**Assignment 01**

**(Done By: Sunandan Sharma)**

**1.** The HTML code to display the heading "HTML defines the content and structure of your website” on the web browser is as follows.

**The Code:**

<!DOCTYPE html>

<html lang="en">

<head><meta charset="utf-8"><meta name="viewport" content="width=device-width, initial-scale=1.0">

</head><head><title>

Assignment 1 - Question 1

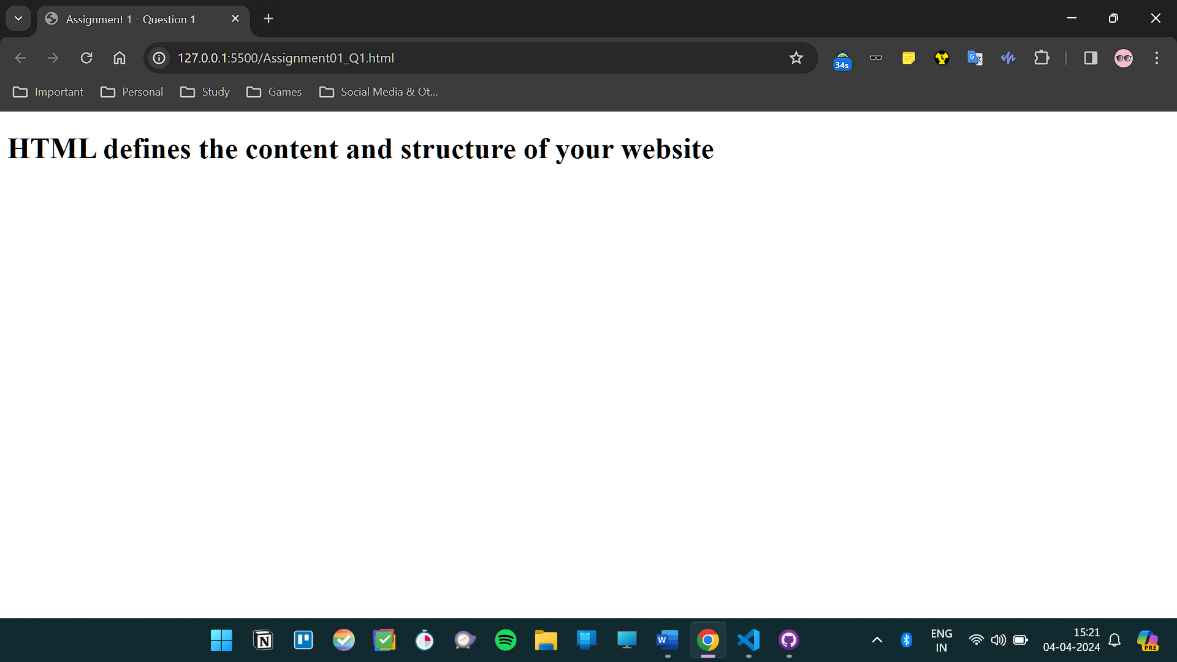
</title>

</head><body>

<h1>HTML defines the content and structure of your website</h1>

</body></html>

**The Output:**

****

**Code GitHub link:** [**Assignment 01 - Q1 Link**](https://github.com/Sunandanshrm/Web-Development/blob/master/Frontend/PwSkills/Assignment%2001/Assignment01_Q1.html)

**2.** Comments in HTML (or any other programming language) serves the following purposes:

**Code Documentation:** Comments written inside the code provide information about the code’s functionality, purpose, and usage. This helps developers (the original author and others) to understand the utility of existing codebase so it can be maintained properly. This also provides clarity and readability to all the developers working on the same project.

**Code** **Debugging:** Comments are sometimes use to temporarily disable some portion of the code without totally deleting it. This helps especially during debugging a lengthy codebase as it is easier to isolate individual section of the code and modify it.

**Collaboration:** Comments can be used to facilitate collaboration among team members working on the same project. They enable developers to communicate ideas, suggestions (Say a link to a blog or tutorial which has relevance to project), or concerns about specific code segments, leading to better teamwork and code quality.

Following is the example of a HTML code with comment added in it.

**3.**

**4.**

**5.**

**[3/28, 15:10] akshaykushwaha7865: <!DOCTYPE html>**

**<html lang="en">**

**<head>**

**<meta charset="UTF-8">**

**<meta name="viewport" content="width=device-width, initial-scale=1.0">**

**<title>HTML Content and Structure</title>**

**</head>**

**<body>**

**<h1>HTML defines the content and structure of your website</h1>**

**</body>**

**</html>**

**[3/28, 15:12] akshaykushwaha7865: 2. Explain the purpose of comments in HTML and provide an example of how to use comments in an HTML**

**[3/28, 15:12] akshaykushwaha7865: <!DOCTYPE html>**

**<html lang="en">**

**<head>**

**<meta charset="UTF-8">**

**<meta name="viewport" content="width=device-width, initial-scale=1.0">**

**<title>HTML Comments Example</title>**

**</head>**

**<body>**

**<!-- This is a comment. It won't be displayed in the browser. -->**

**<h1>Welcome to my Website</h1>**

**<!--**

**This is another comment.**

**You can use comments to explain your code or temporarily disable sections.**

**-->**

**<p>This is a paragraph of text.</p>**

**</body>**

**</html>**

**[3/28, 15:14] akshaykushwaha7865: <!DOCTYPE html>**

**<html lang="en">**

**<head>**

**<meta charset="UTF-8">**

**<meta name="viewport" content="width=device-width, initial-scale=1.0">**

**<title>Simple Web Page Layout</title>**

**</head>**

**<body>**

**<header>**

**<h1>Welcome to My Website</h1>**

**</header>**

**<main>**

**<p>This is a paragraph of text. Lorem ipsum dolor sit amet, consectetur adipiscing elit. Ut fringilla nunc sed lectus tincidunt, sed volutpat magna sollicitudin.</p>**

**</main>**

**<hr> <!-- Horizontal Line -->**

**<br> <!-- Line Break -->**

**<footer>**

**<p>&copy; 2024 My Website. All rights reserved.</p>**

**</footer>**

**</body>**

**</html>**

**[3/28, 15:16] akshaykushwaha7865: In this example:<p> is the opening tag of the paragraph element.This is a paragraph element. is the content of the paragraph.</p> is the closing tag of the paragraph element.The entire construct <p>This is a paragraph element.</p> is the paragraph element.**

**[3/28, 15:17] akshaykushwaha7865: The DOCTYPE Declaration helps web browsers to render web pages correctly by determining the rules and standards that should be applied when parsing and displaying the document. It ensures that browsers interpret the HTML code correctly, avoiding rendering quirks or compatibility issues.Here's an example of a DOCTYPE Declaration for HTML5:**

**[3/28, 20:04] akshaykushwaha7865: Write a simple program in HTML that displays the heading "HTML defines the content and structure ofyour website" on the web browser?**

**[3/28, 20:05] akshaykushwaha7865: <!DOCTYPE html>**

**<html>**

**<head>**

**<title>HTML Structure</title>**

**</head>**

**<body>**

**<h1>HTML defines the content and structure of your website</h1>**

**</body>**

**</html>**

**[3/28, 20:12] akshaykushwaha7865: Comments in HTML are used to add notes or explanations within the code that are not displayed in the web browser. They are helpful for developers to document their code, provide context, or temporarily disable specific parts of the code.Here's an example of how to use comments in an HTML document:<!DOCTYPE html>**

**<html>**

**<head>**

**<title>HTML Comments Example</title>**

**</head>**

**<body>**

**<!-- This is a comment -->**

**<h1>This heading is visible</h1>**

**<!--**

**<p>This paragraph is commented out and won't be displayed in the browser</p>**

**-->**

**<p>This paragraph is visible</p>**

**</body>**

**</html>In this example:<!-- This is a comment --> is a comment that won't be displayed in the browser.The paragraph <p>This paragraph is commented out and won't be displayed in the browser</p> is commented out, so it won't be rendered by the browser.The paragraph <p>This paragraph is visible</p> is visible because it's not within a comment.**

**[3/28, 20:13] akshaykushwaha7865: 2. Explain the purpose of comments in HTML and provide an example of how to use comments in an HTML**

**document**

**[3/28, 20:23] akshaykushwaha7865: 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?**

**[3/28, 20:23] Bandar: The <h1> element creates a large heading for the page.The <p> element creates a paragraph of text.The <hr> element inserts a horizontal line.The <br> element inserts a line break to create some space between elements.Finally, another <p> element adds a closing message.**

**[3/28, 20:24] akshaykushwaha7865: !DOCTYPE html>**

**<html>**

**<head>**

**<title>Simple Web Page Layout</title>**

**</head>**

**<body>**

**<h1>Welcome to My Website</h1>**

**<p>This is a paragraph of text. Lorem ipsum dolor sit amet, consectetur adipiscing elit. Nulla nec odio eget est posuere dignissim. Suspendisse potenti.</p>**

**<hr> <!-- Horizontal line -->**

**<br> <!-- Line break -->**

**<p>Thank you for visiting!</p>**

**</body>**

**</html>**

**[3/28, 20:27] akshaykushwaha7865: In this example, <p> is the opening tag, "This is a paragraph element." is the content, and </p> is the closing tag. Together, they define a paragraph element on the webpage.**

**[3/28, 20:31] Bandar: 5. What is the DOCTYPE Declaration in HTML?**

**[3/28, 20:32] akshaykushwaha7865: The DOCTYPE declaration in HTML specifies the version of HTML used in a webpage and helps browsers render the page correctly.**

**[3/28, 20:32] akshaykushwaha7865: <!DOCTYPE html>**

**<html>**

**<head>**

**<title>Example Page</title>**

**</head>**

**<body>**

**<!-- Content goes here -->**

**</body>**

**</html>**