

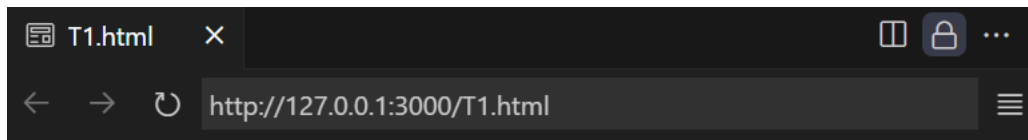
WEB TECHNOLOGY LAB

Assignment-4

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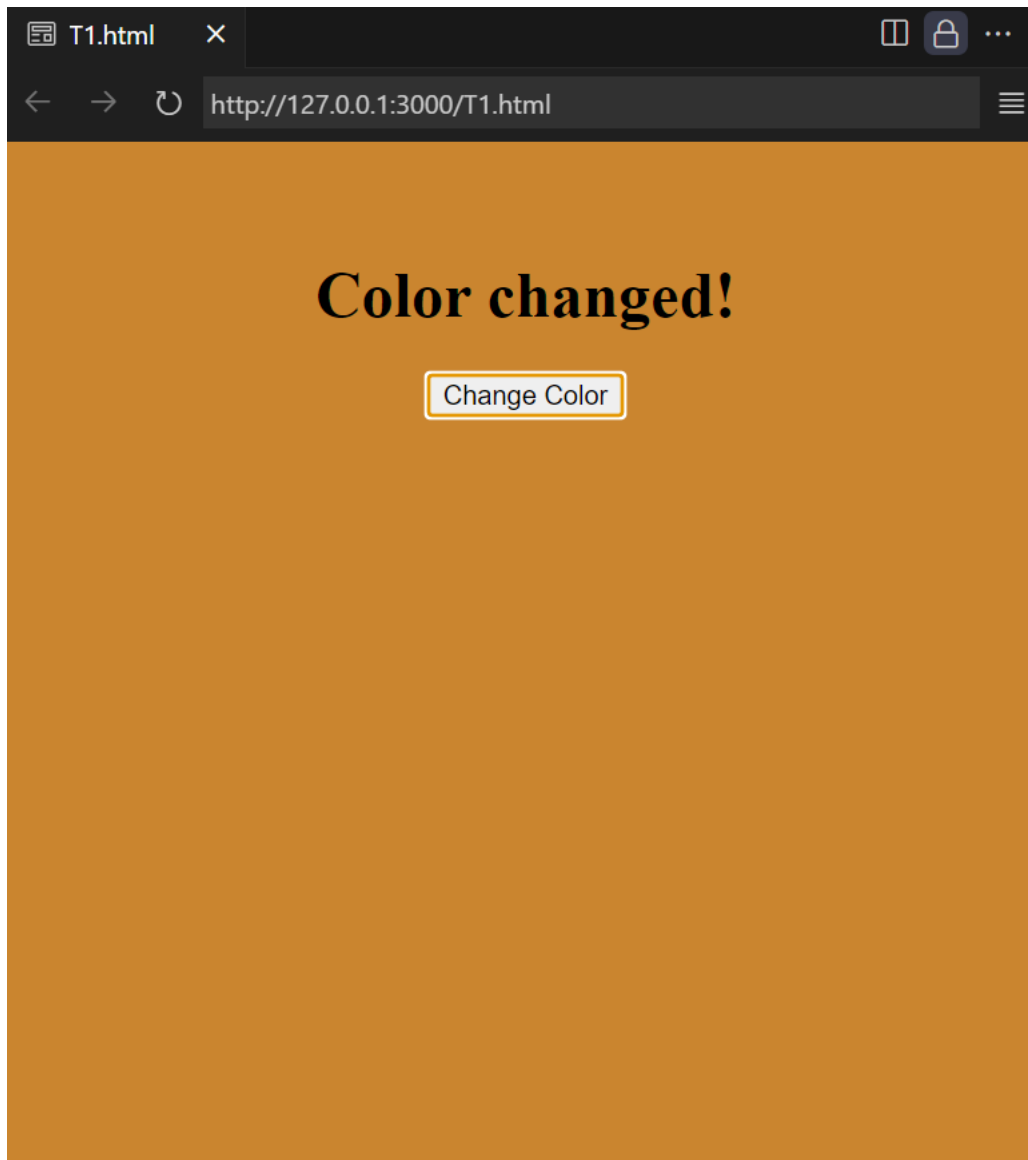
T1. Create a webpage that has a heading and a button. Write a script to change the background color and text when the button is clicked.

```
<html>
<head>
  <style>
    body {
      text-align: center;
      padding: 50px;
      transition: background-color 0.5s;
    }
  </style>
</head>
<body>
  <h1 id="heading">Click the button to change color</h1>
  <button id="colorButton">Change Color</button>
  <script>
    document.getElementById("colorButton").addEventListener("click",
function() {
    var randomColor = getRandomColor();
    document.body.style.backgroundColor = randomColor;
    document.getElementById("heading").innerText = "Color changed!";
  });
  function getRandomColor() {
    var letters = '0123456789ABCDEF';
    var color = '#';
    for (var i = 0; i < 6; i++) {
      color += letters[Math.floor(Math.random() * 16)];
    }
    return color;
  }
</script>
</body>
</html>
```



**Click the button to change
color**

Change Color

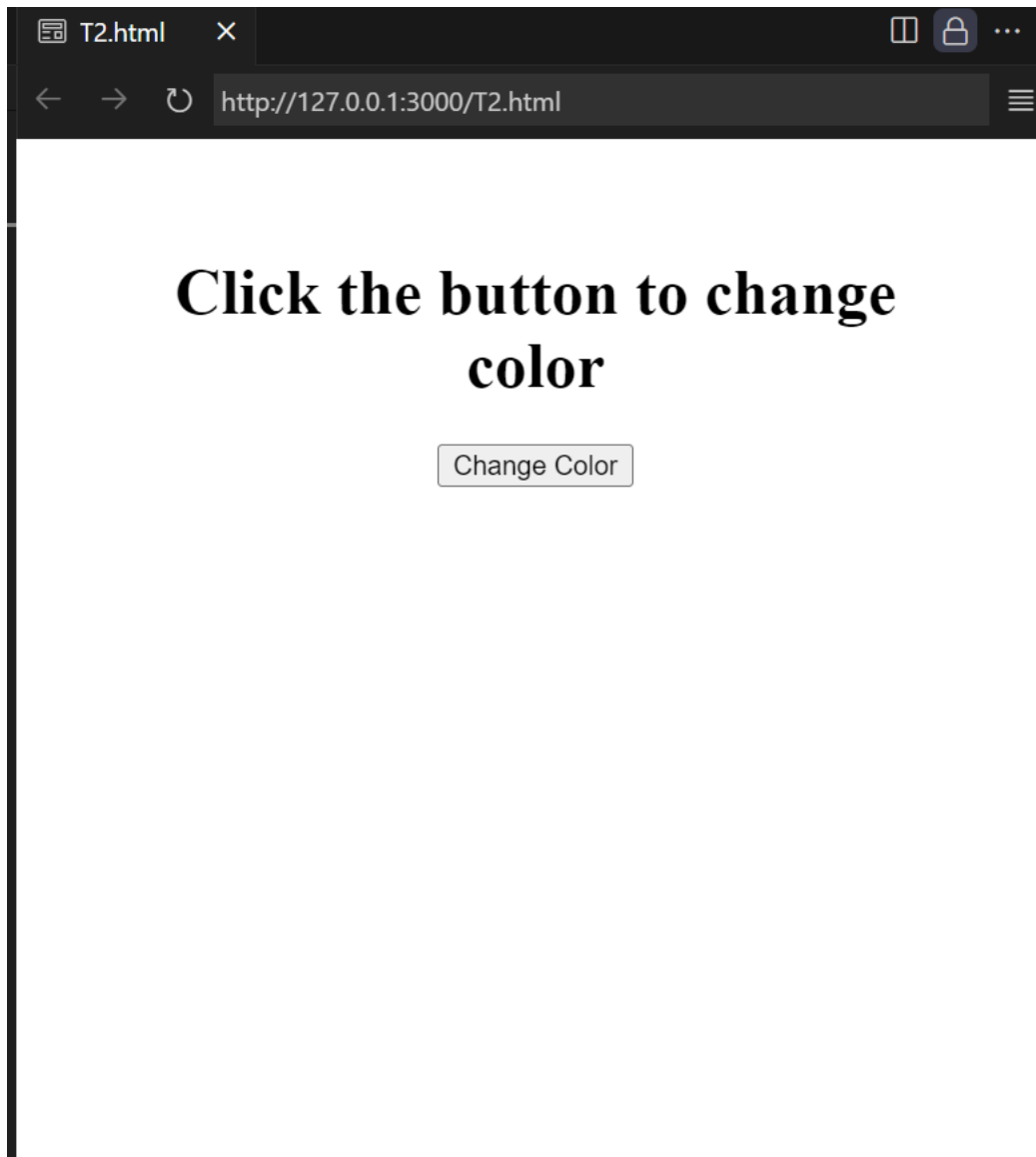


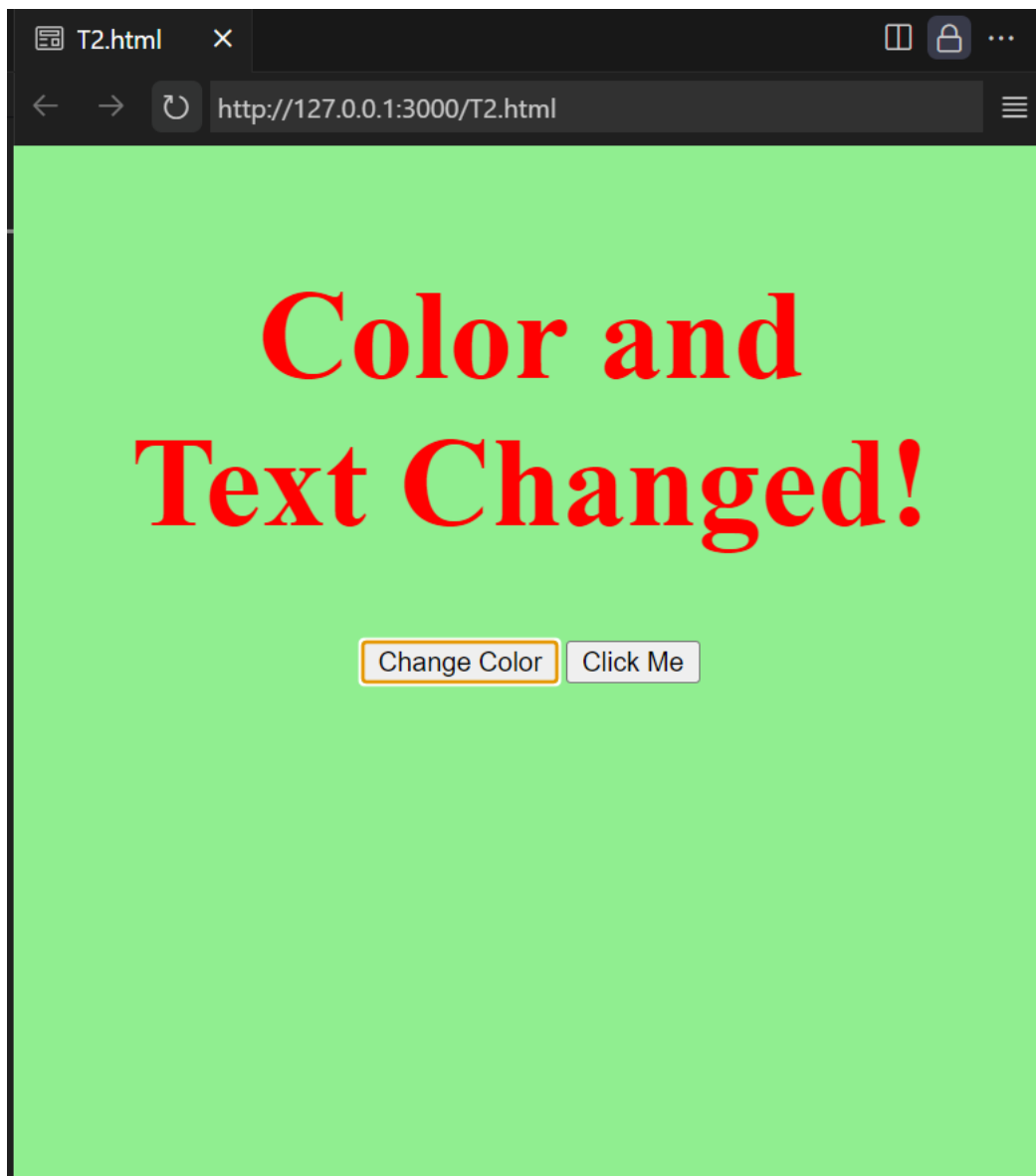
T2. For T1, experiment with the Javascript code by trying the following things:

- a. Make the background light green.
- b. Add a line that makes the text red.
- c. Change the fontSize to 48pt.
- d. Change the wording inside the <h1> tag in the Javascript.
- e. Add <button>Click Me</button> after the closing </h1>.

```
<html>
<head>
  <style>
    body {
      text-align: center;
      padding: 50px;
      transition: background-color 0.5s, color 0.5s, font-size 0.5s;
    }
  </style>
</head>
<body>
  <h1>Color changed!</h1>
  <button>Change Color</button>
</body>
</html>
```

```
        #heading {
            color: black;
            font-size: 24pt;
        }
    </style>
</head>
<body>
    <h1 id="heading">Click the button to change color</h1>
    <button id="colorButton">Change Color</button>
    <script>
        document.getElementById("colorButton").addEventListener("click",
function() {
            document.body.style.backgroundColor = "lightgreen";
            document.getElementById("heading").style.color = "red";
            document.getElementById("heading").style.fontSize = "48pt";
            document.getElementById("heading").innerText = "Color and Text
Changed!";
            var newButton = document.createElement("button");
            newButton.innerText = "Click Me";
            document.body.appendChild(newButton);
        });
    </script>
</body>
</html>
```

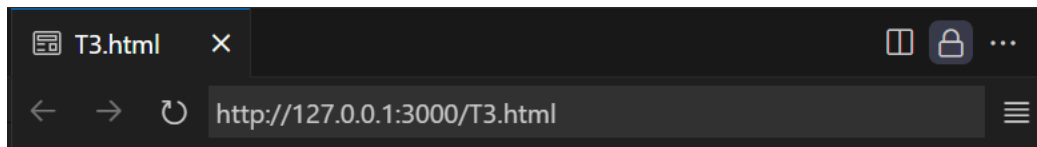




T3. For T1, set the color of the background directly with the class attribute. Generate alerts before and after assigning the class attribute to document object.

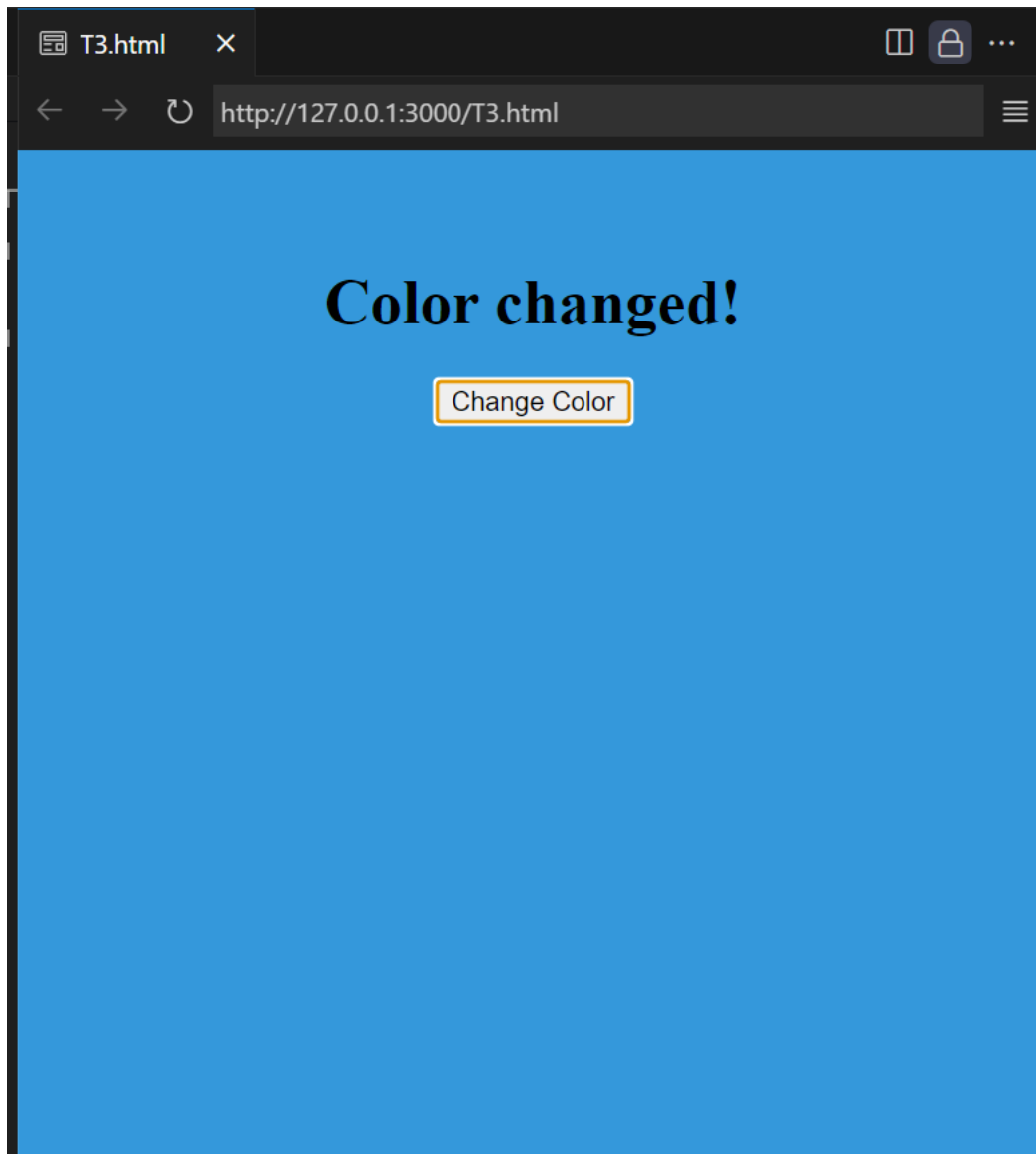
```
<html>
<head>
  <style>
    .blue-background {
      background-color: #3498db;
    }
    .green-background {
      background-color: #2ecc71;
    }
    body {
      text-align: center;
      padding: 50px;
      transition: background-color 0.5s;
    }
  </style>
</head>
<body>
```

```
</style>
</head>
<body>
  <h1 id="heading">Click the button to change color</h1>
  <button id="colorButton">Change Color</button>
  <script>
    function getRandomColorClass() {
      var classes = ['blue-background', 'green-background'];
      var randomIndex = Math.floor(Math.random() * classes.length);
      return classes[randomIndex];
    }
    alert("Before assigning the class attribute!");
    document.getElementById("colorButton").addEventListener("click",
function() {
    var randomColorClass = getRandomColorClass();
    document.body.className = randomColorClass;
    document.getElementById("heading").innerText = "Color changed!";
    alert("After assigning the class attribute!");
  });
  </script>
</body>
</html>
```



**Click the button to change
color**

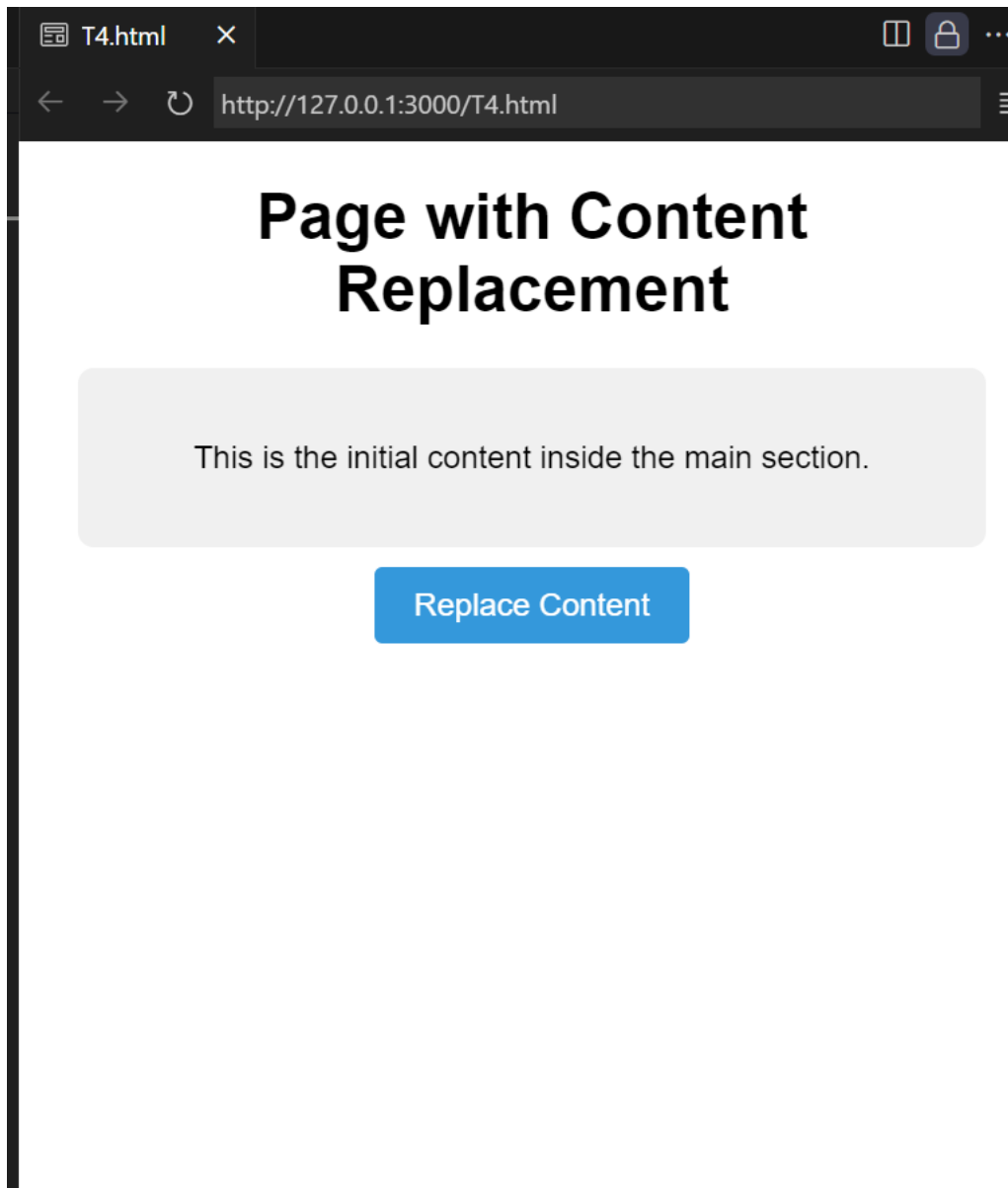
Change Color

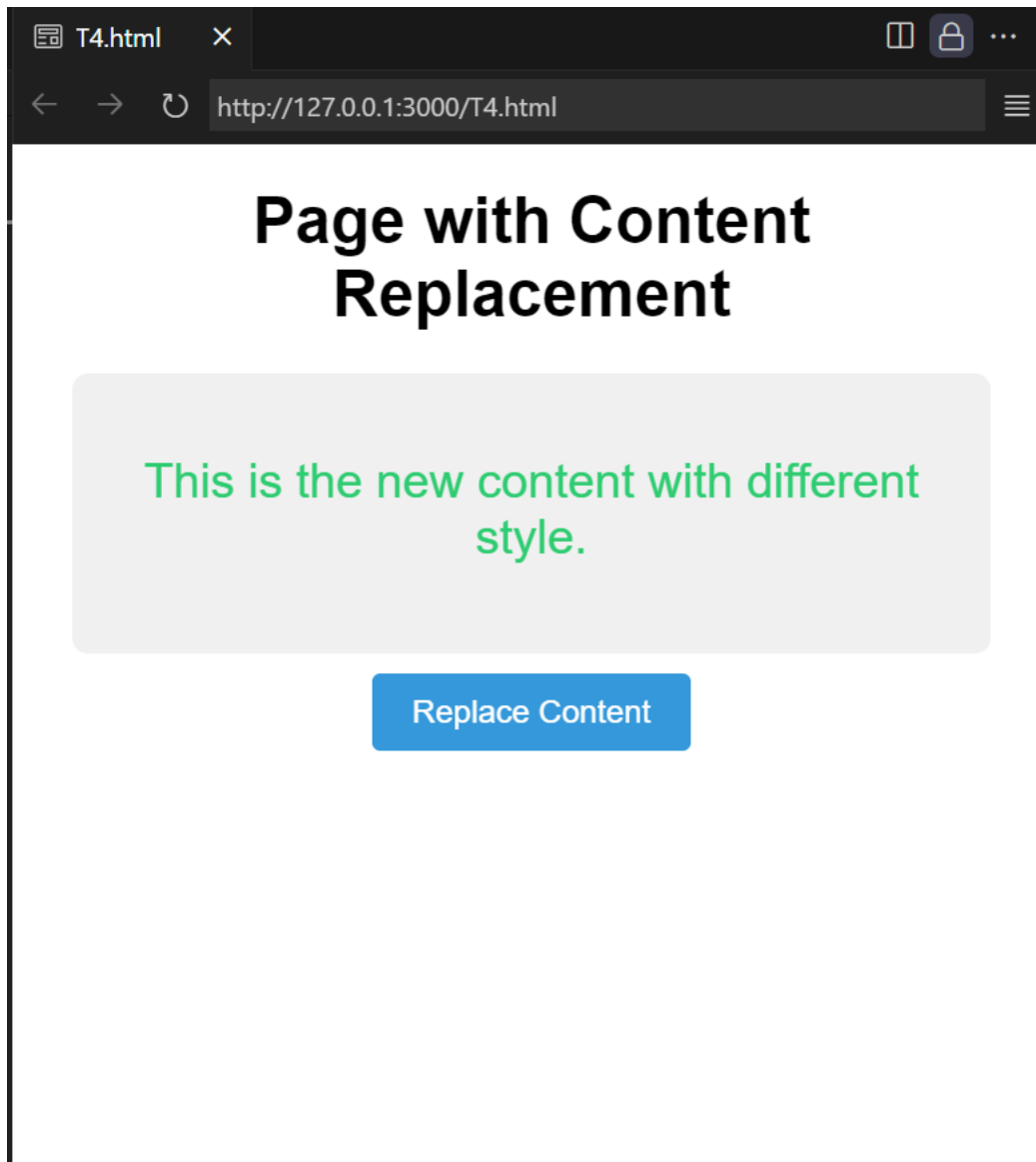


T4. Design a page having contents within and outside the main section. The page must contain a button that when clicked replaces the content of the main section with another content having different style.

```
<html>
<head>
  <style>
    body {
      font-family: Arial, sans-serif;
      text-align: center;
      margin: 20px;
    }
    #mainSection {
      background-color: #f0f0f0;
      padding: 20px;
      margin: 10px;
      border-radius: 8px;
    }
  </style>
</head>
<body>
  <div id="mainSection">
    <h1>Color changed!</h1>
    <button>Change Color</button>
  </div>
</body>
</html>
```

```
    }
    #button {
        background-color: #3498db;
        color: #ffffff;
        padding: 10px 20px;
        font-size: 16px;
        cursor: pointer;
        border: none;
        border-radius: 4px;
    }
    #newContent {
        color: #2ecc71;
        font-size: 24px;
        margin-top: 20px;
    }
</style>
</head>
<body>
    <h1>Page with Content Replacement</h1>
    <div id="mainSection">
        <p>This is the initial content inside the main section.</p>
    </div>
    <button id="button" onclick="replaceContent()">Replace Content</button>
    <script>
        function replaceContent() {
            var mainSection = document.getElementById("mainSection");
            mainSection.innerHTML = "<p id='newContent'>This is the new
content with different style.</p>";
        }
    </script>
</body>
</html>
```





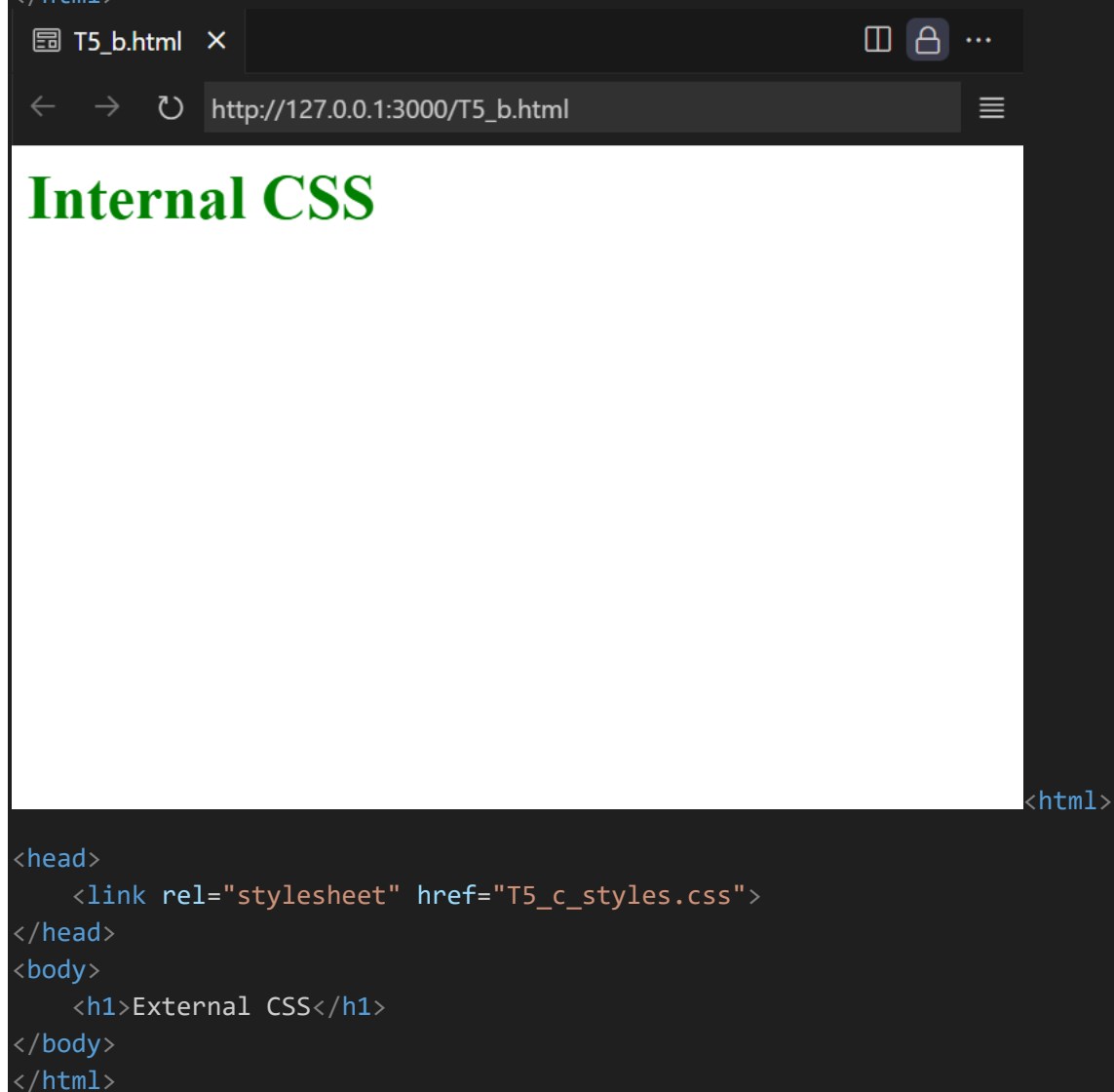
T5. Consider a h1 heading lying outside the main section in the page. Try changing the color of h1 in at least 3 different ways.



```
<html>
<head>
  <style>
    h1 {
      color: green;
    }
  </style>
</head>
<body>

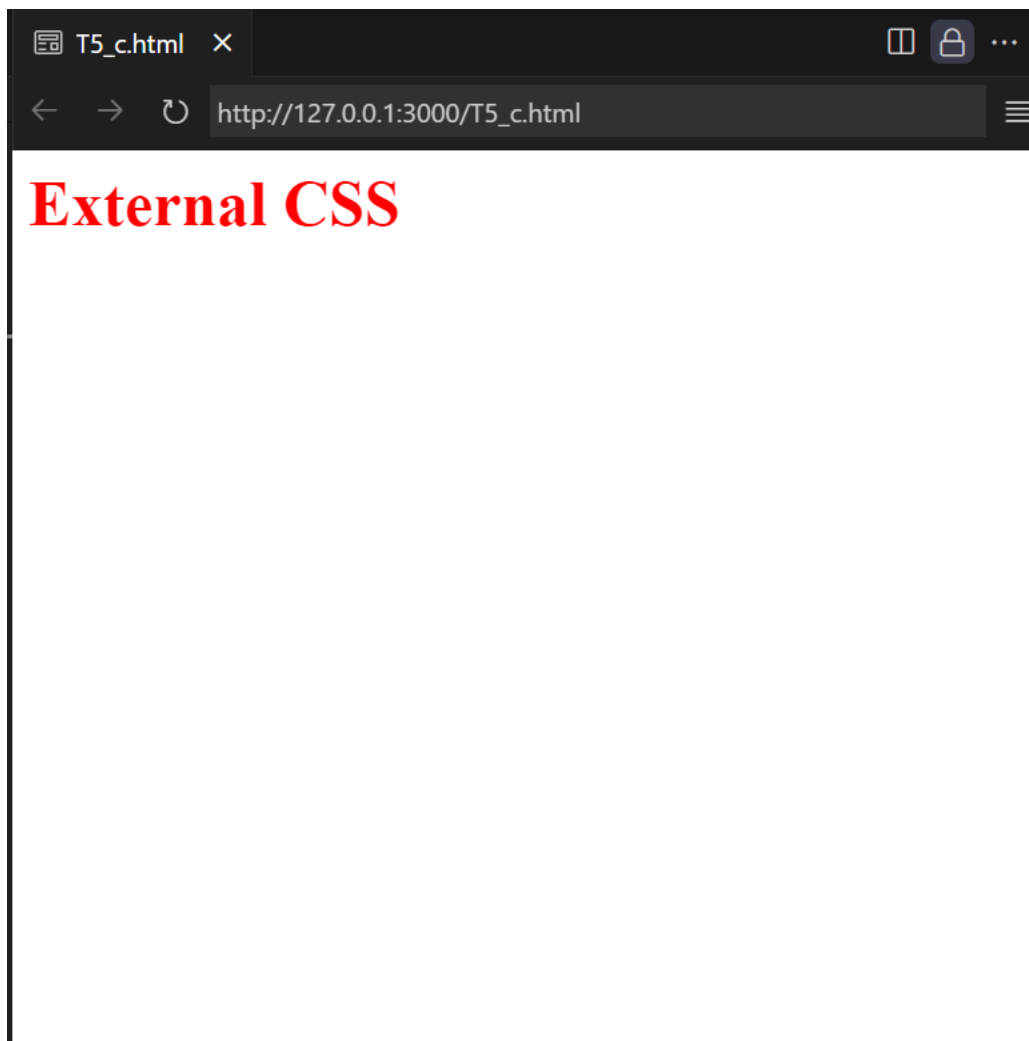
  <h1>Internal CSS</h1>

</body>
</html>
```



```
<html>
<head>
  <link rel="stylesheet" href="T5_c_styles.css">
</head>
<body>
  <h1>External CSS</h1>
</body>
</html>
```

```
h1 {
  color: red;
}
```

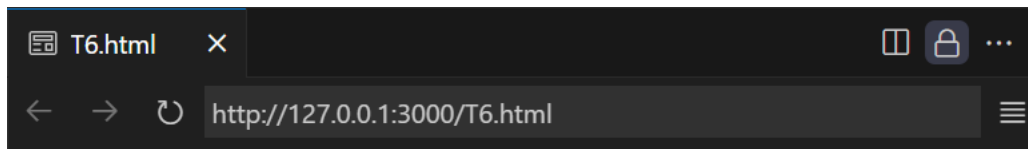







T6. Design a webpage using grid layout that displays the following:

The first row shows icons of various web browsers and the second row shows the latest version number.

```
<html>
<head>
  <style>
    .grid-container {
      display: grid;
      grid-template-columns: repeat(5, 1fr);
      text-align: center;
    }
    .browser img {
      width: 100px;
      height: 50px;
      object-fit: contain;
      border: 1px solid black;
    }
    .version {
      border: 1px solid black;
```

```
        background-color: lightgray;
    }
</style>
</head>
<body>
    <div class="grid-container">
        <div class="browser">
            
            <div class="version">57.0</div>
        </div>
        <div class="browser">
            
            <div class="version">16.0</div>
        </div>
        <div class="browser">
            
            <div class="version">52.0</div>
        </div>
        <div class="browser">
            
            <div class="version">10</div>
        </div>
        <div class="browser">
            
            <div class="version">44</div>
        </div>
    </div>
</body>
</html>
```



				
57.0	16.0	52.0	10	44