UNIT-II
UNDERSTANDING HTML

2.0: Introduction to HTML:

❖ HTML stands for "**Hypertext Mark-up Language**".

❖ It is the language, used to create the Web pages.

❖ HTML **describes the structure and format** of the Web page. Marking up a page indicates its format, so that we are telling the web browsers where we want a new line begins or how we want the Text or insert images and so on.

❖ HTML was developed by "**Tim Berners Lee**"in the year 1990.

❖ In HTML, text is marked up with elements, delimitated by **Tags** that are the keywords contained in pairs of angle brackets.

❖ The HTML tags are not case sensitive.

Creation of HTML files:

❖ We can use any text editor to create HTML files. For Example we can use notepad for creating HTML files. There are some HTML source code editors like HTML_KIT.

❖ All HTML files typically have either the **.htm** or **.html** file name extension.

❖ Errors in HTML code are usually **not fatal**. The browsers will make its best effort at rendering the page but will probably not display the page as we intended.

2.1: Describe the importance of HTML: Due its following features, HTML is more popular one.

❖ **Platform Independence:** HTML becomes worldwide standard due to its platform independence. So it is possible to create an HTML file on any computer with any editor.

❖ **Ease of Use:** An HTML file has simple structure. So everybody can easily understand.

❖ **Easy to Find Information and Services:** HTML allows people access information using older protocols in addition to new protocols currently under development.

2.2: Use the Basic Tags in HTML <html>, <head>, <title> and <body>:

The following HTML code shows the common tags in designing a web page.
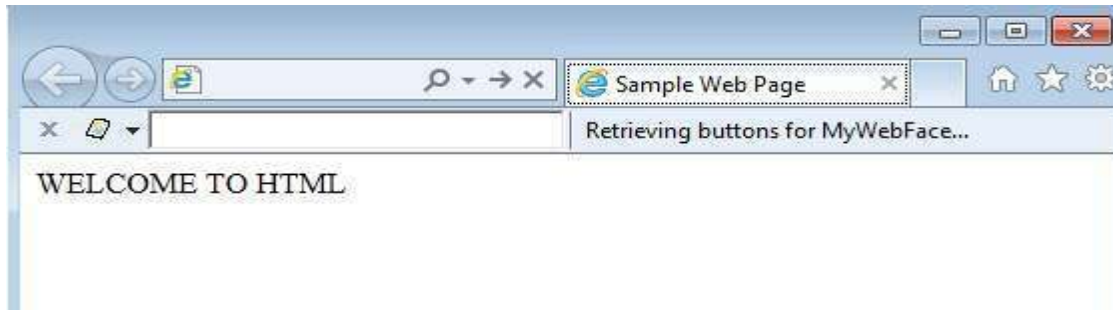
Example:
```
<!DOCTYPE  HTML PUBLIC "//W3C//DTD HTML 4.0//EN">
<HTML>
<!- -HTML COMMENT1 - ->
<!- - HTML COMMENT2 - ->
<HEAD>
        <TITLE> Sample Web Page </TITLE>
</HEAD>
<BODY>
        WELCOME TO HTML
</BODY>
</HTML>
```

❖ **<! - -   - - > Tag:** It is used to place comments throughout the code. Comments help other programmers to understand the code.

Comments in HTML always begin with **<! - -** And end with **- - >**. The browser ignores any text and/or tags placed inside a comment.

❖ **<HTML> . . . . </HTML> Tags:** <HTML> tag is almost always the first tag in an HTML page and </HTML> tag is the last tag. Everything else in the webpage goes between these two tags.

❖ **<HEAD> . . . . </HEAD> Tags:** This element contains general information about the html document. Formally, <HEAD> element must contain <TITLE> tag.

❖ **<TITLE> . . . . </TITLE> Tags**: Contains the title of the HTML document which will appear in the web browser's title bar and is used by search engines to refer to the document. Only on title is allowed in a document.

❖ **<BODY> . . . . </BODY> Tags**: Contains the body of the HTML document, which includes the content like text, images, links, and forms. etc.,
   Note: Remember to include the closing </BODY> tag at the end of   document right before the closing of </HTML> tag.
   This is an important tag and a big one as we can see by its large no. Of attributes.

❖ **<! DOCTYPE> Tag:** Formally starts an HTML document, indicating the version of HTML used.

 Output:

2.3:- Use the Tags <H?>, <Q>, <STRONG>, <CITE>, <BIG>, <SMALL>, <INS>, <DEL> with attributes:

❖ **<H1> through <H6> (**Header Tags)**:-**
   These tags are called **Header** elements. **Creates a Heading** in the Web page, like a headline, using bold font and various sizes. **<H1>** creates the **largest** text and **<H6>** the **smallest**. There are six heading tags, all beloved by HTML programmers: <H1>, <H2>, <H3>, <H4>, <H5> and <H6>.

Attributes of Heading Tags:

1. **Align**: Which can be used to set to left, center (or) right. In this case attributes is optional,by default align all items to the left.

Example:

```
<HTML>
<HEAD>
        <TITLE> Sample Web Page on Headers </TITLE>
</HEAD>
<BODY>
        <H1 ALIGN="CENTER"> WELCOME </H1>
        <H2 ALIGN="CENTER"> WELCOME </H2>
        <H3 ALIGN="CENTER"> WELCOME </H3>
        <H4 ALIGN="CENTER"> WELCOME </H4>
        <H5 ALIGN="CENTER"> WELCOME </H5>
        <H6 ALIGN="CENTER"> WELCOME </H6>
</BODY>
</HTML>
```

Output:

- ❖ **<BIG> Tag:** Renders text in a bigger font then the current default. We use the <BIG> tag to make text somewhat bigger than the current default.
- ❖ **<SMALL> Tag:** We use the <SMALL> Tag to make text somewhat smaller than the current default.
- ❖ **<CITE> Tag:** We use the <CITE> element to indicate that certain text is a citation. Usually, this is rendered **in italics**.
- ❖ **<STRONG> Tag:** We use <STRONG> when we want to strongly emphasize the text. In practice, <STRONG> text is usually rendered as **bold text**.
- ❖ **<Q> Tag:** Used to display the short and inline **quotations** because it doesn't include line breaks. It can be used on a word-by-word basis. This <CITE> Tag is used for longer quotations and <Q> for shorter ones.
- ❖ **<INS> Tag:** Styles the text as **inserted text**; Used to track document edits and changes rendered in Internet Explorer as Underlined.
- ❖ **<DEL> Tag:** Marks text as **deleted**. Rendered as Strikethrough text in Internet Explorer.
  Attributes of <INS> and <DEL> Tags:
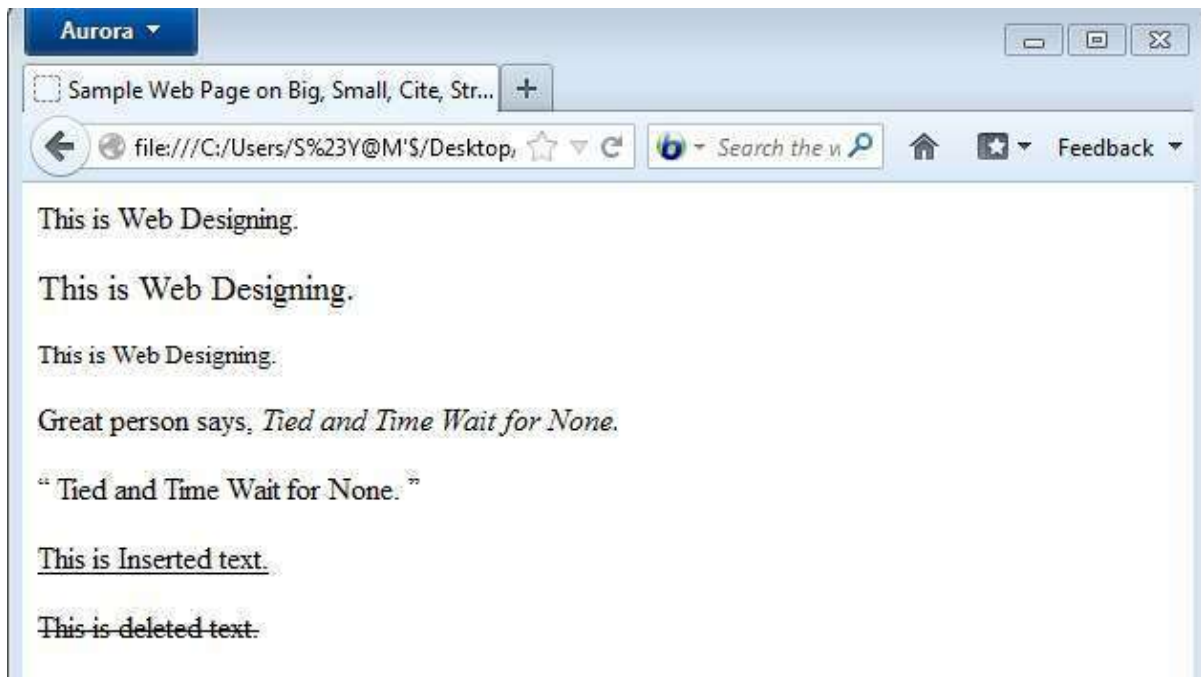 1. **CITE** – Text that cites the reason for the insertion.
  2. **DATETIME** – Displays the date and time of the changes.

EXAMPLE:

```
<HTML>
        <HEAD>
        <TITLE> SAMPLE WEB PAGE ON BIG, SMALL, CITE, STRONG, Q, INS AND DEL. </TITLE>
        </HEAD>
        <BODY>
                THIS IS WEB DESIGNING.
                <BIG> THIS IS WEB DESIGNING. </BIG>
                <SMALL> THIS IS WEB DESIGNING. </SMALL>
                GREAT PERSON SAYS, <CITE> TIED AND TIME WAIT FOR NONE. </CITE>
                <Q> TIED AND TIME WAIT FOR NONE. </Q>
                <INS> THIS IS INSERTED TEXT. </INS>
                <DEL> THIS IS DELETED TEXT. </DEL>
        </BODY>
</HTML>
```

Output:

2.4: Use the Presentation Formation Tags like <B>, <I>, <U>, <STRIKE>, <SUB>, <SUP>, <CENTER>, <FONT>, <MARQUEE> With Attributes:
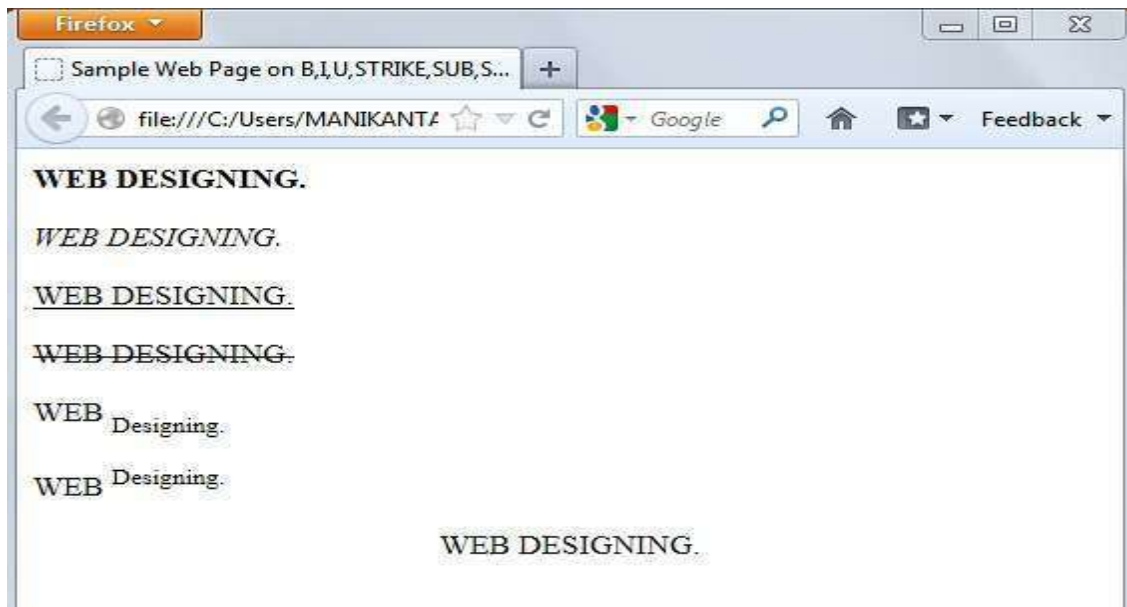
- ❖ **<B> Tag:** Sets the text style to **bold**. We can use this tag together with other styles like <i>.
- ❖ **<I> Tag:** Displays the text in **italics**. We can also combine this style with other styles.
- ❖ **<U> Tag:** We use this tag to **underline** the text in HTML.
- ❖ **<STRIKE> Tag:** Using this tag we will display the text in **strike through** style.
- ❖ **<SUB> Tag:** It creates the text as **sub script**.
- ❖ **<SUP> Tag:** Style the text as **superscript**.
- ❖ **<CENTER> Tag:** **Centers** its enclosed text in the web browser.

Example:
```
<HTML>
<HEAD>
        <TITLE> SAMPLE WEB PAGE ON B,I,U,STRIKE,SUB,SUP,CENTER TAGS. </TITLE>
</HEAD>
<BODY>
        <B> WEB DESIGNING. </B>
        <I> WEB DESIGNING. </I>
        <U> WEB DESIGNING. </U>
        <STRIKE> WEB DESIGNING. </STRIKE>
        WEB <SUB> Designing. </SUB>
        WEB <SUP> Designing. </SUP>
        <CENTER> WEB DESIGNING. </CENTER>
</BODY>
</HTML>
```
Output:

❖ **<FONT> Tag:** We can use this tag to **select a Font, Face, Size and Color**.

Attributes:
1. **Color:** Specifes the color of the font, using following any one of the three of methods:
   - **"RGB(VALUE,VALUE,VALUE)"**
   - **"#00FF20"**
   - **"COLOR NAME"**
2. **Face:** Specifies the styles of the font.
3. **Size:** Specifies the font size.

Example:
```
<HTML>
<HEAD>
        <TITLE> Sample Web Page on FONT Tag. </TITLE>
</HEAD>
<BODY>
        <FONT FACE= "ARIAL" SIZE= "7" COLOR= "BLACK"> WEB DESIGNING.        </FONT>
</BODY>
</HTML>
```

Output:

❖ **<MARQUEE> Tag:** Displaying the text in **a scrolling(moving)**.

Attributes:
1. **Align:** Sets the allignment of the text relative to the marquee. Values are:
   - **Top (Default),**
   - **Middle,**
   - **Bottom.**