1. **Write a simple program in HTML that displays the heading "HTML defines the content and structure of your website” on the web browser?**

<!doctype html>  
<html lang="en">  
<head>  
 <meta charset="UTF-8">  
 <meta name="viewport"  
 content="width=device-width, user-scalable=no, initial-scale=1.0, maximum-scale=1.0, minimum-scale=1.0">  
 <meta http-equiv="X-UA-Compatible" content="ie=edge">  
 <title>Assignment2</title>  
</head>  
<body>  
<!--Heading in HTML we can define in 6 ways-->  
<h1>HTML defines the content and structure of your website”</h1>  
<hr>  
<h2>HTML defines the content and structure of your website”</h2>  
<hr>  
<h3>HTML defines the content and structure of your website”</h3>  
<hr>  
<h4>HTML defines the content and structure of your website”</h4>  
<hr>  
<h5>HTML defines the content and structure of your website”</h5>  
<hr>  
<h6>HTML defines the content and structure of your website”</h6>  
</body>  
</html>

1. **Explain the purpose of comments in HTML and provide an example of how to use comments in an HTML document?**

Ans: The purpose of HTML comments is basically explain the line of code to our fellow Developer. Its help to improve our code maintenance. For Large size enterprises basically multiple team working on different feature and time to time features are getting changed. So, If we have proper comments it helps developer to edit and maintained the code properly.

Note: The purpose of HTML comments are not mean to write more description but it should be in brief.

1. **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?**

<!doctype html>  
<html lang="en">  
<head>  
 <meta charset="UTF-8">  
 <meta name="viewport"  
 content="width=device-width, user-scalable=no, initial-scale=1.0, maximum-scale=1.0, minimum-scale=1.0">  
 <meta http-equiv="X-UA-Compatible" content="ie=edge">  
 <title>Assignment 2</title>  
</head>  
<body>  
<h2>Welcome to PW Full Stack Web Development</h2>  
<p>Lorem ipsum dolor sit amet, consectetur adipisicing elit. Adipisci amet,  
 dicta doloremque, harum modi molestiae nobis obcaecati odio perferendis quam  
 qui reiciendis sapiente tempora ut vel. <br> Culpa qui repellat similique.</p>  
  
<p>Lorem ipsum dolor sit amet, consectetur adipisicing elit. Adipisci amet. br  
 dicta doloremque, harum modi molestiae nobis obcaecati odio perferendis quam  
 qui reiciendis sapiente tempora ut vel. Culpa qui repellat similique.</p>  
<hr>  
<p>Lorem ipsum dolor sit amet, consectetur adipisicing elit. Adipisci amet,  
 dicta doloremque, harum modi <br> molestiae nobis obcaecati odio perferendis quam  
 qui reiciendis sapiente tempora ut vel. Culpa qui repellat similique.</p>  
  
<p>Lorem ipsum dolor sit amet, consectetur adipisicing elit. Adipisci amet,  
 dicta doloremque, harum modi molestiae nobis obcaecati odio perferendis quam  
 qui reiciendis sapiente tempora ut vel. Culpa qui repellat similique.</p>  
<br>  
<hr>  
</body>  
</html>

1. **Write a short note on Tag and element with an example?**

Ans : Tag is the smallest individual unit in HTML. By using multiple tag basically we are creating the web page.

Ex: <Body> </body>

There are two type of Tag in HTML

1. **Self-Closing tag**
   * + 1. The tag which has self-closing tag is called as self-closing tag or the tag which has opening and closing tag is called self-closing tag.

ex: <p> Self Closing Tag</p>

1. **Non-self-closing tag**

The Tag which does have the self-closing tag or only opening tag is called as non-self-closing tag.

ex: <img>

1. **What is the DOCTYPE Declaration in HTML?**

The doctype declaration is a type of statement which tells a web browser what type of HTML document and version of HTML written in.

* It appears as the first line of code in an HTML or XHTML document
* It's not an HTML tag, but rather an instruction to the browser about what document type to expect.
* It ensures that different web browsers parse the web page in the same way.
* In HTML5, the DOCTYPE declaration is simple: <!DOCTYPE html>
* In older documents (HTML 4 or XHTML), the declaration is more complicated
* A "Doctype HTML Error" occurs when the DOCTYPE is missing, incorrect, or not placed at the beginning of the document.