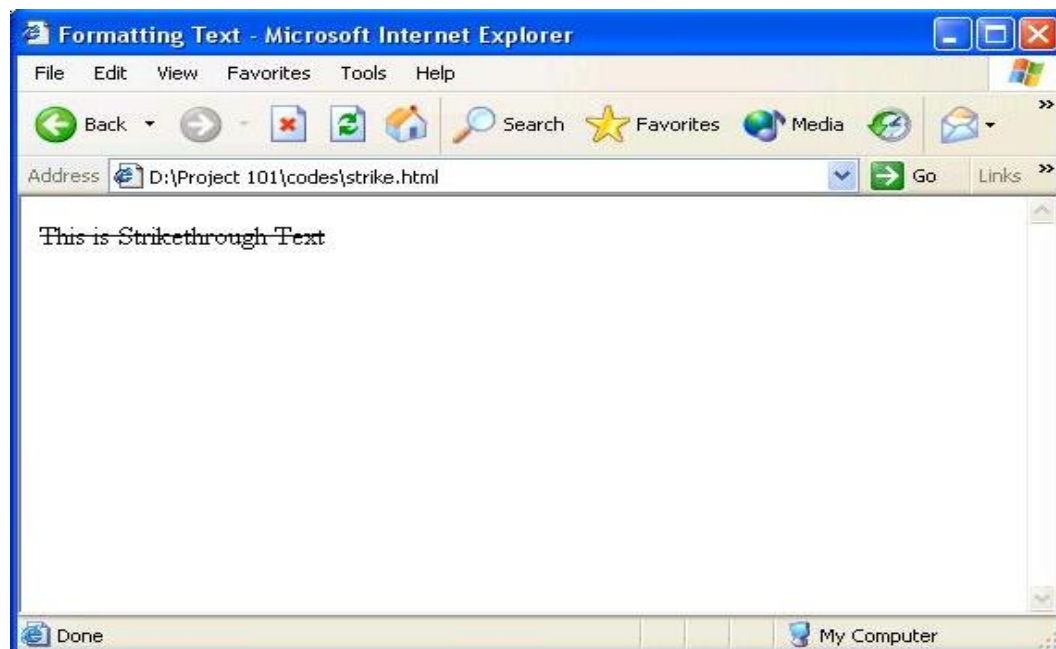


```
<HTML>
<HEAD>
<TITLE>Formatting Text</TITLE>
</HEAD>
<BODY>

  <S>This is Strikethrough Text</S>

</BODY>
</HTML>
```

Output:



Superscript Text

➤ ``

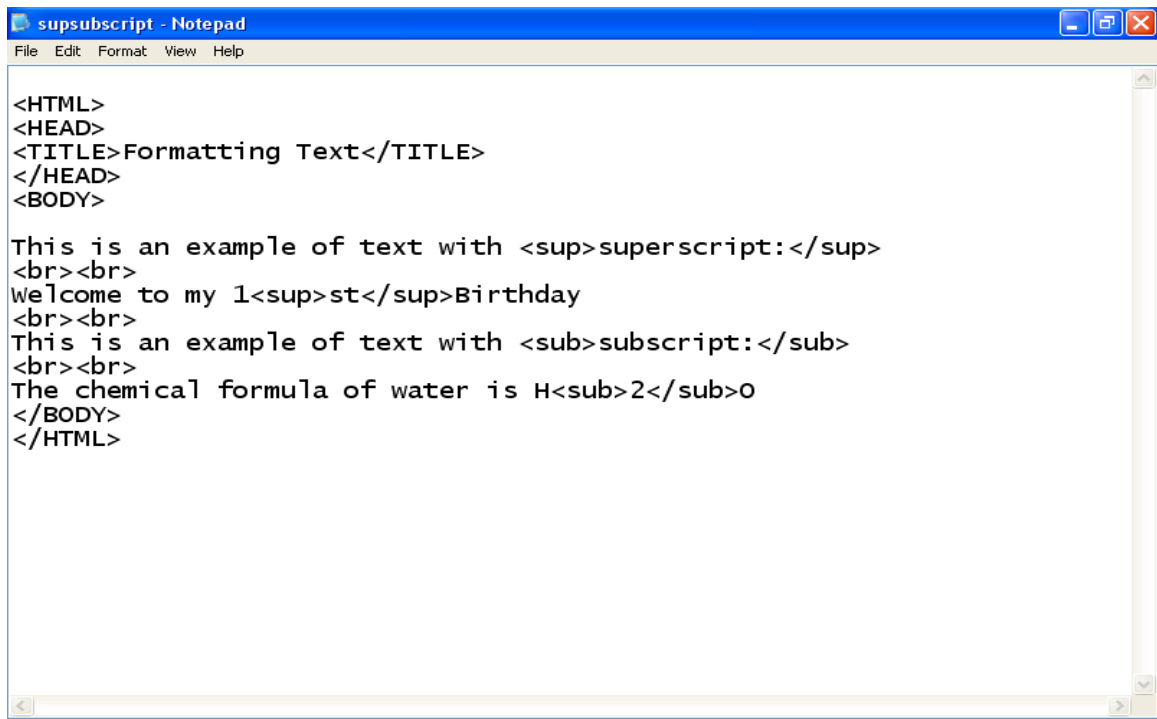
- This is used to mark text as superscript.

Subscript Text

➤ ``

- This is used to mark text as subscript.

Example:



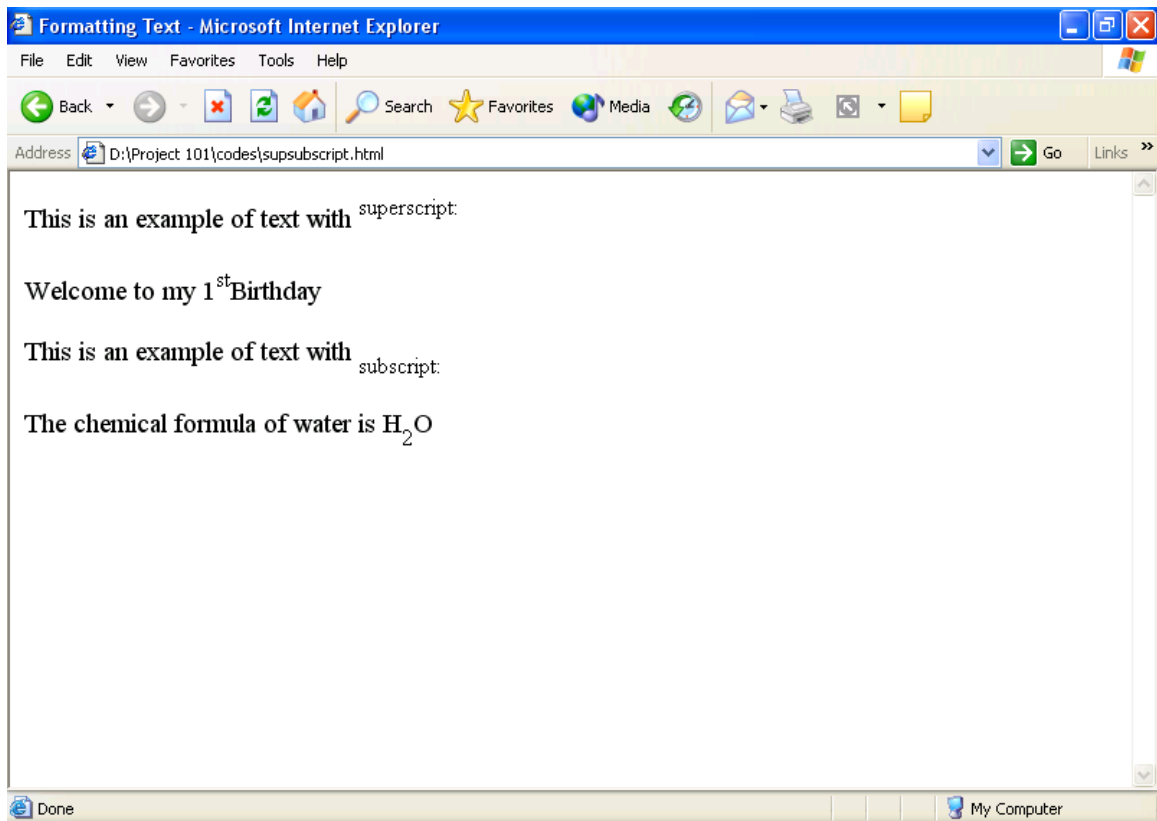
```

<HTML>
<HEAD>
<TITLE>Formatting Text</TITLE>
</HEAD>
<BODY>

This is an example of text with <sup>superscript:</sup>
<br><br>
Welcome to my 1<sup>st</sup> Birthday
<br><br>
This is an example of text with <sub>subscript:</sub>
<br><br>
The chemical formula of water is H<sub>2</sub>O
</BODY>
</HTML>

```

Output:



Lesson 3: FONT SELECTION

At the end of the lesson, the learner will be able to:

1. Acquire knowledge with the use of different font tags.
2. Choose appropriate fonts to add aesthetics in your web page.

Discussion:

Font Tags

➤ ** **

- This tag is used to set the characteristics of the fonts that will be displayed on the web page

ATTRIBUTES:

◆ **Size = "number"**

- This defines the size of the text that is used by the FONT tag. The value of the font size is from 1 to 7. The normal size is 3.

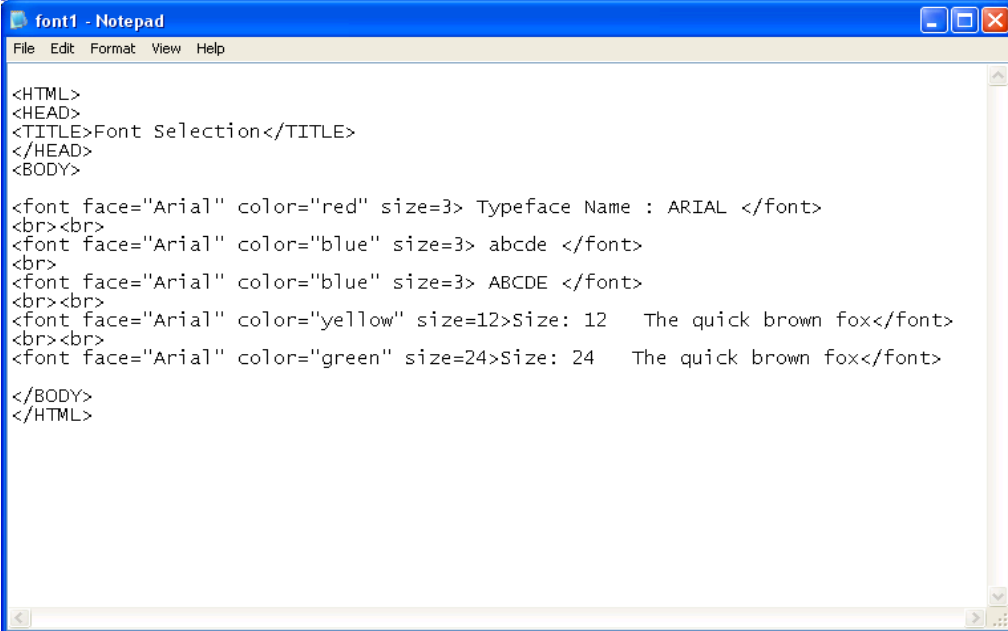
◆ **Face ="font name"**

- This defines the name of the font that is used by the FONT tag.

◆ **Color ="color"**

- This defines the color of the text that is used by the FONT tag.

Example 1:

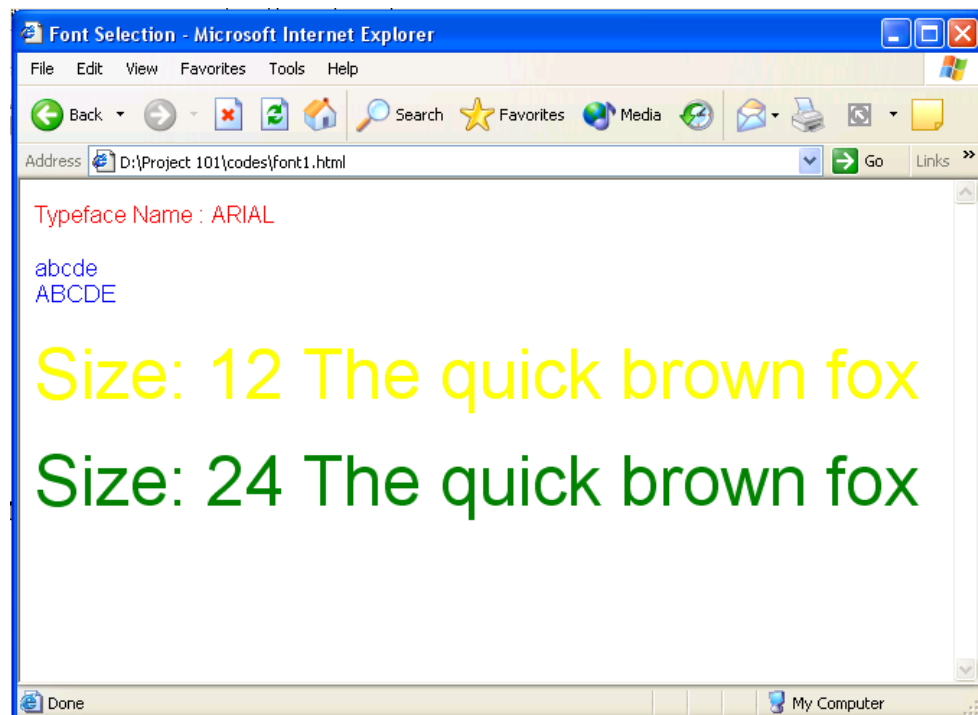


```
<HTML>
<HEAD>
<TITLE>Font Selection</TITLE>
</HEAD>
<BODY>

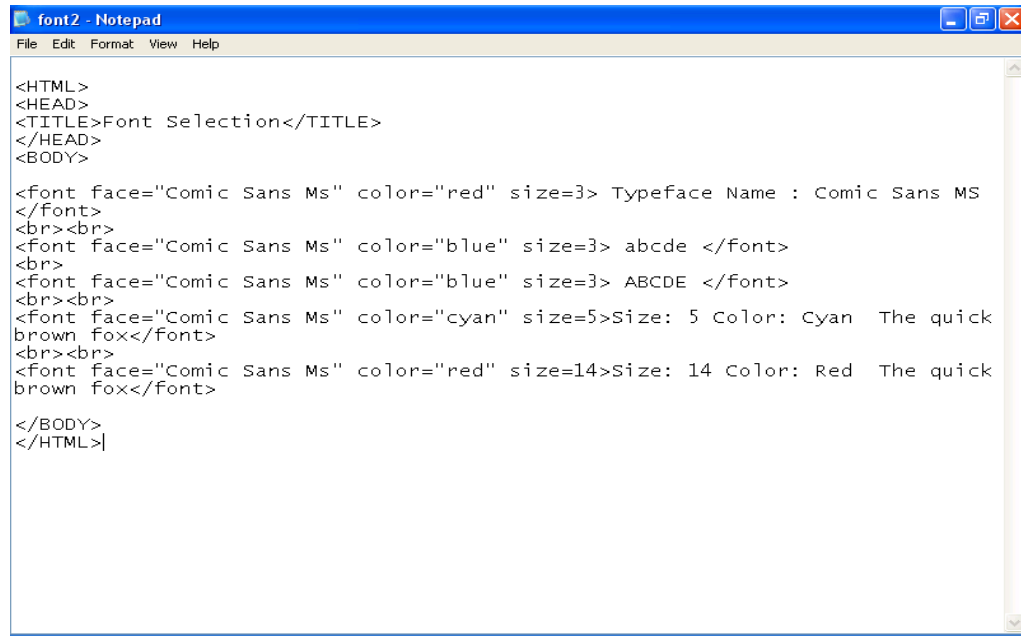
<font face="Arial" color="red" size=3> Typeface Name : ARIAL </font>
<br><br>
<font face="Arial" color="blue" size=3> abcde </font>
<br>
<font face="Arial" color="blue" size=3> ABCDE </font>
<br><br>
<font face="Arial" color="yellow" size=12>Size: 12   The quick brown fox</font>
<br><br>
<font face="Arial" color="green" size=24>Size: 24   The quick brown fox</font>

</BODY>
</HTML>
```

OUTPUT:



Example 2:



```

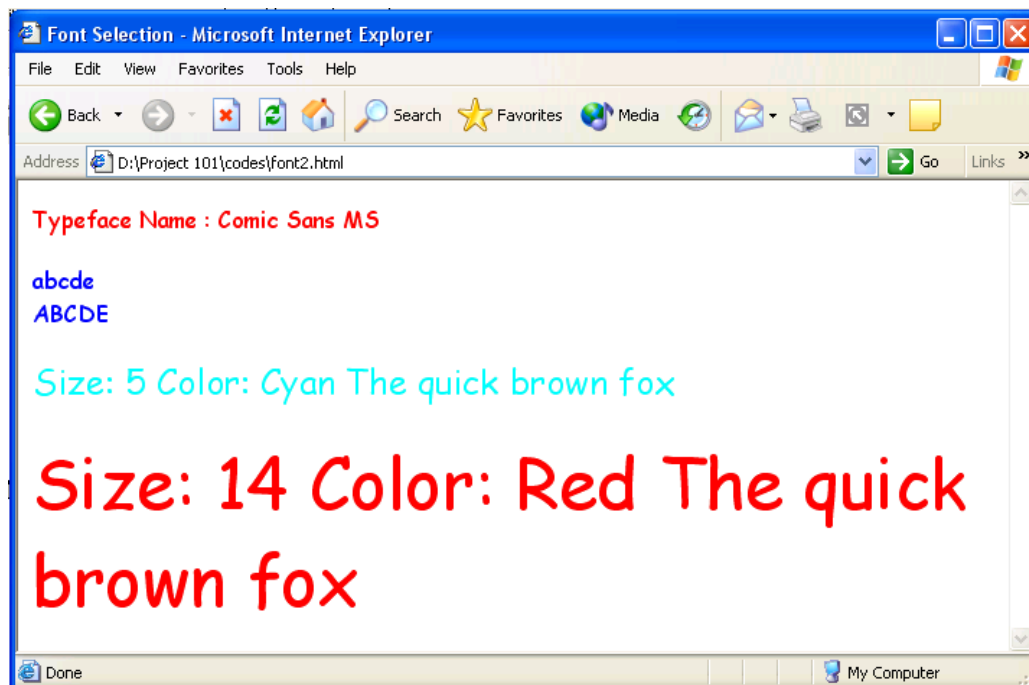
<HTML>
<HEAD>
<TITLE>Font Selection</TITLE>
</HEAD>
<BODY>

<font face="Comic Sans Ms" color="red" size=3> Typeface Name : Comic Sans MS
</font>
<br><br>
<font face="Comic Sans Ms" color="blue" size=3> abcde </font>
<br>
<font face="Comic Sans Ms" color="blue" size=3> ABCDE </font>
<br><br>
<font face="Comic Sans Ms" color="cyan" size=5>Size: 5 Color: Cyan The quick
brown fox</font>
<br><br>
<font face="Comic Sans Ms" color="red" size=14>Size: 14 Color: Red The quick
brown fox</font>

</BODY>
</HTML>

```

OUTPUT:



Lesson 4: INSERTING PICTURES

At the end of the lesson, the learner will be able to:

1. Know how to add pictures or graphical images in their web page.

Discussion:

Image Source

- This tag is used if you want to add an image or picture file in your HTML document.
- Images or pictures that can be used are bitmap images (.bmp), jpeg images (.jpeg/jpg)

ATTRIBUTES OF IMAGE SOURCE

SRC="filename"

- This specifies the filename of the image or picture file.

**** (Note: the image used is in the same folder with HTML documents).

- If the source file is in another folder, specify the path and folder containing the image file. For example,
****.

ALIGN="top / center / bottom"

- This specifies the layout between the text and the image file next to it.

WIDTH="size"

- This specifies the width of the image and are measured in pixels

✦ **HEIGHT="size"**

- This specifies the height of the image and are measured in pixels

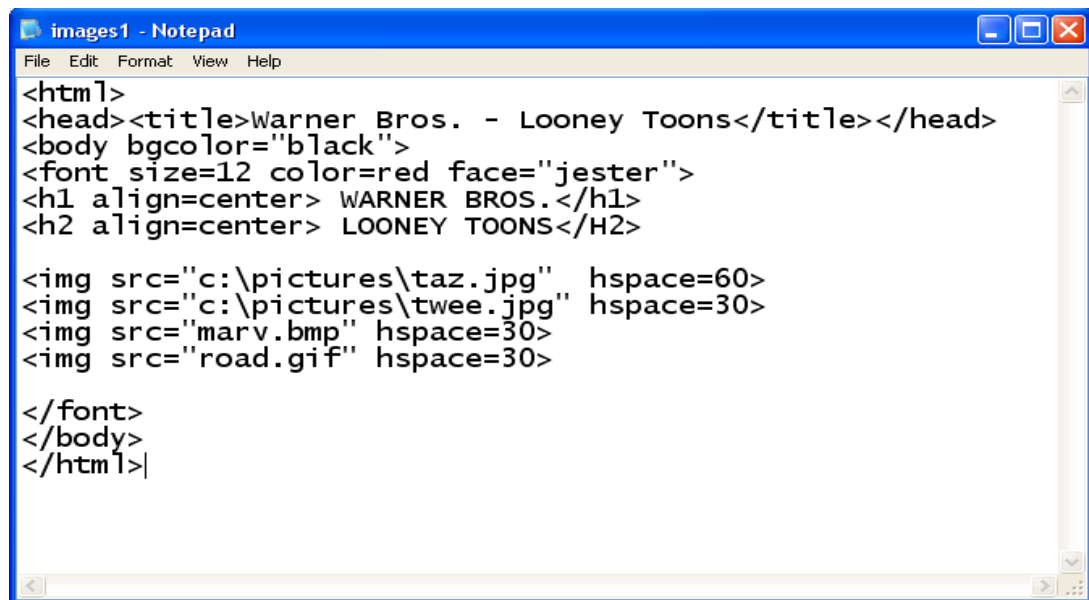
✦ **HSPACE="distance"**

- This specifies the vertical distance of the image file next to the text contained in the document

✦ **ALT="text"**

- This displays an alternative text that is displayed when the image loaded is not available.

Example 1:



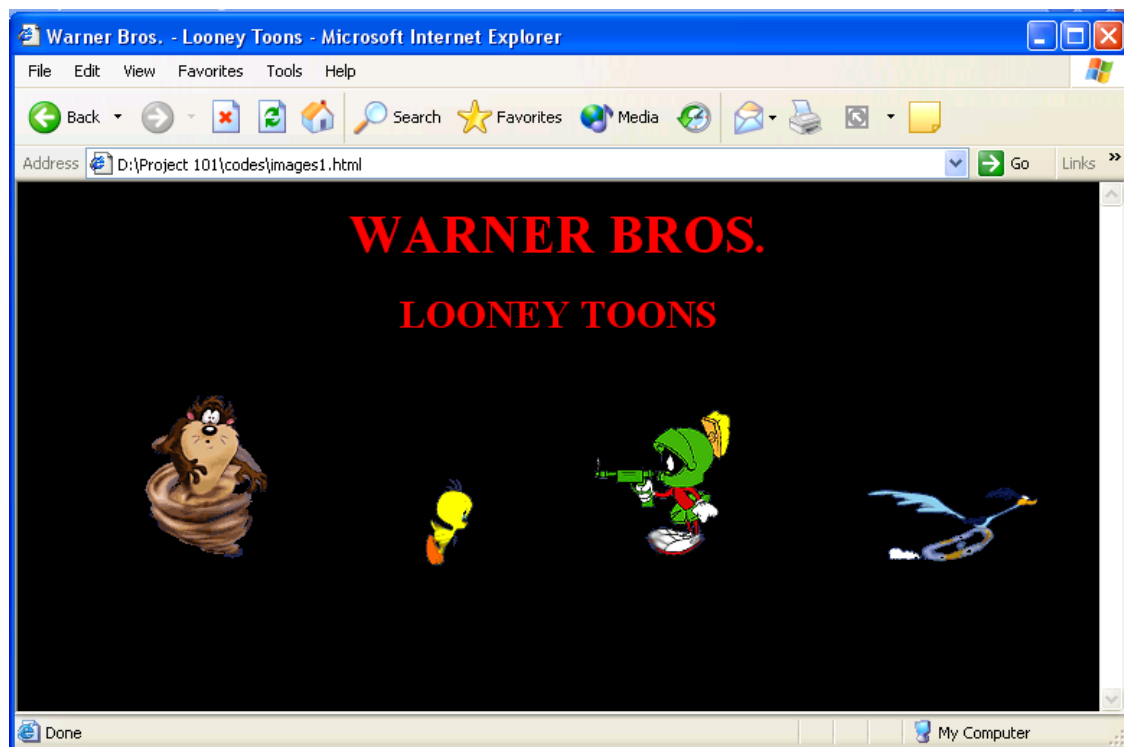
```
<html>
<head><title>Warner Bros. - Looney Toons</title></head>
<body bgcolor="black">
<font size=12 color=red face="jester">
<h1 align=center> WARNER BROS.</h1>
<h2 align=center> LOONEY TOONS</h2>






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

OUTPUT:



Example 2:

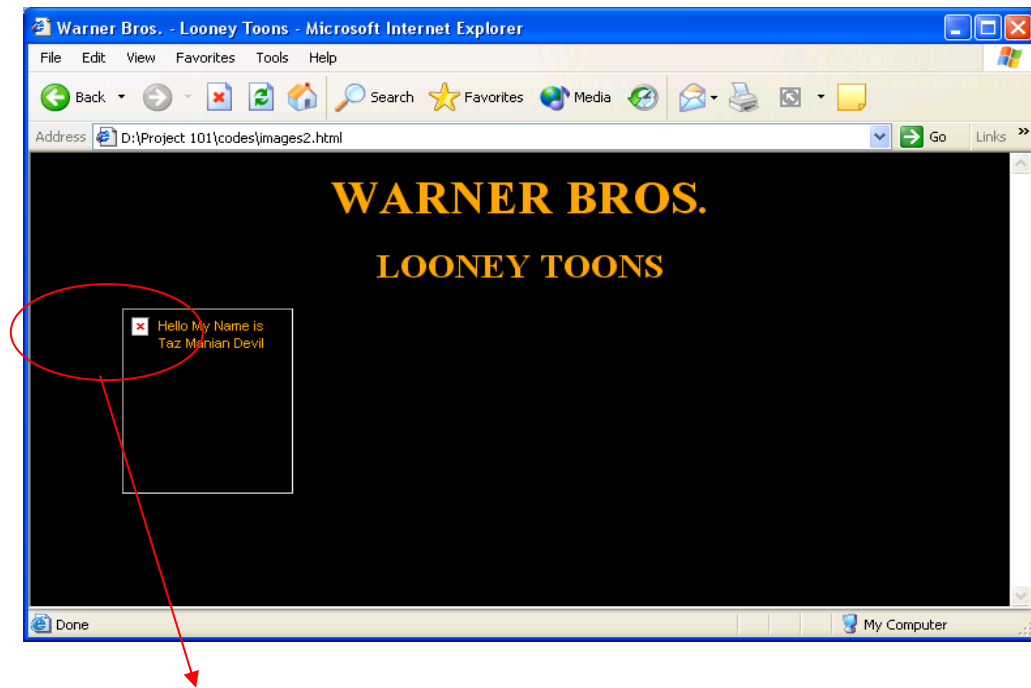
```

images2 - Notepad
File Edit Format View Help

<html>
<head><title>Warner Bros. - Looney Toons</title></head>
<body bgcolor="black">
<font size=12 color=Orange face="jester">
<h1 align=center> WARNER BROS.</h1>
<h2 align=center> LOONEY TOONS</h2>


</body>
</html>
  
```

OUTPUT:



This is the Alternative Text

Lesson 5: CREATING HYPERLINKS

At the end of the lesson, the learner will be able to:

1. Include branching or navigating in their web pages and apply them by linking their documents with other HTML documents using hyperlinks.

Discussion:

**<A HREF> **

- Most HTML documents contain a hyperlink or hypertext link that is used to link or point to another document or a web address on the Web.

**<A> **

- This defines the anchor tag used to create a link to another document or web page.
- This anchor can point to any resource on the web such as an HTML page, an image, a sound file, movie, etc.

ATTRIBUTE:

❖ <HREF>

- This defines the address of the document to link to.
- The text or words between the anchor's start and end tag will be displayed as the hyperlink.

Example:



```

Homepage.html - Notepad
File Edit Format View Help

<html>
<head>
<title>My Home Page</title>
</head>

<body bgcolor="black" text="white" link="yellow" vlink="pink" alink="orange">

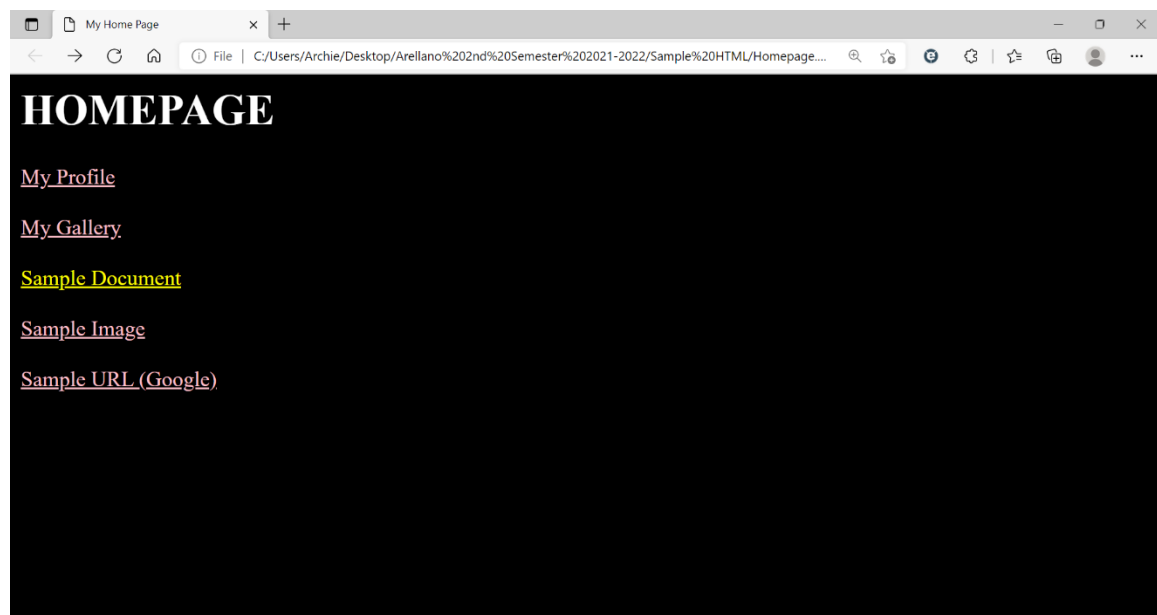
<h1>HOMEPAGE</h1>

<a href="Myprofile.html">My Profile </a> <br><br>
<a href="Mygallery.html">My Gallery </a> <br><br>
<a href="worddocu.doc">Sample Document</a> <br><br>
<a href="image1.jpg">Sample Image</a> <br><br>
<a href="https://www.google.com">Sample URL (Google)</a>

</body>
</html>
Ln 18, Col 1 130% Windows (CRLF) UTF-8

```

OUTPUT:



 anchor text

- The **name** attribute is used to create a named anchor.

Example:

```

aname.html - Notepad
File Edit Format View Help
<HTML><HEAD><TITLE>Calendar 2003</TITLE>
</HEAD>
<BODY>
<CENTER><pre><FONT face="arial" color="blue" size=6>

<A name=top>
<A href="#jan">January</A> | <A href="#feb">February</A> | <a href="#march">March</a> | <a href="#april">April</a>

<br><br><br><br><br><br><br><br><br><br><br><br><br><br><br>

<A name=jan>
<CENTER>
January 2022<FONT size=3>
<A href="#top">Go to Top ^^</A>
</FONT>
<BR>
<pre>
sun mon tue wed thu fri sat
      1  2  3
5  6  7  8  9 10 11
12 13 14 15 16 17 18
19 20 21 22 23 24 25
26 27 28 29 30 31 |

<A name=feb>
<CENTER>
<BR><BR>
February 2022<FONT size=3>
<A href="#top">Go to Top ^^
</A></FONT>
<BR>
sun mon tue wed thu fri sat
      1
2  3  4  5  6  7  8
9 10 11 12 13 14 15
16 17 18 19 20 21 22
23 24 25 26 27 28

<A name=march>
<CENTER>
<BR><BR>
March 2022<FONT size=3>
<A href="#top">Go to Top ^^</A>
</FONT>
<BR>
sun mon tue wed thu fri sat

```

```

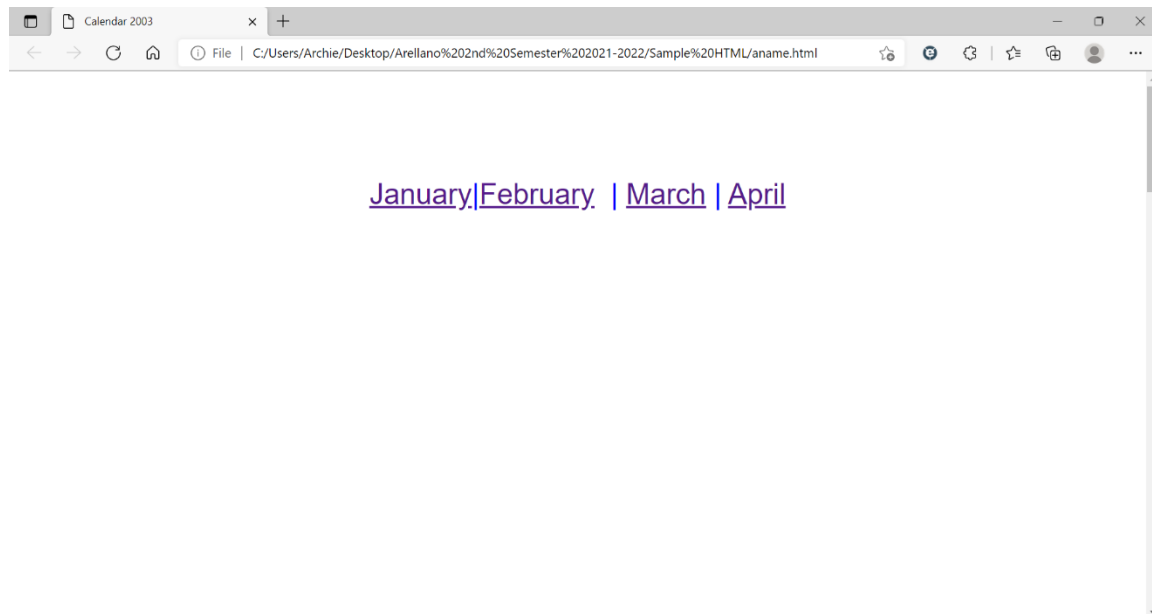
      1
2 3 4 5 6 7 8
9 10 11 12 13 14 15
16 17 18 19 20 21 22
23 24 25 26 27 28

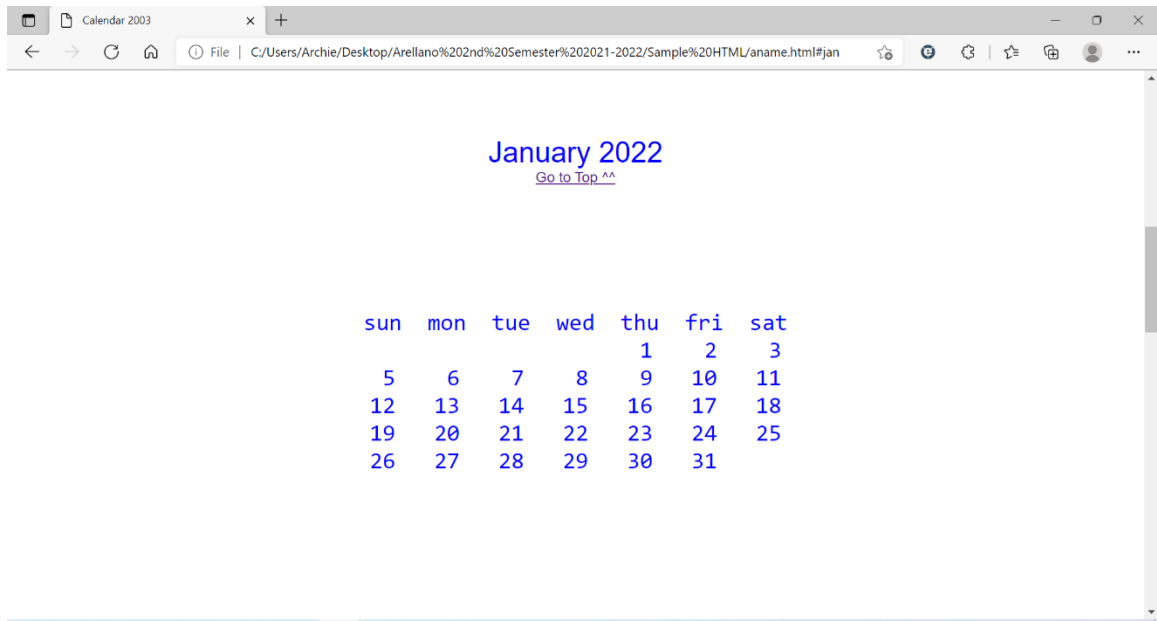
<A name=april>
<CENTER>
<BR><BR>
April 2007<FONT size=3>
<A href="#top">Go to Top ^^
</A></FONT>
<BR>
sun mon tue wed thu fri sat
      1
2 3 4 5 6 7 8
9 10 11 12 13 14 15
16 17 18 19 20 21 22
23 24 25 26 27 28

</BODY>
</HTML>

```

OUTPUT:





References:**Print:**

1. Vodnik, Sasha. **HTML5 and CSS3: Introductory**. Cengage Learning. 2017
2. Jemma Inc.. **Web design : HTML, cascading style sheets, dreamweaver CS6, javascript, XHTML**. Jemma Inc.. 2013
3. Duckett, Jon. **HTML and CSS: Design and Build Websites**. Wiley. 2014.

Non-print: (Related Websites)

1. https://www.w3schools.com/html/html_formatting.asp
2. https://www.w3schools.com/html/html_forms.asp
3. https://www.w3schools.com/css/css_background.asp
4. https://www.w3schools.com/html/html_images_picture.asp
5. https://www.tutorialspoint.com/html/html_embed_multimedia.htm
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7. <https://www.hostgator.in/blog/website/how-to-host-a-website-a-complete-guide-for-beginners/>

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