Task1-CSS Basic (Gemini)

**CSS** (Cascading Style Sheets) is a programming language used to style HTML elements. It controls the appearance of web pages, including colors, fonts, layout, and responsiveness.

**Role of CSS in Web Development**

* **Formatting:** CSS defines how HTML elements are displayed on the screen.
* **Styling:** It allows you to change the appearance of web pages to match a desired design.
* **Responsiveness:** CSS can be used to create responsive designs that adapt to different screen sizes.
* **Maintainability:** By separating the structure (HTML) and presentation (CSS), it makes web development more organized and easier to maintain.

**Example: A Simple HTML Document with CSS Styling**

**HTML Document (index.html):**

<!DOCTYPE html>

<html>

<head>

    <title>My Simple Website</title>

    <link rel="stylesheet" href="style.css">

</head>

<body>

    <h1>Welcome to my website!</h1>

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

</body>

</html>

**CSS Stylesheet (style.css):**

body {

    background-color: lightblue;

    color: white;

    font-size: 24px;

}

**Explanation of the CSS Code:**

1. **body { ... }:** This selector targets the <body> element of the HTML document.
2. **background-color: lightblue;:** This property sets the background color of the <body> to light blue.
3. **color: white;:** This property sets the color of the text within the <body> to white.
4. **font-size: 24px;:** This property sets the font size of the text within the <body> to 24 pixels.

**How it works:**

When the HTML document is loaded in a web browser, the browser reads the <link> element in the <head> section. This link tells the browser to load the style.css file. The CSS rules defined in style.css are then applied to the corresponding HTML elements. In this example, the styles are applied to the entire <body> content, affecting the background color, text color, and font size of all elements within it.