K. J. Somaiya College of Engineering, Mumbai-77
(A Constituent College of Somaiya Vidyavihar University)

Batch: A1 **Roll No.: 16010123012**

Experiment No. 02

TITLE: Develop and demonstrate the usage of inline, internal and external style sheet using CSS

AIM: To demonstrate usage of CSS

Expected Outcome of Experiment: Use CSS to prepare the layout of web pages.

Books/ Journals/ Websites referred:
https://developer.mozilla.org/en-US/docs/Web/HTML
https://developer.mozilla.org/en-US/docs/Web/CSS

Importance of CSS in designing of a website is to be explained. Explain various ways to use CSS. Also explain how to change background colour of page, adding and editing border types, adding navigation bars, usage of various types of 2D and 3D transformation.

Description of the CSS style code with its effect at output:

```
<!DOCTYPE html>
<html lang="en">
  <head>
    <meta charset="UTF-8" />
    <meta name="viewport" content="width=device-width,
initial-scale=1.0" />
    <title>Health and Wellness Blog</title>
    <style>
      * {
        margin: 0;
        padding: 0;
        font-family: Georgia, "Times New Roman", Times,
serif;
      }
      .header-container {
        display: flex;
        justify-content: space-between;
        align-items: center;
        background-color: #edffd2;
```

```
      padding: 10px;
    }
    .navbar {
      display: flex;
      justify-content: right;
      color: rgb(0, 0, 0);
    }
    .navbar a {
      margin-left: 15px;
      text-decoration: none;
      color: black;
    }
    .flexbox {
      display: flex;
      justify-content: left;
      align-items: center;
      background-color: #edffd2;
      color: rgb(0, 0, 0);
      padding: 2px;
    }
    #buttons {
      display: flex;
      justify-content: center;
    }
  </style>
</head>
<body>
  <div class="header-container">
    <div class="flexbox">
      <img
        src="hawb.avif"
        width="50"
        height="50"
        alt="Health and Wellness Blog"
      />
      Health and Wellness Blog
    </div>
    <nav class="navbar">
      <a href="#">Home</a>
      <a href="#">About</a>
      <a href="#">Articles</a>
      <a href="#">Contact</a>
```

```
      </nav>
    </div>
    <hr />
    <div
      style="
        background-image: url('hwbg.jpg');
        background-size: cover;
        background-position: center;
        color: white;
        padding: 50px 20px;
        height: 72vh;
      "
    >
      <h1 style="text-align: center; color: rgb(0, 0, 0)">
        Welcome to the Health and Wellness Blog
      </h1>
      <h1 style="text-align: center; color: rgb(0, 0, 0)">
        Your Supportive Health Companion
      </h1>
      <b
        ><p style="text-align: center; color: rgb(0, 0, 0);
padding: 10px">
          We are here to help you on your mental health
journey.
        </p></b
      >
      <br />
      <ul
        style="
          list-style-type: none;
          padding: 10;
          text-align: center;
          color: rgb(0, 0, 0);
        "
      >
        <li>Practice mindfulness and meditation</li>
        <li>Connect with supportive friends or family</li>
        <li>Take care of your physical health</li>
        <li>Engage in activities that bring joy</li>
      </ul>
      <br />
      <div id="buttons">
```

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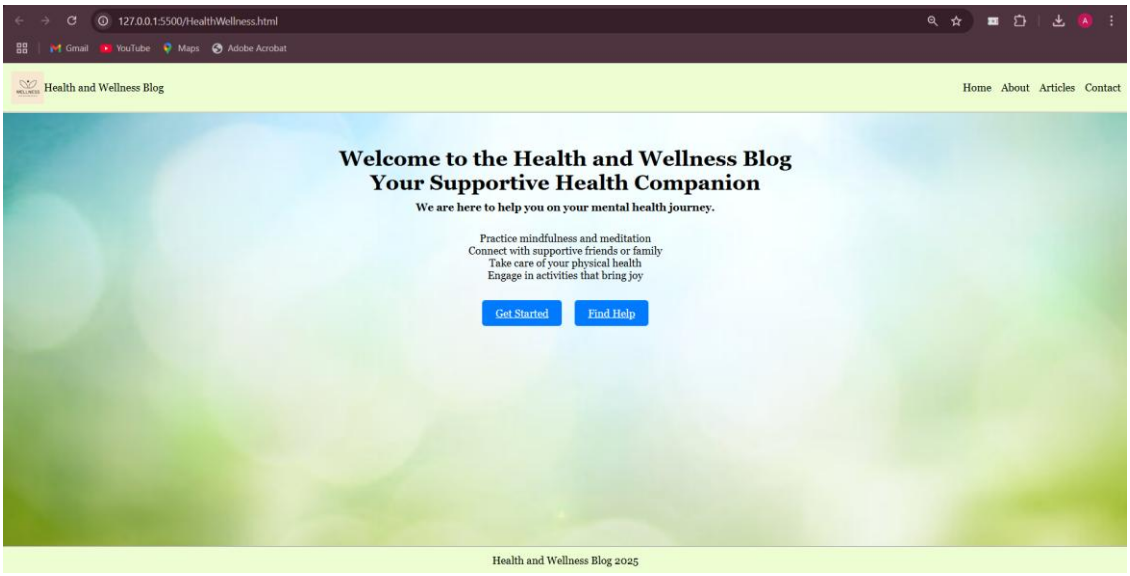
```
        <a
          href="#"
          style="
            margin: 10px;
            padding: 10px 20px;
            background-color: #007bff;
            color: white;
            border-radius: 5px;
          "
          >Get Started</a
        >
        <a
          href="#"
          style="
            margin: 10px;
            padding: 10px 20px;
            background-color: #007bff;
            color: white;
            border-radius: 5px;
          "
          >Find Help</a
        >
      </div>
    </div>
    <hr />
    <footer
      style="background-color: #edffd2; padding: 10px; text-
align: center"
    >
      <span>Health and Wellness Blog 2025</span>
    </footer>
  </body>
</html>
```



Post Lab Objective with Ans (Min 5):

- **What is the Box model in CSS?**

The Box Model in CSS defines how every HTML element is treated as a rectangular box. It consists of four main components: content, padding, border, and margin. The content is the innermost part of the box which contains the actual text, images, or other elements. Surrounding the content is the padding, which provides inner spacing between the content and the border. The border is the layer that wraps around the padding and content, and it can be styled with various widths, colors, and styles. Finally, the margin is the outermost layer, creating space between the box and other neighboring elements. The total size of a box is calculated by adding the content's width and height to the padding, border, and margin on all sides.

- **What are the advantages of using CSS?**

CSS (Cascading Style Sheets) offers several advantages that make it an essential tool in web development. First, it allows for the separation of content and design, making the HTML structure cleaner and easier to maintain. This separation enables developers to make global style changes by editing a single CSS file, ensuring consistency across multiple pages and reducing redundancy. CSS enhances flexibility and control over layout, typography, colours and responsive designs, allowing websites to adapt seamlessly to different screen sizes and devices. Additionally, CSS improves website performance by reducing HTML code clutter and allowing faster loading times through cached stylesheets. Its modular nature also encourages code reusability, simplifying the development process. Overall, CSS not only improves the aesthetics of a website but also enhances usability, accessibility, and maintainability.

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- **What are the limitations of CSS?**

CSS has several limitations despite being a powerful tool for styling websites. One key limitation is its lack of logic-based features. Additionally, CSS can become difficult to manage in large projects due to its global nature, where one rule can unintentionally affect multiple elements, leading to style conflicts. It also lacks built-in support for advanced animations or complex layouts, requiring additional tools or frameworks to achieve those effects. Browser compatibility issues are another challenge, as different browsers may interpret CSS rules differently, necessitating extra effort for cross-browser testing. Finally, CSS provides no direct security or error-handling mechanisms, making it prone to cascading issues if errors occur.

- **What are the different types of Selectors in CSS?**

CSS offers various types of selectors to target and style HTML elements efficiently. The Universal Selector (*) targets all elements, while the Type Selector targets elements by their tag name. The Class Selector (.) applies styles to elements with a specific class, and the ID Selector (#) targets a single element with a unique ID. Multiple elements can be styled together using the Group Selector, which combines selectors with a comma. Pseudo-classes style elements in specific states, like a:hover for hover effects, and Pseudo-elements target specific parts of elements, such as p::first-line for the first line of a paragraph. These selectors provide a powerful way to apply precise and flexible styling to web pages.