Assignment-10

Answer - 1 : CSS stands for Cascading Style Sheets, and it's used to add style to a web page by dictating how a site is displayed on a browser. CSS is unique in that it doesn't create any new elements, like HTML or JavaScript. Instead, it's a language used to style HTML elements. CSS is responsible for the text style, size, positioning, color, and more on a website. It's also what controls how a website's style shifts between desktop and mobile versions. Without CSS, websites would look pretty boring.

There are many reasons why we'll want to use CSS in web design. First, CSS can save us time. Once we have a style sheet created, we can use it multiple times. The best practice for CSS is to save it as a .css file, separate from our html file. The style sheet can then be linked to our HTML file. When we find a style that we like, we can apply it to as many pages as we like.

Second, CSS is efficient. Only a few lines of code are required to dictate the style on a webpage, which speeds up loading time and keeps files relatively lightweight. Lastly, it's easy for users to

learn and update, which makes global changes to style simple and quick.

Answer - 2 : There are three ways to bring css in our web pages.

1. **Inline CSS -** The first way to add CSS into HTML is by using a method called inline-css. Inline-css means adding CSS rules directly into the HTML elements (tags) with the style attribute.
   For example, if I want to change the text color of an element:
   <h1 style="color: red">Test Headline</h1>
2. **Internal CSS -** The second way for adding CSS to HTML is by using the internal CSS way. In this method to use , we need to use an HTML tag called <style> tag (not style attribute) and between the style tags, we can write our CSS selectors & rules. For Example :
   <style>H1{Color:red;}</style>
3. **External CSS -** Keeping CSS & HTML separated is best practice. In real programming, we need to keep HTML, CSS, and JavaScript in

separate files and later import them where necessary. This way improves readability & makes it easier for the maintenance of the code. Example : h1 { color: red;}.

Answer - 3 : In CSS, specificity is a measurement of relevance based on the type and order of CSS selectors in a document. In cases when an HTML element or a group of elements is targeted by multiple CSS selectors, the rules of CSS specificity tell the web browser which CSS declarations should be applied. Before we look at the different rules of CSS specificity, let's define the levels of specificity of each type of CSS selector. Below is the "specificity hierarchy," which lists selector types from the highest specificity to the lowest specificity.

- **ID selectors**: ID selectors are the most specific kind of selector. They select an element based on its ID attribute (for example: #my-id).
- **Class selectors**: Class selector are three type-

    - **Class selectors**: select all elements in a CSS class (example: .my-class).

    - **Attribute selectors:** select all elements with a given attribute (Example: p[target]).
    - **Pseudo-class**: selectors select elements only when in a special state, like visited or hover (Example: button:hover).
- **Type selectors**: These select all HTML elements that have a given node name and have the syntax element (Example: div).
- **Universal selector:** The universal selector (*) has no effect on specificity.