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<u>LAB Assignment - 4</u>

<u>Question 1</u>

<u>Code</u> :

```html
<!DOCTYPE html>
<html lang="en">
<head>
<meta charset="UTF-8">
<meta name="viewport" content="width=device-width, initial-scale=1.0">
<title>Change Background Color</title>
<style>
    body {
        font-family: Arial, sans-serif;
        text-align: center;
        padding-top: 50px;
    }
    h1 {
        color: #333;
    }
    .container {
        margin-top: 20px;
    }
    .btn {
        padding: 10px 20px;
        background-color: #007bff;
        color: #fff;
        border: none;
        border-radius: 5px;
        cursor: pointer;
        transition: background-color 0.3s;
    }
    .btn:hover {
        background-color: #0056b3;
    }
</style>
</head>
<body>

<h1>Change Background Color</h1>
```

```
<div class="container">
    <button id="colorBtn" class="btn">Change Color</button>
</div>

<script>
    const colorBtn = document.getElementById('colorBtn');
    const body = document.body;

    colorBtn.addEventListener('click', function() {
        const randomColor = getRandomColor();
        body.style.backgroundColor = randomColor;
        colorBtn.textContent = 'Color Changed!';
    });

    function getRandomColor() {
        const letters = '0123456789ABCDEF';
        let color = '#';
        for (let i = 0; i < 6; i++) {
            color += letters[Math.floor(Math.random() * 16)];
        }
        return color;
    }
</script>

</body>
</html>
```
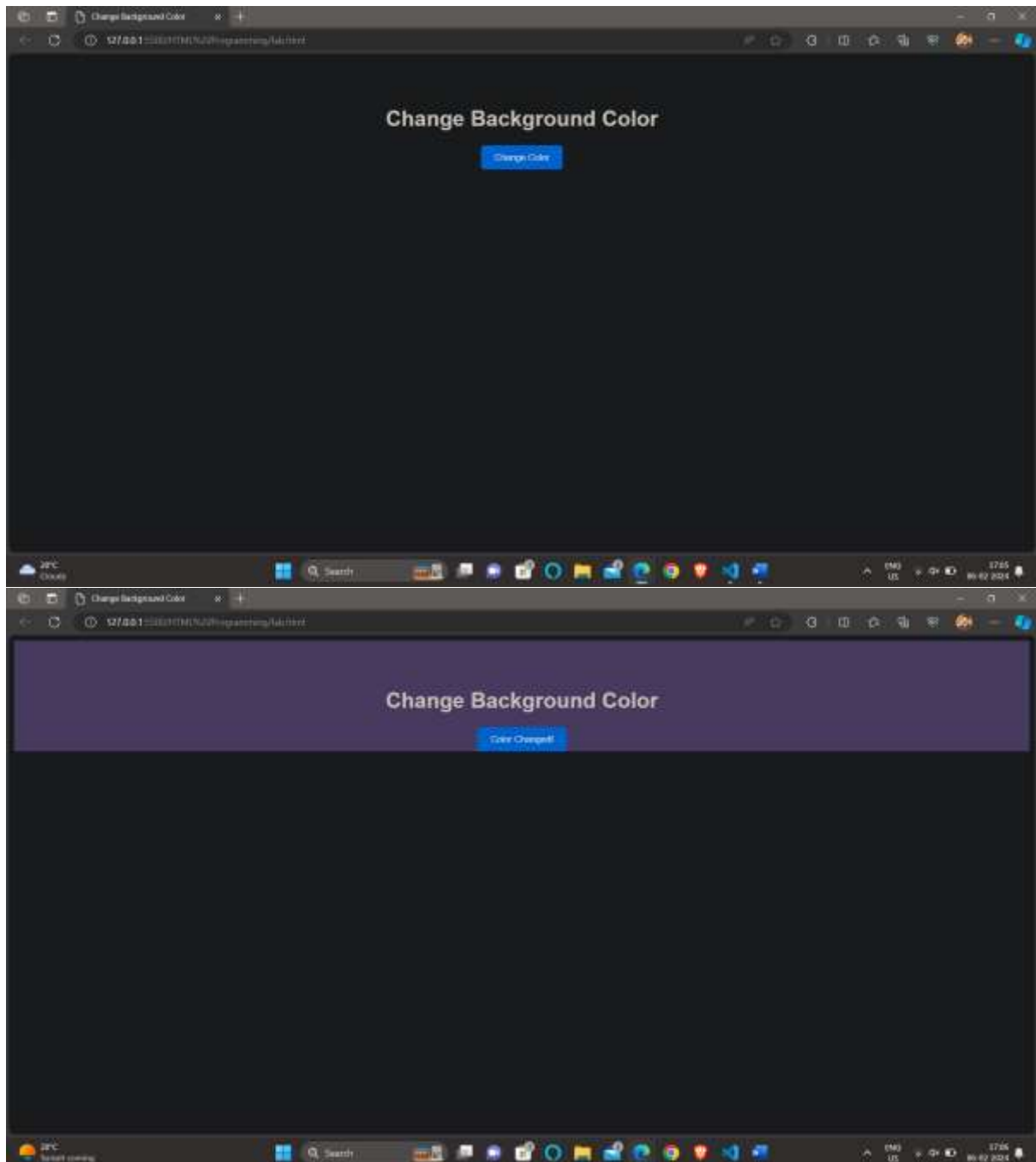
Output :

Question 2

Code :

```
<!DOCTYPE html>
<html lang="en">
<head>
<meta charset="UTF-8">
<meta name="viewport" content="width=device-width, initial-scale=1.0">
<title>Change Background Color</title>
<style>
    body {
```

```css
        font-family: Arial, sans-serif;
        text-align: center;
        padding-top: 50px;
        background-color: lightgreen; /* Change background color to light
green */
        color: red; /* Make the text red */
        font-size: 48pt; /* Change fontSize to 48pt */
    }
    .container {
        margin-top: 20px;
    }
    .btn {
        padding: 10px 20px;
        background-color: #007bff;
        color: #fff;
        border: none;
        border-radius: 5px;
        cursor: pointer;
        transition: background-color 0.3s;
    }
    .btn:hover {
        background-color: #0056b3;
    }
</style>
</head>
<body>

<h1 id="heading">Change Background Color</h1>
<button id="colorBtn" class="btn">Change Color</button> <!-- Added button
after closing </h1> -->

<script>
    const colorBtn = document.getElementById('colorBtn');
    const body = document.body;
    const heading = document.getElementById('heading'); // Get the heading
element

    colorBtn.addEventListener('click', function() {
        body.style.backgroundColor = 'lightgreen'; // a. Make the background
light green.
        body.style.color = 'red'; // b. Make the text red.
        body.style.fontSize = '48pt'; // c. Change fontSize to 48pt.
        heading.textContent = 'Color Changed!'; // d. Change the wording
inside the <h1> tag
        colorBtn.textContent = 'Color Changed!'; // Update button text
    });
</script>
```
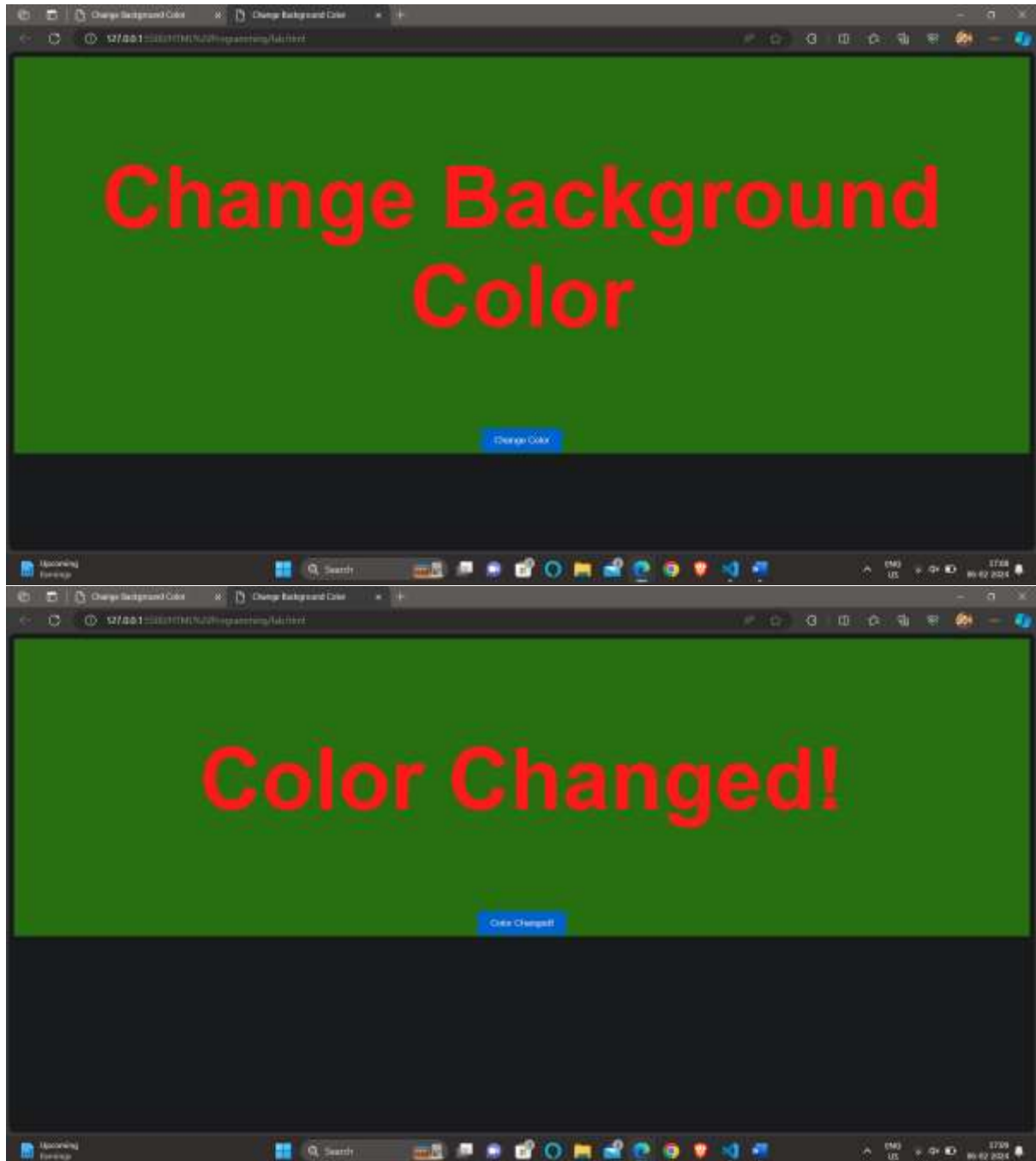
```
</body>
</html>
```

Output :

Question 3

Code :

```
<!DOCTYPE html>
<html lang="en">
```

```html
<head>
<meta charset="UTF-8">
<meta name="viewport" content="width=device-width, initial-scale=1.0">
<title>Change Background Color</title>
<style>
    body {
        font-family: Arial, sans-serif;
        text-align: center;
        padding-top: 50px;
        color: red; /* Make the text red */
        font-size: 24pt; /* Change fontSize to 24pt */
    }
    .container {
        margin-top: 20px;
    }
    .btn {
        padding: 10px 20px;
        background-color: #007bff;
        color: #fff;
        border: none;
        border-radius: 5px;
        cursor: pointer;
        transition: background-color 0.3s;
    }
    .btn:hover {
        background-color: #0056b3;
    }
    .light-green-bg {
        background-color: lightgreen; /* Set background color directly with
class attribute */
    }
</style>
</head>
<body>

<h1 id="heading">Change Background Color</h1>
<button id="colorBtn" class="btn">Change Color</button> <!-- Added button
after closing </h1> -->

<script>
    alert("Before assigning the class attribute."); // Generate alert before
assigning class attribute

    const colorBtn = document.getElementById('colorBtn');
    const body = document.body;
    const heading = document.getElementById('heading'); // Get the heading
element
```
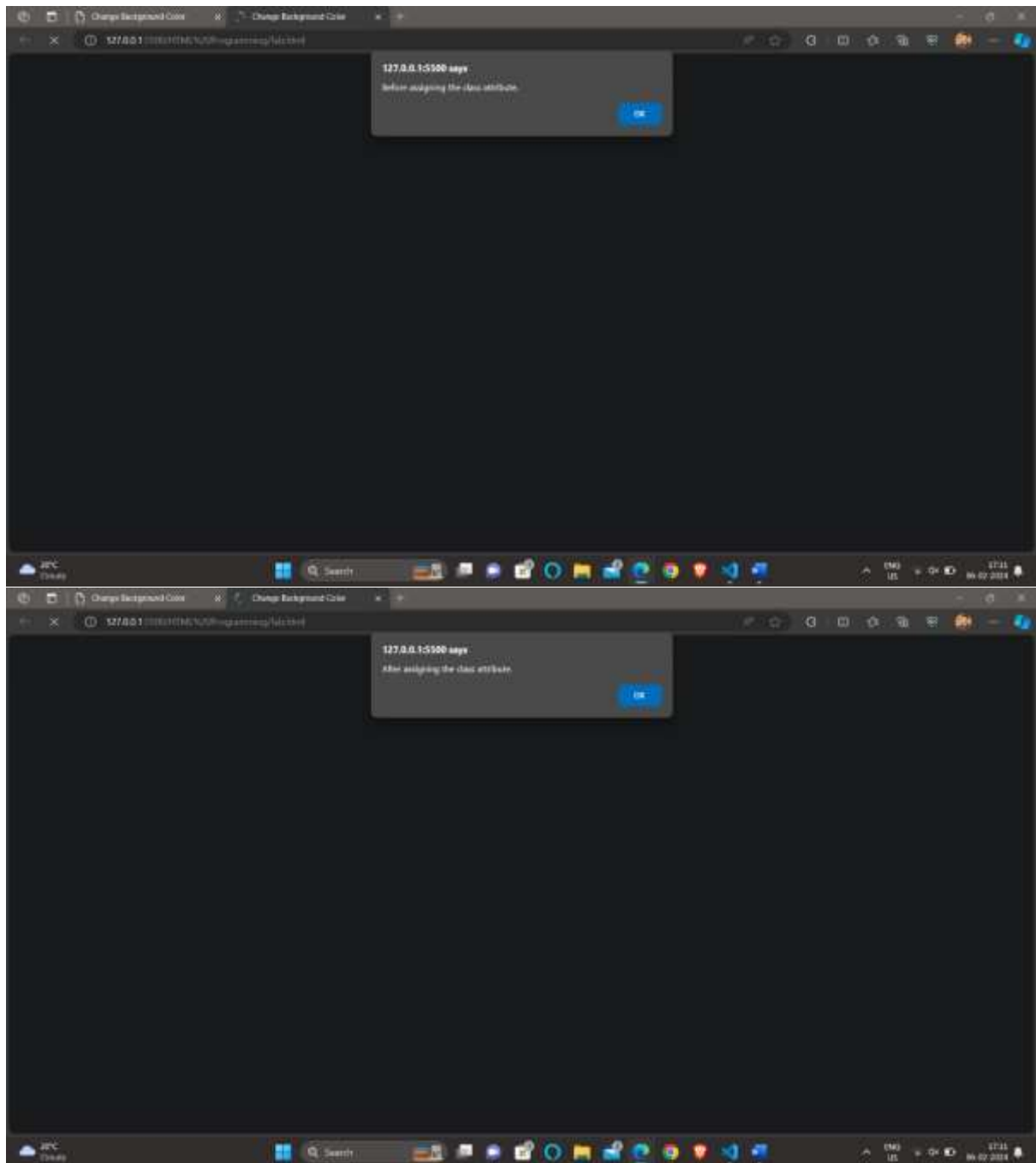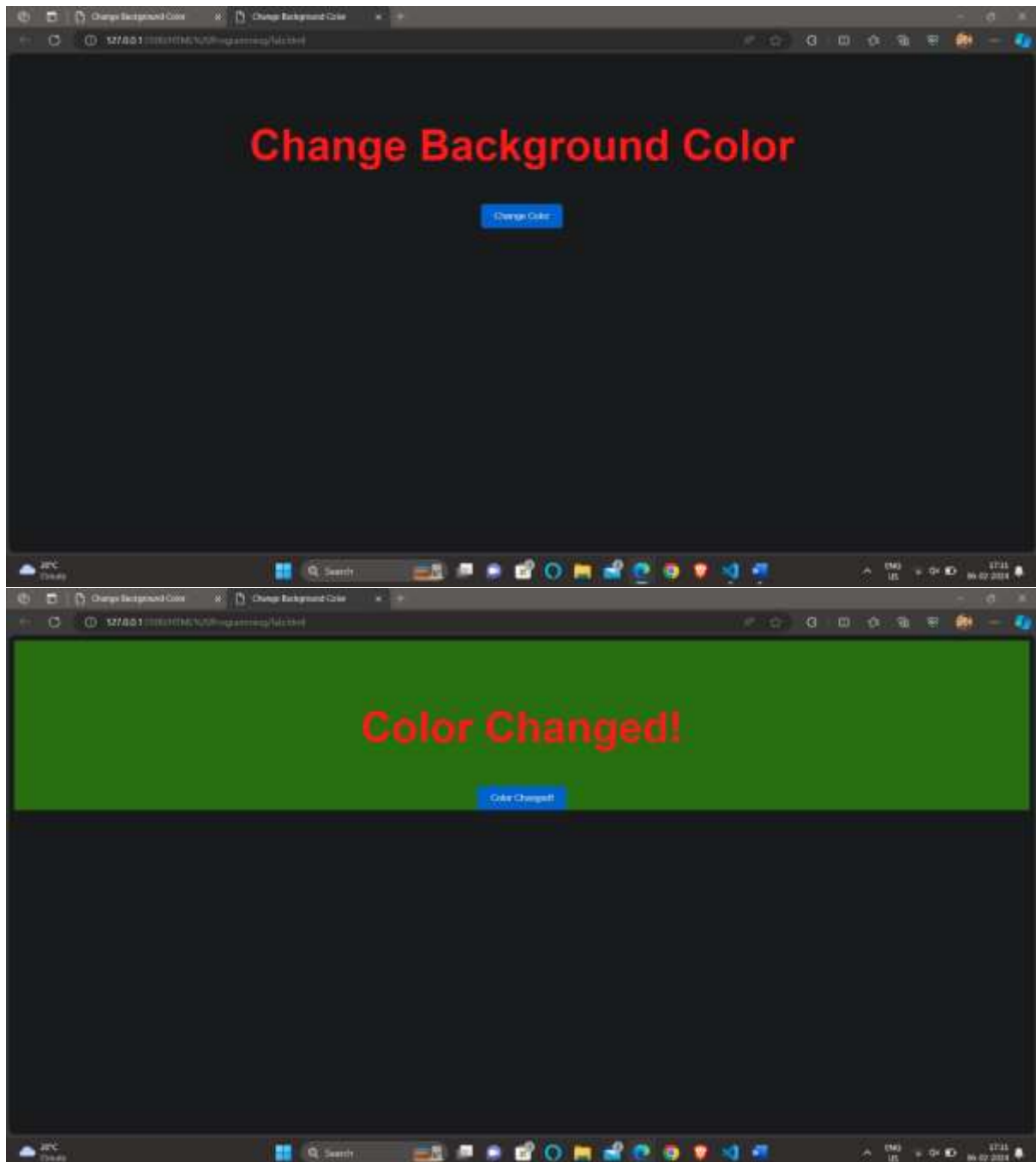
```
    colorBtn.addEventListener('click', function() {
        body.classList.add('light-green-bg'); // Set background color with
class attribute
        heading.textContent = 'Color Changed!'; // Change the wording inside
the <h1> tag
        colorBtn.textContent = 'Color Changed!'; // Update button text
    });

    alert("After assigning the class attribute."); // Generate alert after
assigning class attribute
</script>

</body>
</html>
```

Output :

Question 4

Code :

```
<!DOCTYPE html>
<html lang="en">
<head>
<meta charset="UTF-8">
<meta name="viewport" content="width=device-width, initial-scale=1.0">
<title>Dynamic Content Change</title>
<style>
    body {
```

```css
            font-family: Arial, sans-serif;
            text-align: center;
            padding-top: 50px;
        }
    main {
            background-color: #f0f0f0;
            padding: 20px;
            border-radius: 10px;
            margin-bottom: 20px;
        }
    .container {
            display: flex;
            justify-content: center;
            align-items: center;
            margin-top: 20px;
        }
    .btn {
            padding: 10px 20px;
            background-color: #007bff;
            color: #fff;
            border: none;
            border-radius: 5px;
            cursor: pointer;
            transition: background-color 0.3s;
        }
    .btn:hover {
            background-color: #0056b3;
        }
    .new-content {
            font-size: 20px;
            color: #ff5733;
            font-weight: bold;
            text-transform: uppercase;
            margin-top: 20px;
        }
</style>
</head>
<body>

<main>
    <h1>Main Content</h1>
    <p>This is the original content of the main section.</p>
</main>

<div class="container">
    <button id="changeContentBtn" class="btn">Change Content</button>
</div>
```

```
<script>
    const changeContentBtn = document.getElementById('changeContentBtn');
    const mainContent = document.querySelector('main');

    changeContentBtn.addEventListener('click', function() {
        mainContent.innerHTML = `
            <h1>New Content</h1>
            <p class="new-content">This is the new content with different
style.</p>
        `;
    });
</script>

</body>
</html>
```

Output :

Question 5

Code :

```html
<!DOCTYPE html>
<html lang="en">
<head>
<meta charset="UTF-8">
<meta name="viewport" content="width=device-width, initial-scale=1.0">
<title>Changing Heading Color</title>
<style>
    body {
```

```css
            font-family: Arial, sans-serif;
            text-align: center;
            padding-top: 50px;
        }
        main {
            background-color: #f0f0f0;
            padding: 20px;
            border-radius: 10px;
            margin-bottom: 20px;
        }
        .container {
            display: flex;
            justify-content: center;
            align-items: center;
            margin-top: 20px;
        }
        .btn {
            padding: 10px 20px;
            background-color: #007bff;
            color: #fff;
            border: none;
            border-radius: 5px;
            cursor: pointer;
            transition: background-color 0.3s;
        }
        .btn:hover {
            background-color: #0056b3;
        }
        .heading-style {
            color: green;
        }
</style>
</head>
<body>
<h1 id="heading">Heading Outside Main Section</h1>
<main>
    <h1>Main Content</h1>
    <p>This is the original content of the main section.</p>
</main>
<div class="container">
    <button id="changeContentBtn" class="btn">Change Content</button>
</div>
<script>
    const changeContentBtn = document.getElementById('changeContentBtn');
    const mainContent = document.querySelector('main');
    const heading = document.getElementById('heading');
    changeContentBtn.addEventListener('click', function() {
        mainContent.innerHTML = `
```
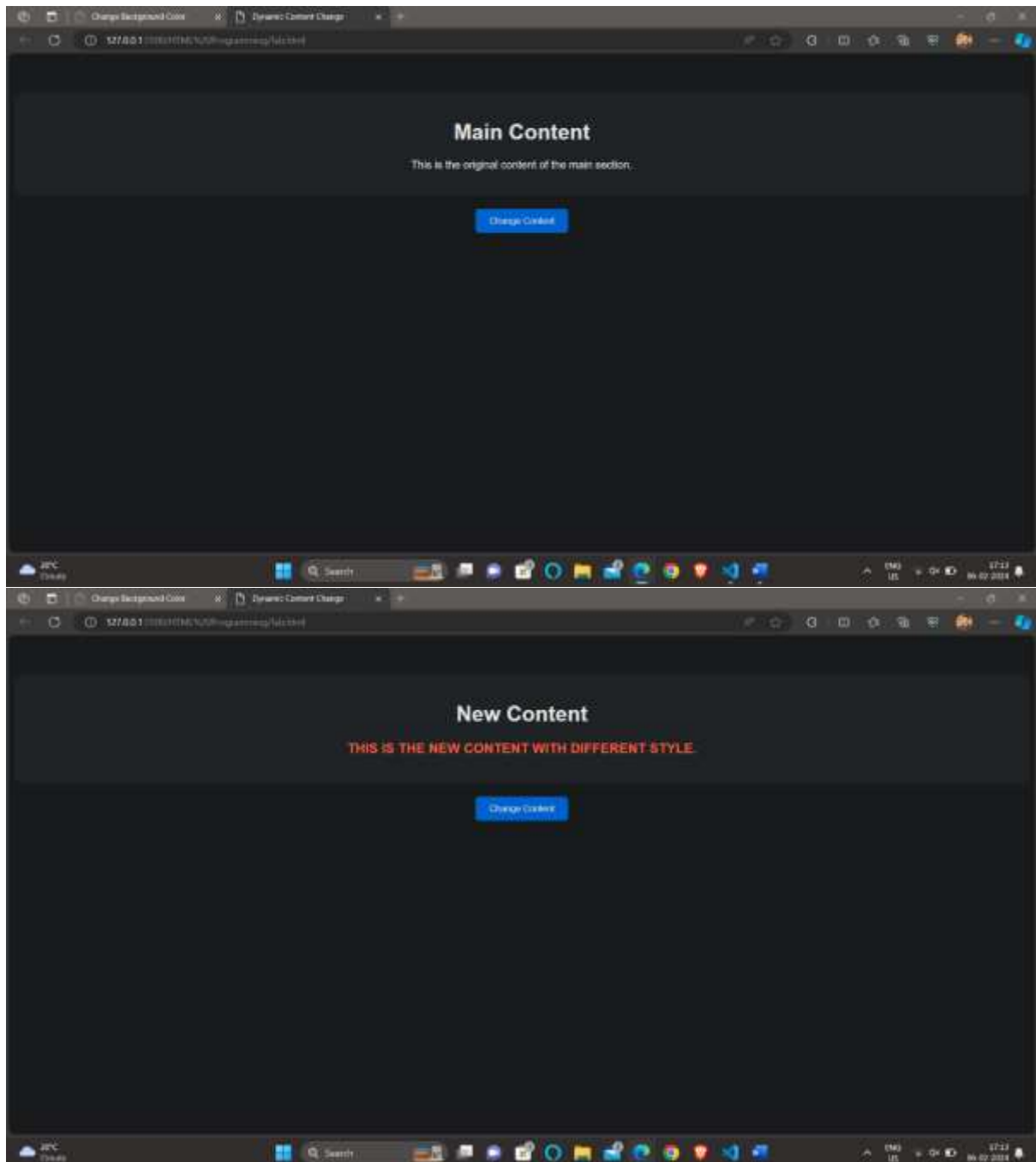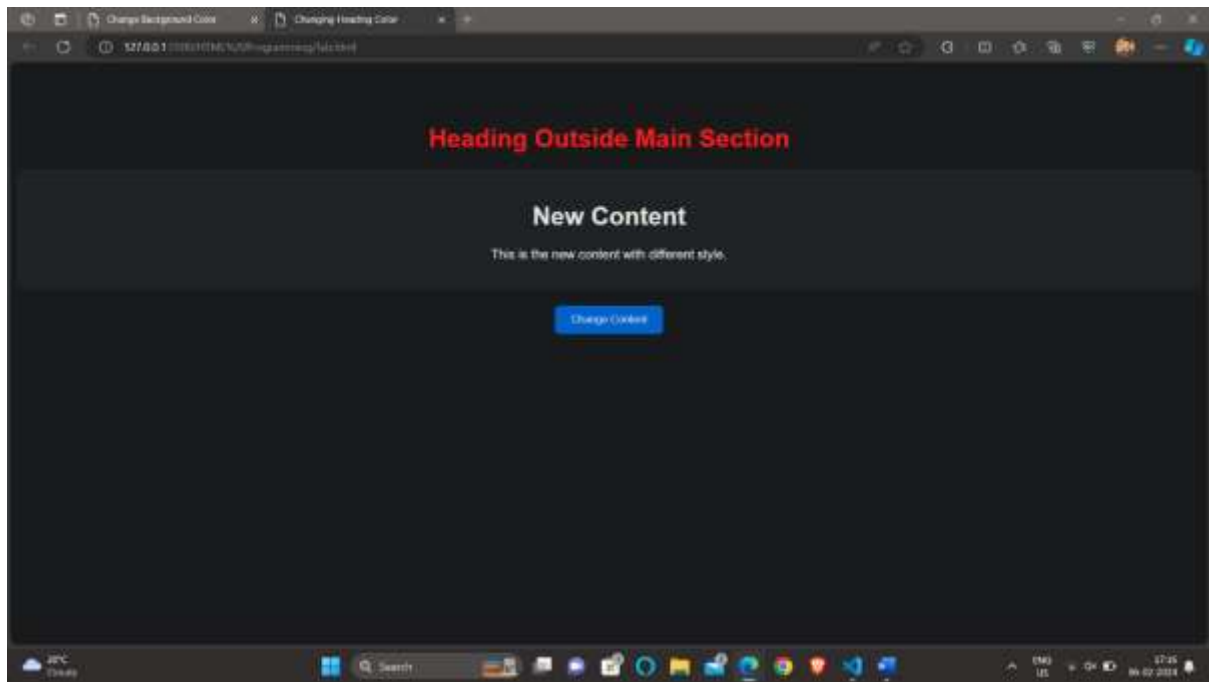
```
        <h1>New Content</h1>
        <p class="new-content">This is the new content with different
style.</p>
        `;
        let col=["Red","Blue","Green"];
        let val=col[Math.floor(Math.random()*col.length)];
        heading.style.color = val;
    });
</script>
</body>
</html>
```

Output :

Heading Outside Main Section

Main Content

This is the original content of the main section.

[Change Content]

Heading Outside Main Section

New Content

This is the new content with different style.

[Change Content]

Question 6

Code :

```html
<!DOCTYPE html>
<html lang="en">
<head>
<meta charset="UTF-8">
<meta name="viewport" content="width=device-width, initial-scale=1.0">
<title>Browser Versions</title>
<style>
    body {
        font-family: Arial, sans-serif;
        margin: 0;
        padding: 0;
    }

    .grid-container {
        display: grid;
        grid-template-rows: auto auto;
        grid-template-columns: repeat(5, 1fr); /* Adjust the number based on
the number of browsers */
        gap: 10px;
        padding: 20px;
    }

    .grid-item {
        text-align: center;
    }
```

```
        .icon {
            width: 60px;
            height: 60px;
        }

        .version {
            font-size: 18px;
            margin-top: 5px;
        }

        table {
            width: 100%;
            border-collapse: collapse;
        }

        th, td {
            border: 1px solid #dddddd;
            padding: 8px;
            text-align: left;
        }

        th {
            background-color: #f2f2f2;
        }
</style>
</head>
<body>

    <table>
        <tbody>
            <tr>
                <td><img class="icon" src="chrome.png" alt="Chrome"></td>
                <td><img class="icon" src="firefox.png" alt="Firefox"></td>
                <td><img class="icon" src="edge.jpg" alt="Edge"></td>
                <td><img class="icon" src="safari.jpg" alt="Safari"></td>
                <td><img class="icon" src="opera.png" alt="Opera"></td>
            </tr>
            <tr>
                <td>Latest Version: 57</td>
                <td>Latest Version: 52</td>
                <td>Latest Version: 16</td>
                <td>Latest Version: 10</td>
                <td>Latest Version: 44</td>
            </tr>
        </tbody>
    </table>


</body>
```

```
</html>
```

Output :