Name: ***Roll No:***

Department: AIDS (Sem V)

Class: Third Year (T.E.)

Subject: Web Computing & Network lab (WC&NL)

Experiment. No.01

Title: To Create a webpage using HTML.

Date:

Subject In-Charge Sign: ………………………..

Aim: To create a webpage using HTML

Tools: Microsoft Visual studio, Notepad

Theory:

HTML: Hypertext Markup Language (HTML) is the standard markup language for documents designed to be displayed in a web browser. It can be assisted by technologies such as Cascading Style Sheets (CSS) and scripting languages such as JavaScript.

Web browsers receive HTML documents from a web server or from local storage and render the documents into multimedia web pages. HTML describes the structure of a web page semantically and originally included cues for the appearance of the document.

HTML elements are the building blocks of HTML pages. With HTML constructs, images, and other objects such as interactive forms may be embedded into the rendered page. HTML provides a means to create structured documents by denoting structural semantics for text such as headings, paragraphs, lists, links, quotes, and other items.

General structure of a Web Page

A basic HTML page contains a Head section and a Body section. The contents of the head section are normally invisible in a web browser and mainly consists of some Metatags. The Body consist of those HTML elements that you want to have displayed in your browser.

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

Simple steps to create a basic HTML document:

1. Open notepad or another text editor.

2. At the top of the page type <html>

3. Add the opening header tag <head>

4. On the next line type <title> give title for page </title>

5. Go to next line and type closing header tag </head>

6. Go to next line and type opening body tag<body>

7. Go to next line and type closing body tag</body>

8. Finally, go to next line and type</html>

9. In the file menu, choose to save as.

10. In the save as type option box, choose all files.

11. Name the file filename.html

12. Click save.

An HTML document starts and ends with <html> and

</html> tags. These tags tell the browser that the entire document is composed in HTML. Inside these two tags, the document is split into 2 sections:

1. The <head>……</head> elements contain information about the document such as title of the document etc.

2. The <body>…. </body> elements contain the real content of the document that you see on your screen.

HTML Headings

HTML headings are defined with the `<h1>` to `<h6>` tags.

`<h1>` defines the most important heading. `<h6>` defines the least important heading:

Example

```
<h1>This is heading 1</h1>
<h2>This is heading 2</h2>
<h3>This is heading 3</h3>
```

HTML Paragraphs

HTML paragraphs are defined with the `<p>` tag:

Example

```
<p>This is a paragraph. </p>
<p>This is another paragraph.</p>
```

HTML Links

HTML links are defined with the `<a>` tag:

Example

```
<a href="https://www.w3schools.com">This is a link</a>
```

HTML Elements

The HTML **element** is everything from the start tag to the end tag:

`<tagname>`Content goes here...`</tagname>`

Examples of some HTML elements:

`<h1>`My First Heading`</h1>`

`<p>`My first paragraph. `</p>`

Nested HTML Elements

HTML elements can be nested (this means that elements can contain other elements).

All HTML documents consist of nested HTML elements.

The following example contains four HTML elements
(`<html>`, `<body>`, `<h1>` and `<p>`):

```
<body>

<h1>My First Heading</h1>
<p>My first paragraph. </p>

</body>
```

The `<body>` element defines the document's body.

It has a start tag `<body>` and an end tag `</body>`.

`<p>This is a <br> paragraph with a line break. </p>`

The `<br>` tag defines a line break, and is an empty element without a closing tag:

Note : HTML is Not Case Sensitive

HTML tags are not case sensitive: `<P>` means the same as `<p>`.

HTML Attributes

- All HTML elements can have **attributes**
- Attributes provide **additional information** about elements
- Attributes are always specified in **the start tag**
- Attributes usually come in name/value pairs like: **name="value"**

The href Attribute

The `<a>` tag defines a hyperlink. The `href` attribute specifies the URL of the page the link goes to:

`<a href="https://www.w3schools.com">Visit W3Schools</a>`

The src Attribute

The `<img>` tag is used to embed an image in an HTML page. The `src` attribute specifies the path to the image to be displayed:

`<img src="img_girl.jpg">`

The width and height Attributes

The `<img>` tag should also contain the `width` and `height` attributes, which specifies the width and height of the image (in pixels):

`<img src="img_girl.jpg" width="500" height="600">`

The alt Attribute

The required `alt` attribute for the `<img>` tag specifies an alternate text for an image if the image for some reason cannot be displayed. This can be due to slow connection, or an error in the `src` attribute, or if the user uses a screen reader.

```
<img src="img_girl.jpg" alt="Girl with a jacket">
```

The style Attribute

The `style` attribute is used to add styles to an element, such as color, font, size, and more.

Example

```
<p style="color:red;">This is a red paragraph.</p>
```

The lang Attribute

You should always include the `lang` attribute inside the `<html>` tag, to declare the language of the Web page. This is meant to assist search engines and browsers.

The following example specifies English as the language:

```
<!DOCTYPE html>
<html lang="en">
<body>
...
</body>
</html>
```

The title Attribute

The `title` attribute defines some extra information about an element.

The value of the title attribute will be displayed as a tooltip when you mouse over the element:

```
<p title="I'm a tooltip">This is a paragraph.</p>
```

HTML Headings

HTML headings are titles or subtitles that you want to display on a webpage.

example

Heading 1

Heading 2

Heading 3

Heading 4

Heading 5

Heading 6

HTML Headings

HTML headings are defined with the `<h1>` to `<h6>` tags.

`<h1>` defines the most important heading. `<h6>` defines the least important heading.

Example

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

Bigger Headings

Each HTML heading has a default size. However, you can specify the size for any heading with the `style` attribute, using the CSS `font-size` property:

Example

```
<h1 style="font-size:60px;">Heading 1</h1>
```

HTML Formatting Elements

Formatting elements were designed to display special types of text:

- `<b>` - Bold text
- `<strong>` - Important text
- `<i>` - Italic text
- `<em>` - Emphasized text
- `<mark>` - Marked text
- `<small>` - Smaller text
- `<del>` - Deleted text
- `<ins>` - Inserted text

HTML <b> and <strong> Elements

The HTML `<b>` element defines bold text, without any extra importance.

Example

`<b>This text is bold</b>`

HTML <i> and <em> Elements

The HTML `<i>` element defines a part of text in an alternate voice or mood. The content inside is typically displayed in italic.

`<i>This text is italic</i>`

HTML <small> Element

The HTML `<small>` element defines smaller text:

`<small>This is some smaller text. </small>`

HTML <mark> Element

The HTML `<mark>` element defines text that should be marked or highlighted:

Example

`<p>Do not forget to buy <mark>milk</mark> today.</p>`

HTML <del> Element

The HTML `<del>` element defines text that has been deleted from a document. Browsers will usually strike a line through deleted text:

Example

```
<p>My favorite color is <del>blue</del> red.</p>
```

HTML Tables

HTML tables allow web developers to arrange data into rows and columns.

Define an HTML Table

A table in HTML consists of table cells inside rows and columns

Table Cells

Each table cell is defined by a `<td>` and a `</td>` tag.

`td` stands for table data.

Everything between `<td>` and `</td>` are the content of the table cell.

Example

```
<table>
  <tr>
    <td>Emil</td>
    <td>Tobias</td>
    <td>Linus</td>
  </tr>
</table>
```

Table Rows

Each table row starts with a `<tr>` and end with a `</tr>` tag.

`tr` stands for table row.

```
<table>
  <tr>
    <td>Emil</td>
    <td>Tobias</td>
    <td>Linus</td>
  </tr>
  <tr>
    <td>16</td>
    <td>14</td>
    <td>10</td>
  </tr>
```

```
</table>
```

Table Headers

Sometimes you want your cells to be headers, in those cases use the `<th>` tag instead of the `<td>` tag:

1

To add a border, use the CSS `border` property on `table`, `th`,and `td` elements:

```
table, th, td {
  border: 1px solid black;
}
```
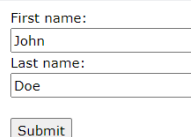
Style Table Borders

If you set a background color of each cell, and give the border a white color (the same as the document background), you get the impression of an invisible border

```
table, th, td {
  border: 1px solid white;
  border-collapse: collapse;
}
th, td {
  background-color: #96D4D4;
}
```

HTML Forms

An HTML form is used to collect user input. The user input is most often sent to a server for processing.

Example

First name:
John

Last name:
Doe

Submit

<input type="text">   Displays a single-line text input field

<input type="radio">	Displays a radio button (for selecting one of many choices)
<input type="checkbox">	Displays a checkbox (for selecting zero or more of many choices)
<input type="submit">	Displays a submit button (for submitting the form)
<input type="button">	Displays a clickable button

Output:

(Note: Attach the html code of your profile page & ss of your page)

Conclusion: This experiment helps us to understand concept of html & different tags used in HTML for creating a webpage.

Pre-Lab Question:

Q1) What is WWW?

Q2) Name different types of Web development languages

POST LAB Questions:

Q1) Name the tags used in html for creating your profile page.