

# WEB TECHNOLOGY

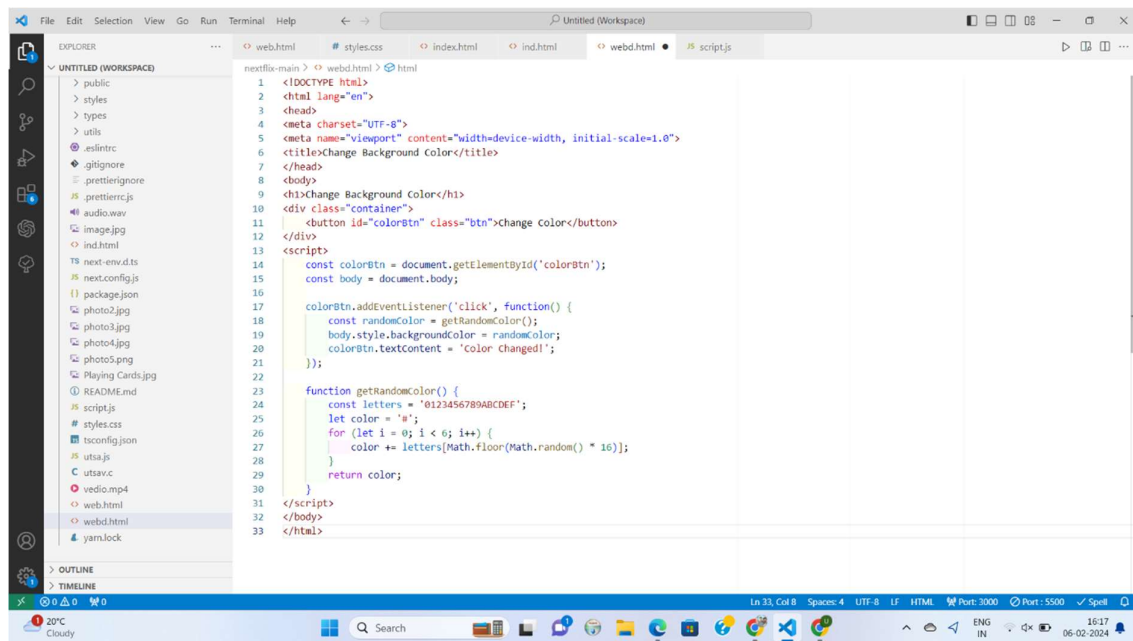
## Lab Assignment – 04

**Name :- Ujjwal Kumar**

**Roll No. :- 22CS3064**

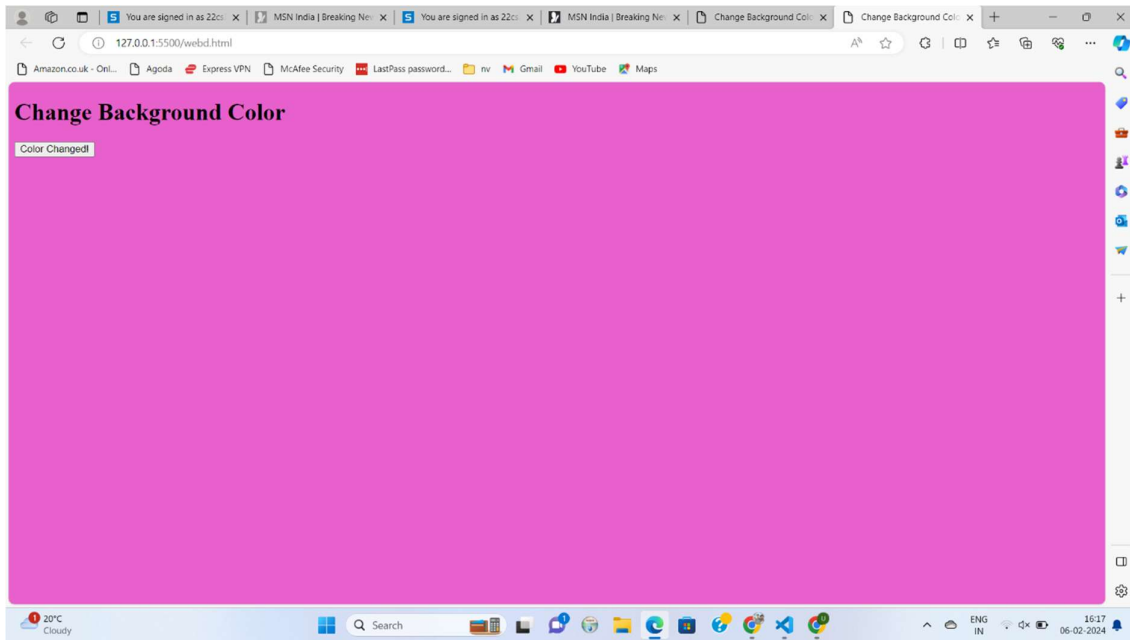
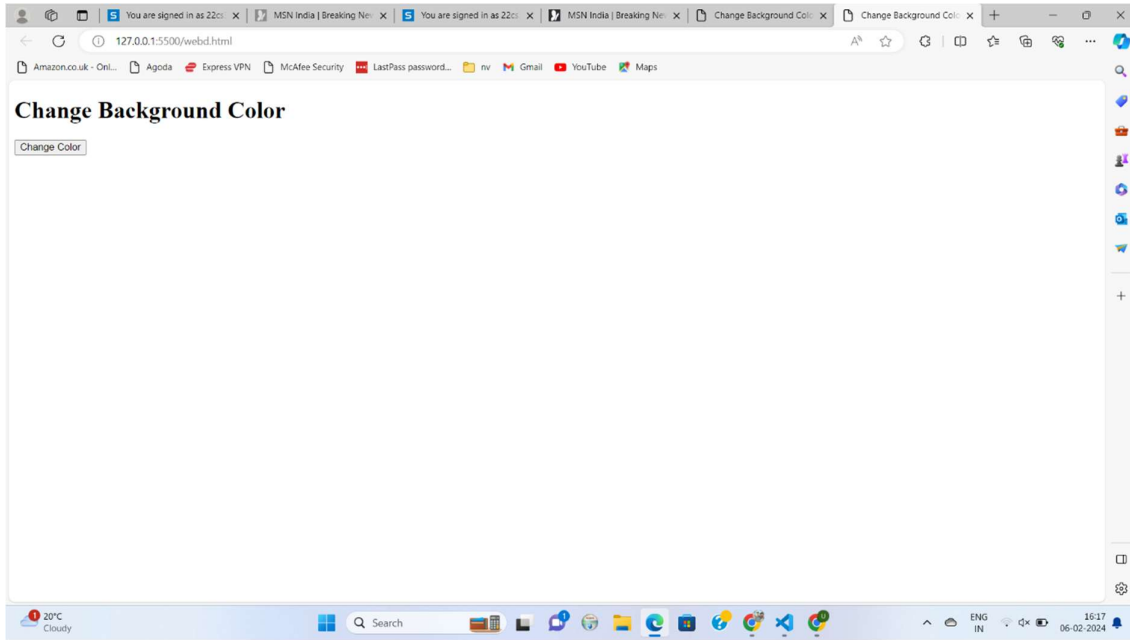
**Branch :- CSE**

### Task 1)

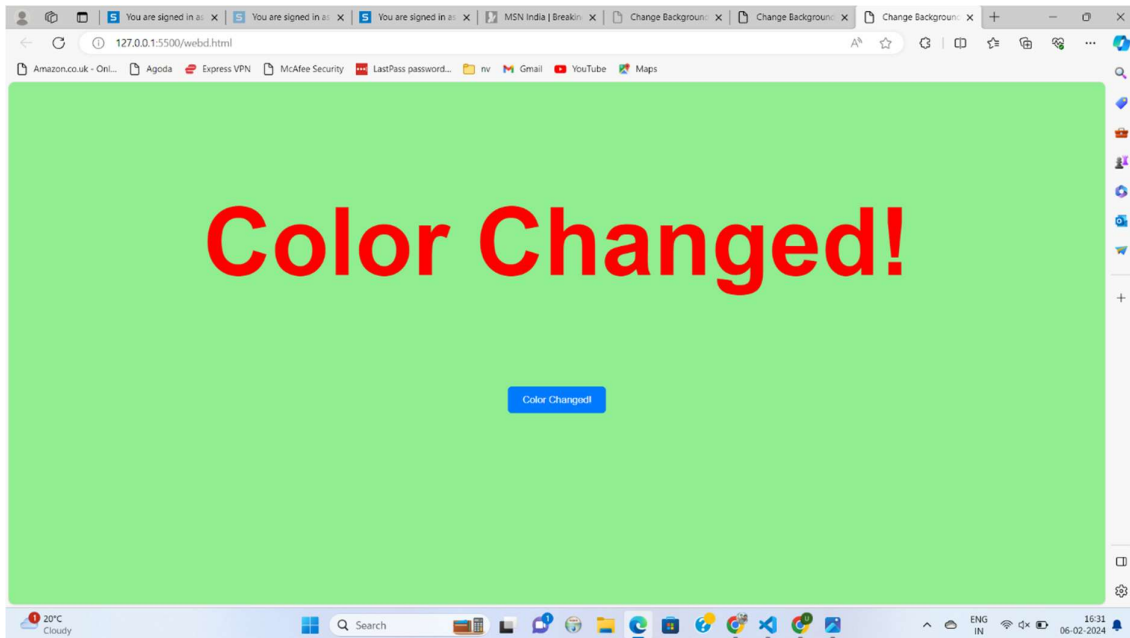
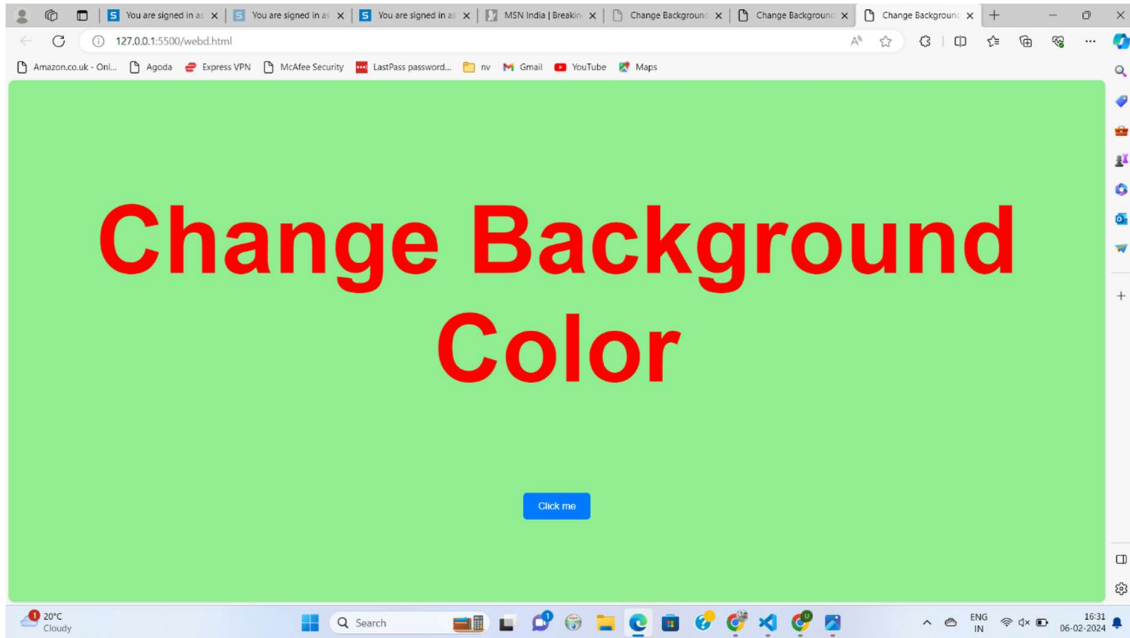


The screenshot shows a Visual Studio Code editor with a workspace named 'Untitled (Workspace)'. The Explorer panel on the left shows a file tree with folders like 'public', 'styles', and 'types', and files like 'index.html', 'ind.html', 'webd.html', and 'script.js'. The main editor area displays the content of 'webd.html', which is an HTML file with a single button that changes its background color when clicked. The script.js file contains a function to generate a random color from a set of hexadecimal characters.

```
nextfix-main > webd.html > html
1 <!DOCTYPE html>
2 <html lang="en">
3 <head>
4 <meta charset="UTF-8">
5 <meta name="viewport" content="width=device-width, initial-scale=1.0">
6 <title>Change Background Color</title>
7 </head>
8 <body>
9 <h1>Change Background Color</h1>
10 <div class="container">
11 | <button id="colorBtn" class="btn">Change Color</button>
12 </div>
13 <script>
14   const colorBtn = document.getElementById('colorBtn');
15   const body = document.body;
16
17   colorBtn.addEventListener('click', function() {
18     const randomColor = getRandomColor();
19     body.style.backgroundColor = randomColor;
20     colorBtn.textContent = 'Color changed!';
21   });
22
23   function getRandomColor() {
24     const letters = '0123456789ABCDEF';
25     let color = '';
26     for (let i = 0; i < 6; i++) {
27       color += letters[Math.floor(Math.random() * 16)];
28     }
29     return color;
30   }
31 </script>
32 </body>
33 </html>
```



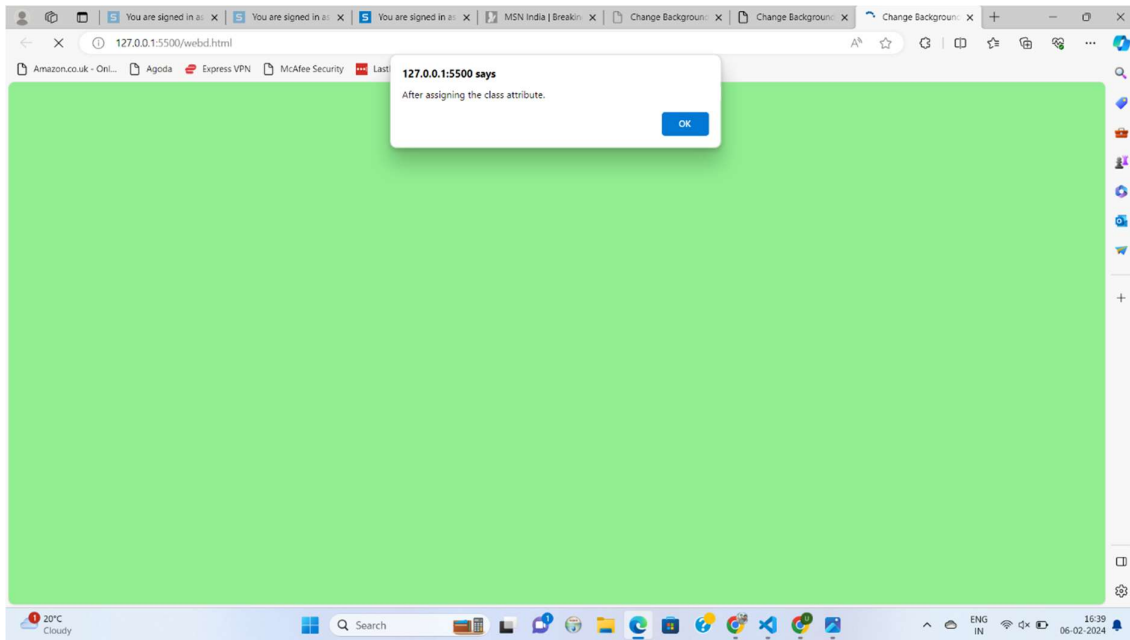
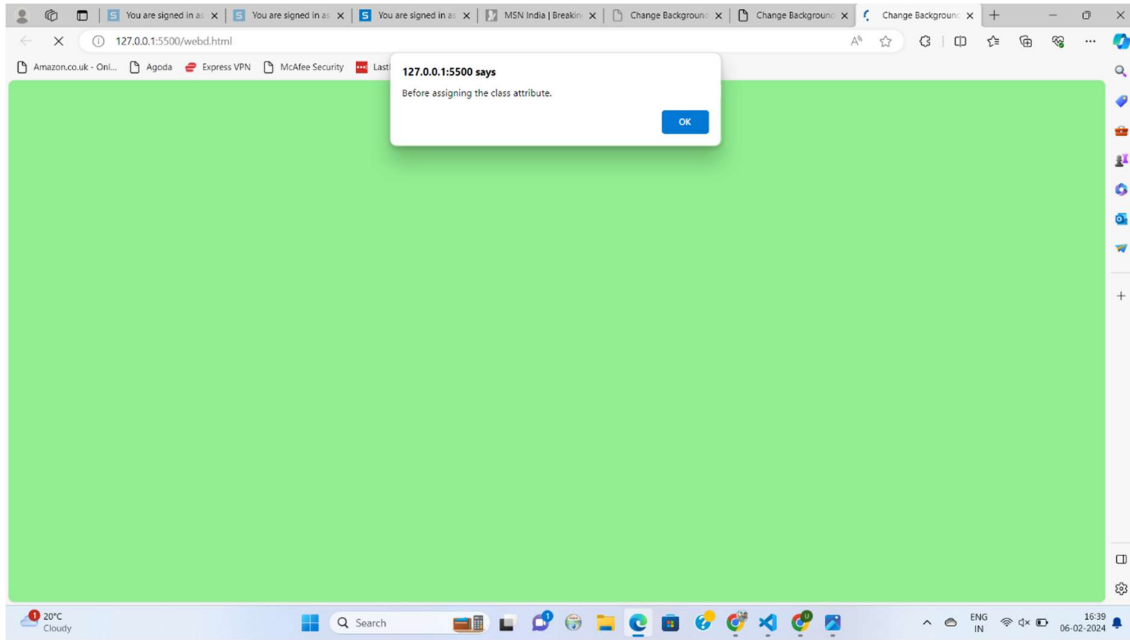
## Task 2)

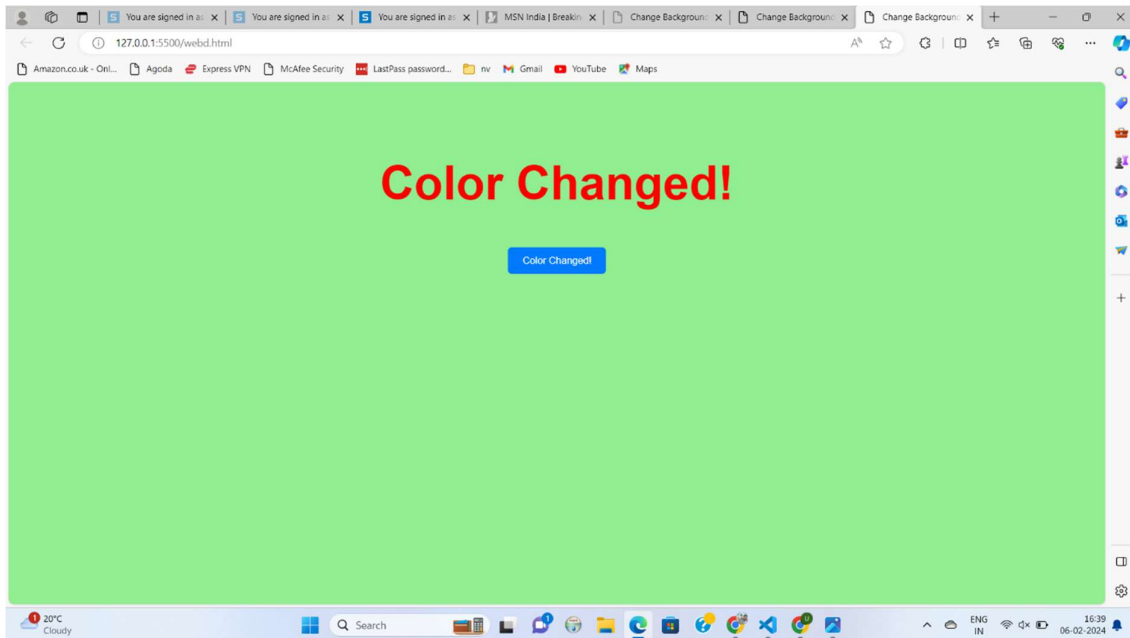
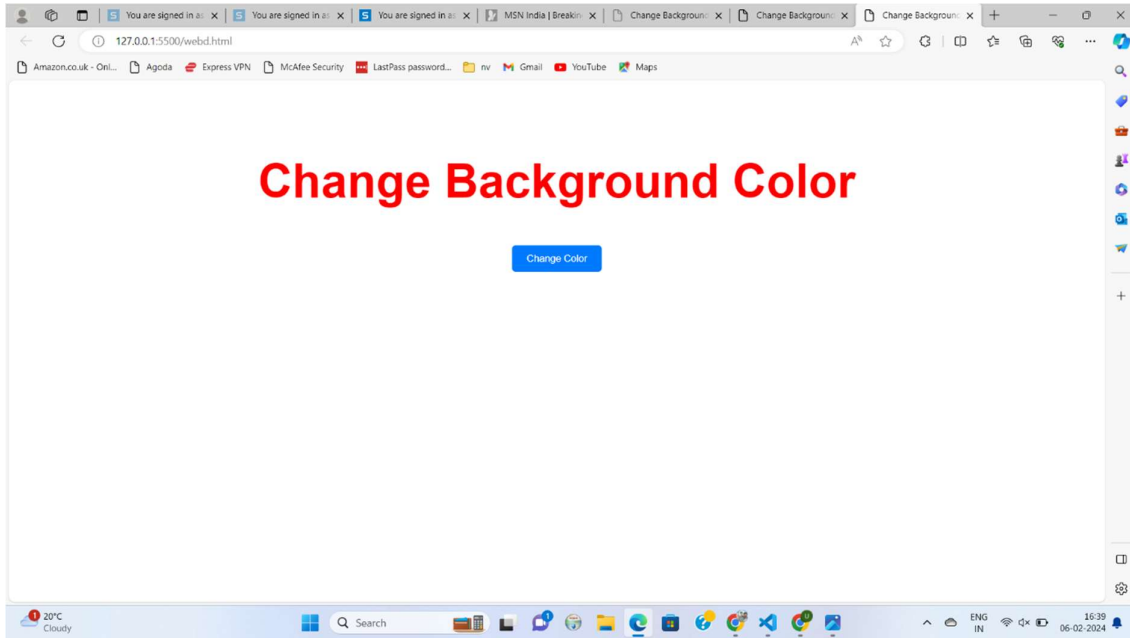


## Task 3)

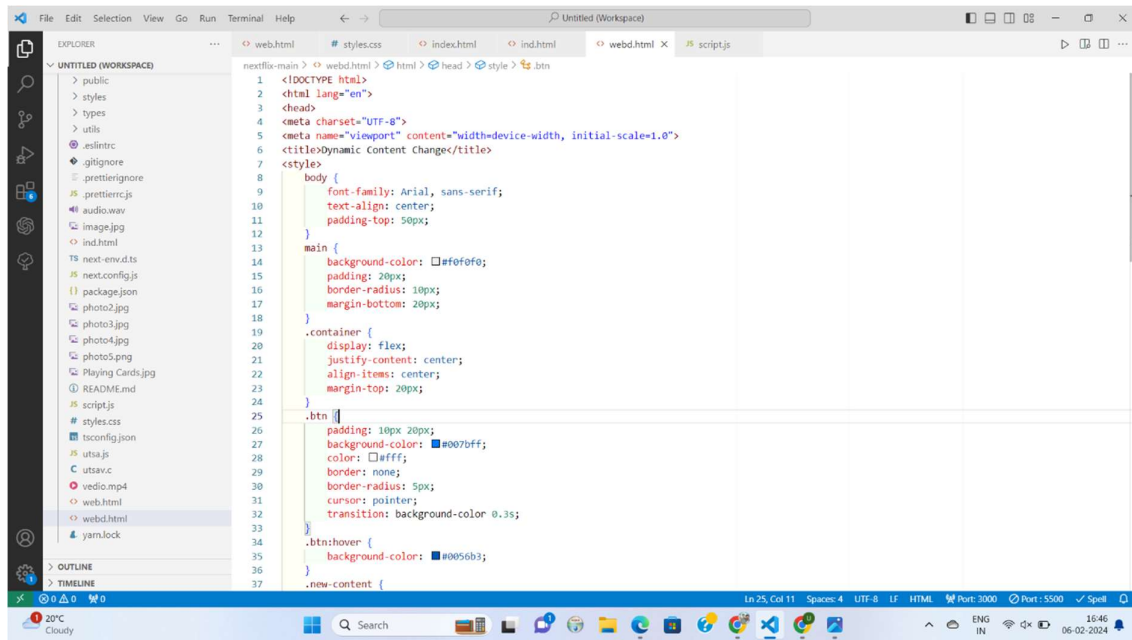
```
1 <!DOCTYPE html>
2 <html lang='en'>
3 <head>
4 <meta charset='UTF-8'>
5 <meta name='viewport' content='width=device-width, initial-scale=1.0'>
6 <title>Change Background Color</title>
7 <style>
8   body {
9     font-family: Arial, sans-serif;
10    text-align: center;
11    padding-top: 50px;
12    color: red;
13    font-size: 24pt;
14  }
15  .container {
16    margin-top: 20px;
17  }
18  .btn {
19    padding: 10px 20px;
20    background-color: #007bff;
21    color: #fff;
22    border: none;
23    border-radius: 5px;
24    cursor: pointer;
25    transition: background-color 0.3s;
26  }
27  .btn:hover {
28    background-color: #0056b3;
29  }
30  .light-green-bg {
31    background-color: lightgreen;
32  }
33 </style>
34 </head>
35 <body>
36 <h1 id='heading'>Change Background Color</h1>
37 <button id='colorBtn' class='btn'>Change Color</button>
```

```
22 border: none;
23 border-radius: 5px;
24 cursor: pointer;
25 transition: background-color 0.3s;
26 }
27 .btn:hover {
28   background-color: #0056b3;
29 }
30 .light-green-bg {
31   background-color: lightgreen;
32 }
33 </style>
34 </head>
35 <body>
36 <h1 id='heading'>Change Background Color</h1>
37 <button id='colorBtn' class='btn'>Change Color</button>
38 <script>
39   alert('Before assigning the class attribute. ');
40   const colorBtn = document.getElementById('colorBtn');
41   const body = document.body;
42   const heading = document.getElementById('heading');
43   colorBtn.addEventListener('click', function() {
44     body.classList.add('light-green-bg');
45     heading.textContent = 'Color changed!';
46     colorBtn.textContent = 'Color changed!';
47   });
48   alert('After assigning the class attribute. ');
49 </script>
50 </body>
51 </html>
```

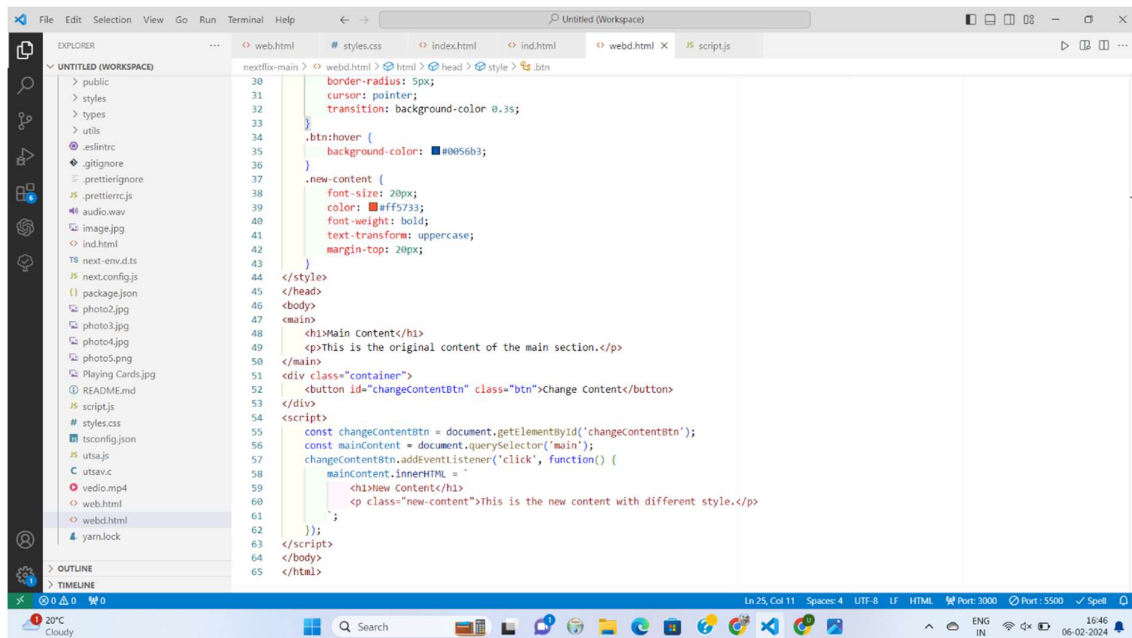




## Task 4)

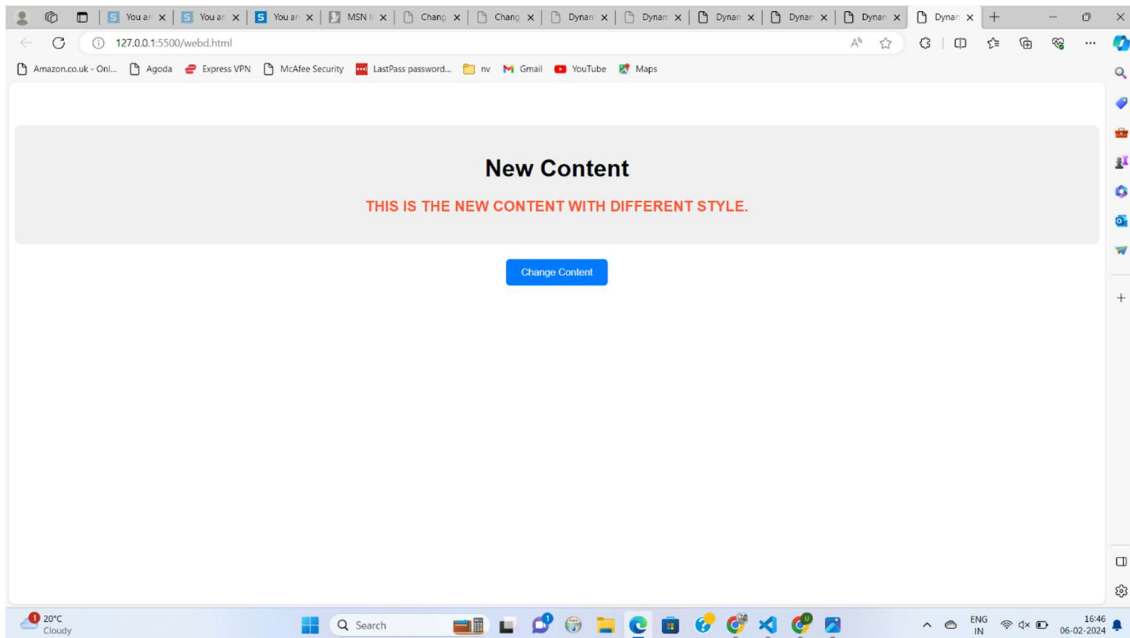
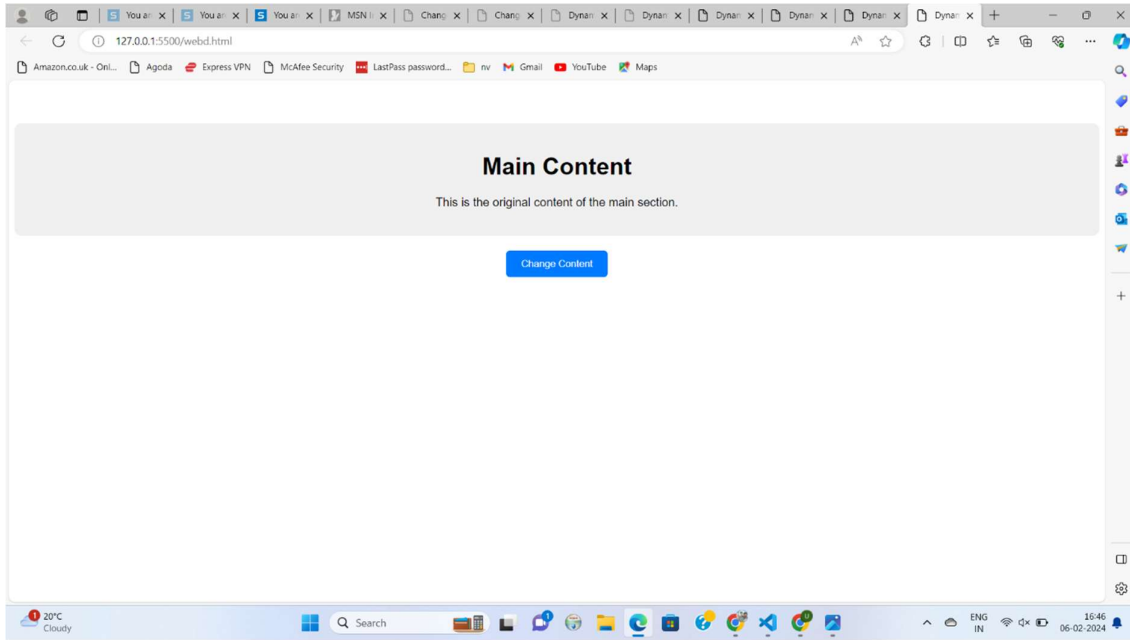


```
1 <!DOCTYPE html>
2 <html lang="en">
3 <head>
4 <meta charset="UTF-8">
5 <meta name="viewport" content="width=device-width, initial-scale=1.0">
6 <title>Dynamic Content Change</title>
7 <style>
8   body {
9     font-family: Arial, sans-serif;
10    text-align: center;
11    padding-top: 50px;
12  }
13  main {
14    background-color: #f0f0f0;
15    padding: 20px;
16    border-radius: 10px;
17    margin-bottom: 20px;
18  }
19  .container {
20    display: flex;
21    justify-content: center;
22    align-items: center;
23    margin-top: 20px;
24  }
25  .btn {
26    padding: 10px 20px;
27    background-color: #007bff;
28    color: #fff;
29    border: none;
30    border-radius: 5px;
31    cursor: pointer;
32    transition: background-color 0.3s;
33  }
34  .btn: hover {
35    background-color: #0056b3;
36  }
37  .new-content {
```

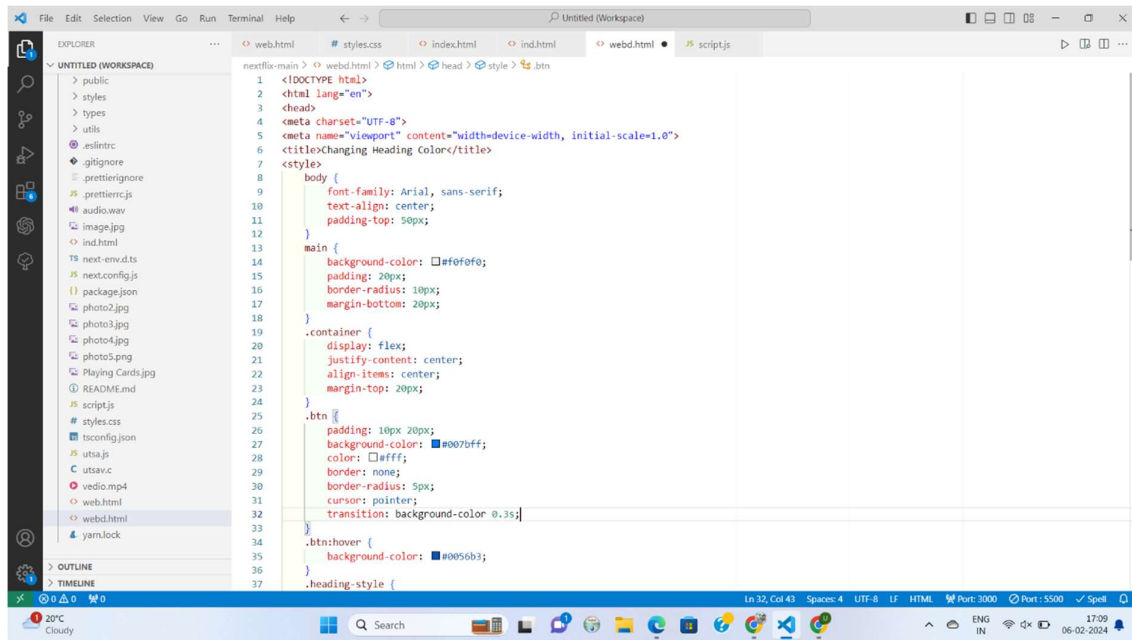


```
30 border-radius: 5px;
31 cursor: pointer;
32 transition: background-color 0.3s;
33 }
34 .btn: hover {
35   background-color: #0056b3;
36 }
37 .new-content {
38   font-size: 20px;
39   color: #ff5733;
40   font-weight: bold;
41   text-transform: uppercase;
42   margin-top: 20px;
43 }
44 </style>
45 </head>
46 <body>
47 <main>
48   <h1>Main Content</h1>
49   <p>This is the original content of the main section.</p>
50 </main>
51 <div class="container">
52   <button id="changeContentBtn" class="btn">Change Content</button>
53 </div>
54 <script>
55   const changeContentBtn = document.getElementById('changeContentBtn');
56   const mainContent = document.querySelector('main');
57   changeContentBtn.addEventListener('click', function() {
58     mainContent.innerHTML = `
59     <h1>New Content</h1>
60     <p class="new-content">This is the new content with different style.</p>
61   `;
62   });
63 </script>
64 </body>
65 </html>
```



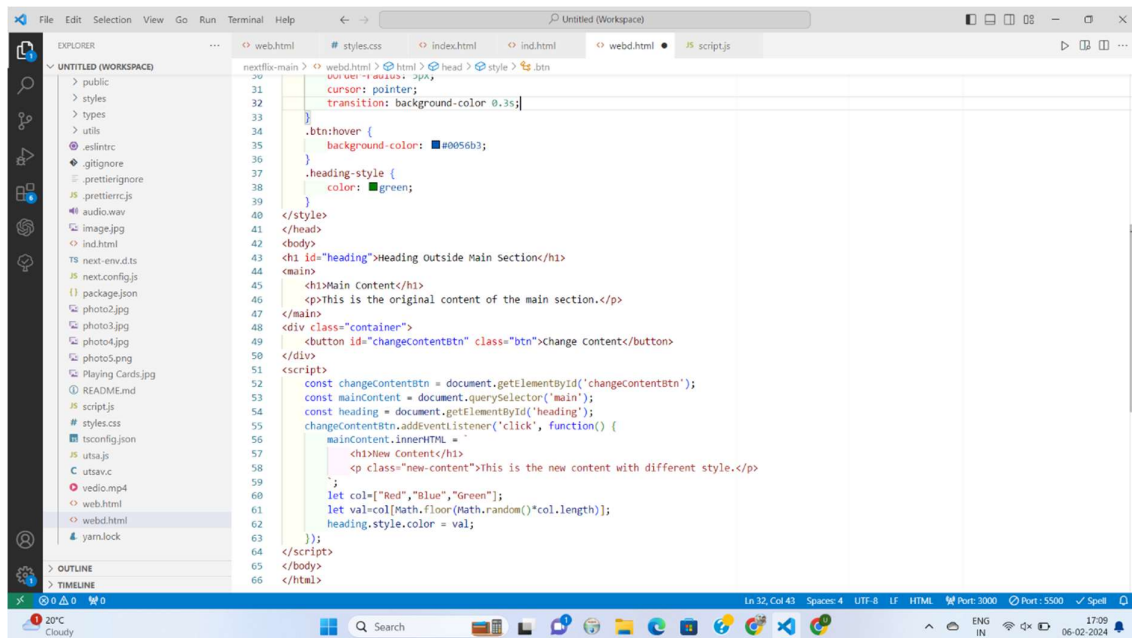


## Task 5)



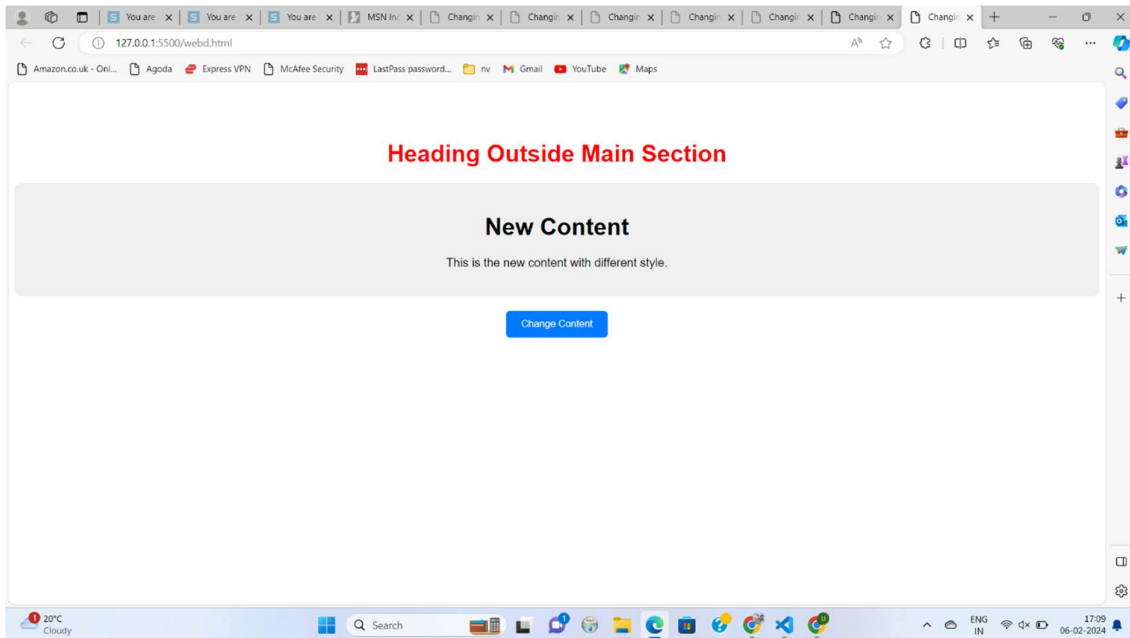
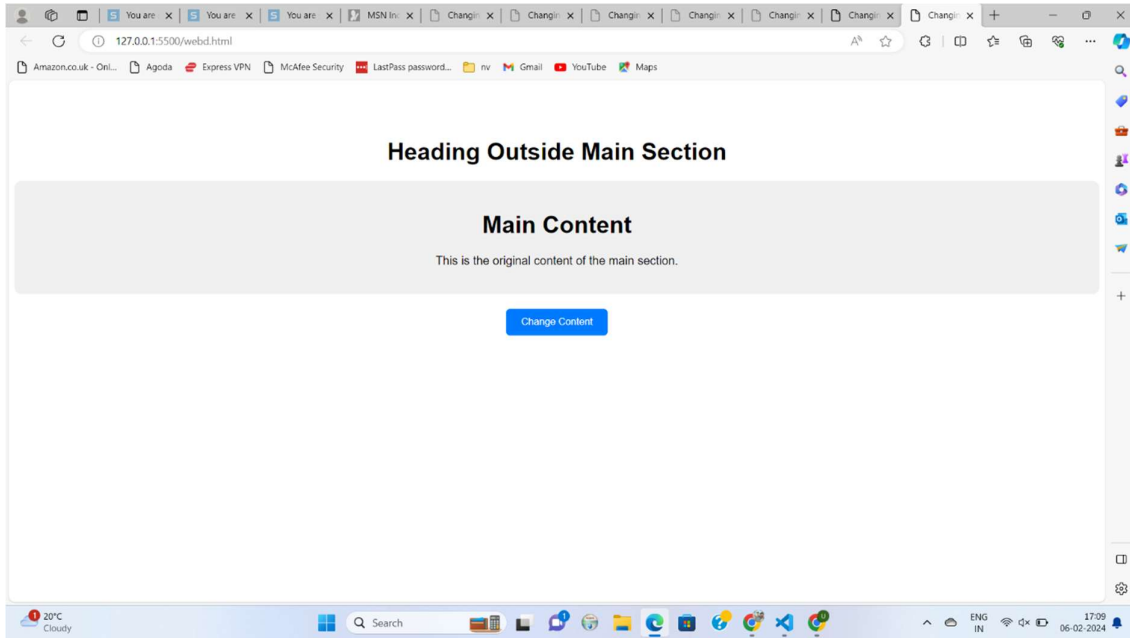
The screenshot shows the VS Code editor with the 'webd.html' file open. The file contains the following CSS code:

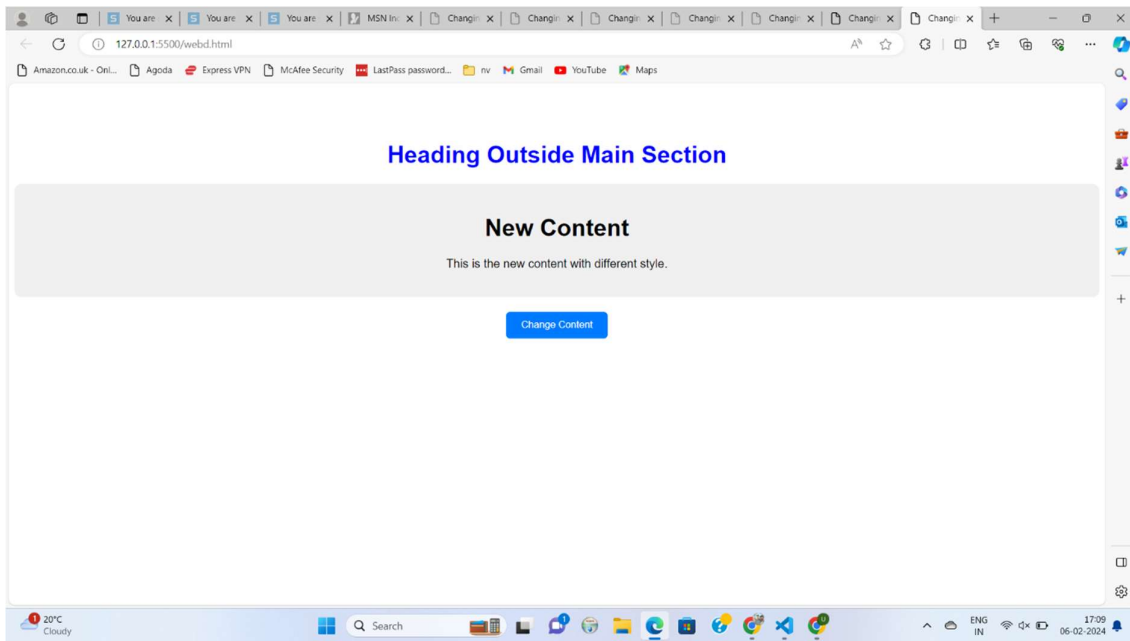
```
1 <!DOCTYPE html>
2 <html lang="en">
3 <head>
4 <meta charset="UTF-8">
5 <meta name="viewport" content="width=device-width, initial-scale=1.0">
6 <title>Changing Heading Color</title>
7 <style>
8   body {
9     font-family: Arial, sans-serif;
10    text-align: center;
11    padding-top: 50px;
12  }
13  main {
14    background-color: #f0f0f0;
15    padding: 20px;
16    border-radius: 10px;
17    margin-bottom: 20px;
18  }
19  .container {
20    display: flex;
21    justify-content: center;
22    align-items: center;
23    margin-top: 20px;
24  }
25  .btn {
26    padding: 10px 20px;
27    background-color: #007bff;
28    color: #fff;
29    border: none;
30    border-radius: 5px;
31    cursor: pointer;
32    transition: background-color 0.3s;
33  }
34  .btn:hover {
35    background-color: #0056b3;
36  }
37  .heading-style {
```



The screenshot shows the VS Code editor with the 'webd.html' file open. The file contains the following HTML and JavaScript code:

```
31   cursor: pointer;
32   transition: background-color 0.3s;
33 }
34 .btn:hover {
35   background-color: #0056b3;
36 }
37 .heading-style {
38   color: green;
39 }
40 </style>
41 </head>
42 <body>
43 <h1 id="heading">Heading Outside Main Section</h1>
44 <main>
45   <h2>Main Content</h2>
46   <p>This is the original content of the main section.</p>
47 </main>
48 <div class="container">
49   <button id="changeContentBtn" class="btn">Change Content</button>
50 </div>
51 <script>
52   const changeContentBtn = document.getElementById('changeContentBtn');
53   const mainContent = document.querySelector('main');
54   const heading = document.getElementById('heading');
55   changeContentBtn.addEventListener('click', function() {
56     mainContent.innerHTML =
57       <h2>New Content</h2>
58       <p class="new-content">This is the new content with different style.</p>
59     ;
60     let col=["Red","Blue","Green"];
61     let val=col[Math.floor(Math.random()*col.length)];
62     heading.style.color = val;
63   });
64 </script>
65 </body>
66 </html>
```





## Task 6)

