Module 3 Assignment

Name: Siddhant Kumar
Email: siddhant8798@gmail.com

Q1) Write a simple program in HTML that displays the heading "HTML defines the content and structure of your website" on the web browser.

Ans) Code Example

1. **<!DOCTYPE html>**
   - o   Declares the document type. It tells the browser that this is an HTML5 document.
2. **<html>**
   - o   The root element that contains all the HTML content.
3. **<head>**
   - o   This section contains meta-information about the web page (like title, links to CSS, etc.).
4. **<title>**
   - o   Sets the title of the web page shown in the browser tab.
5. **<body>**
   - o   Contains everything that will be displayed on the web page.
6. **<h1>**
   - o   A heading tag. <h1> is used for the largest and most important heading. The text inside it appears bold and large on the browser.

Q2) Explain the purpose of comments in HTML and provide an example of how to use comments in an HTML document?

Ans) Code Example
- Used for non-executing code notes.
- Aid in code documentation and debugging.
- Single line: <!-- Comment -->
- Multi-line: <!-- Multi-line comment -->
- Temporarily disable sections of code without deleting them.
- Clarify structure of the document, especially in long or complex files.

Q3) Write an HTML program that includes a heading, a paragraph of text, a horizontal line, and a line break. Arrange these elements to create a simple web page layout?
Ans) Full Answer Code On GitHub Link

Q4) Write a short note on Tag and element with an example?

Ans)
Tag in HTML: A **tag** is a piece of code enclosed in angle brackets (< >) that tells the browser how to display the content. Tags usually come in pairs: an **opening tag** (e.g., <p>) and a **closing tag** (e.g., </p>), although some tags are self-closing (e.g., <br />).
Element in HTML: An **element** in HTML consists of the opening tag, the content inside it, and the closing tag. It represents a part of the document structure, such as a paragraph, a heading, or a link.

Example:

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

- <p> is the **opening tag**.
- </p> is the **closing tag**.
- This is a paragraph. is the **content**.
- The entire line <p>This is a paragraph.</p> is an **HTML element**.

Q5) What is the DOCTYPE Declaration in HTML?

 Ans)

The **DOCTYPE declaration** in HTML is an instruction that tells the web browser which version of HTML the document is written in. It helps the browser render the page correctly by switching to the appropriate rendering mode (standards mode vs. quirks mode).

- ➢ <!DOCTYPE html> is used in **HTML5**, the latest standard.
- ➢ It must be placed at the **very beginning** of an HTML document, before the <html> tag.
- ➢ It is **not case-sensitive**, but is usually written in uppercase for readability.
- ➢ It is **not an HTML tag**; it's a declaration.