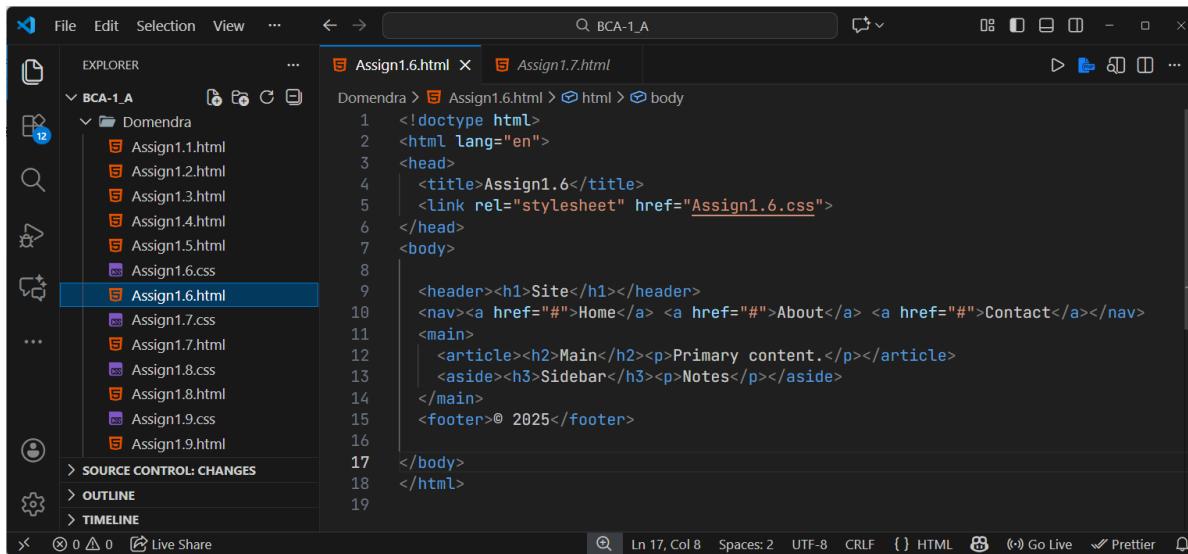


2.1. Styling a Web Page Layout: Create a simple web page using HTML and CSS that includes a header, navigation bar, main content, and footer.

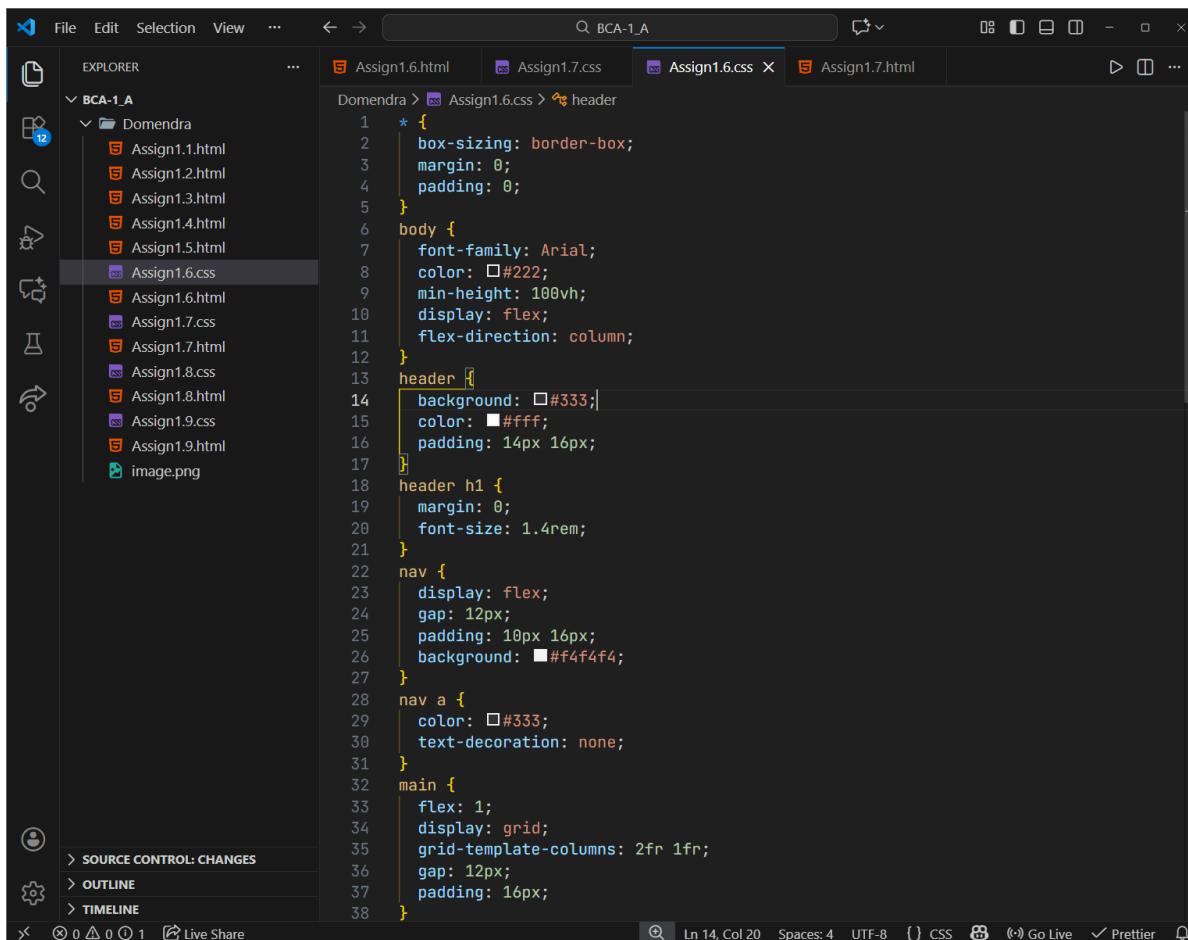
Code:



The screenshot shows a code editor interface with the following details:

- File Explorer:** Shows a folder structure under "BCA-1_A" named "Domendra". Inside "Domendra", there are files: Assign1.1.html, Assign1.2.html, Assign1.3.html, Assign1.4.html, Assign1.5.html, Assign1.6.css, Assign1.6.html, Assign1.7.css, Assign1.7.html, Assign1.8.css, Assign1.8.html, Assign1.9.css, and Assign1.9.html. The file "Assign1.6.html" is currently selected.
- Code Editor:** Displays the content of "Assign1.6.html".

```
<!DOCTYPE html>
<html lang="en">
<head>
    <title>Assign1.6</title>
    <link rel="stylesheet" href="Assign1.6.css">
</head>
<body>
    <header><h1>Site</h1></header>
    <nav><a href="#">Home</a> <a href="#">About</a> <a href="#">Contact</a></nav>
    <main>
        <article><h2>Main</h2><p>Primary content.</p></article>
        <aside><h3>Sidebar</h3><p>Notes</p></aside>
    </main>
    <footer>© 2025</footer>
</body>
</html>
```
- Status Bar:** Shows the current line (Ln 17, Col 8), spaces (Spaces: 2), encoding (UTF-8), and file type (HTML). It also includes "Go Live" and "Prettier" buttons.



The screenshot shows a code editor interface with the following details:

- File Explorer:** Shows a folder structure under "BCA-1_A" named "Domendra". Inside "Domendra", there are files: Assign1.1.html, Assign1.2.html, Assign1.3.html, Assign1.4.html, Assign1.5.html, Assign1.6.css, Assign1.6.html, Assign1.7.css, Assign1.7.html, Assign1.8.css, Assign1.8.html, Assign1.9.css, and Assign1.9.html. The file "Assign1.6.css" is currently selected.
- Code Editor:** Displays the content of "Assign1.6.css".

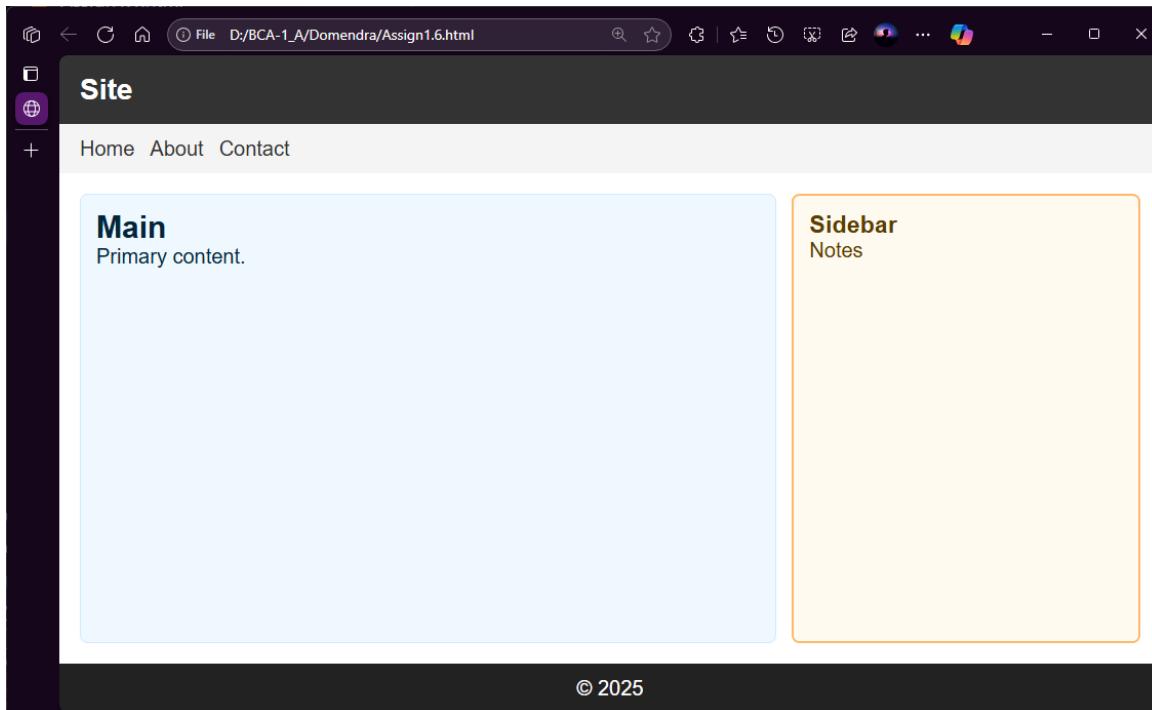
```
* {
    box-sizing: border-box;
}
body {
    font-family: Arial;
    color: #222;
    min-height: 100vh;
    display: flex;
    flex-direction: column;
}
header {
    background: #333;
    color: #fff;
    padding: 14px 16px;
}
header h1 {
    margin: 0;
    font-size: 1.4rem;
}
nav {
    display: flex;
    gap: 12px;
    padding: 10px 16px;
    background: #f4f4f4;
}
nav a {
    color: #333;
    text-decoration: none;
}
main {
    flex: 1;
    display: grid;
    grid-template-columns: 2fr 1fr;
    gap: 12px;
    padding: 16px;
}
```
- Status Bar:** Shows the current line (Ln 14, Col 20), spaces (Spaces: 4), encoding (UTF-8), and file type (CSS). It also includes "Go Live" and "Prettier" buttons.

The screenshot shows a code editor interface with a dark theme. In the top bar, there are tabs for "Assign1.6.html", "Assign1.7.css", "Assign1.6.css X", and "Assign1.7.html". The "Assign1.6.css X" tab is currently active, displaying the following CSS code:

```
Domendra > Assign1.6.css > header
30
31   }
32   main {
33     flex: 1;
34     display: grid;
35     grid-template-columns: 2fr 1fr;
36     gap: 12px;
37     padding: 16px;
38   }
39   article {
40     background: #f0f8ff;
41     padding: 12px;
42     border-radius: 6px;
43     border: 1px solid #cfe9ff;
44     color: #02263a;
45   }
46   aside {
47     background: #ffffaf0;
48     padding: 12px;
49     border-radius: 6px;
50     border: 2px solid #ffb86b;
51     color: #5a3b00;
52   }
53   footer {
54     background: #222;
55     color: #fff;
56     text-align: center;
57     padding: 10px;
58   }
59   @media (max-width: 700px) {
60     main {
61       grid-template-columns: 1fr;
62     }
63     nav {
64       flex-direction: column;
65       padding: 8px 16px;
66     }
67 }
```

The left sidebar shows a file tree under "BCA-1_A" with files like "Assign1.1.html", "Assign1.2.html", etc., and a "Domendra" folder containing "Assign1.6.css". The bottom status bar shows "Ln 14, Col 20" and "Spaces: 4".

Output:

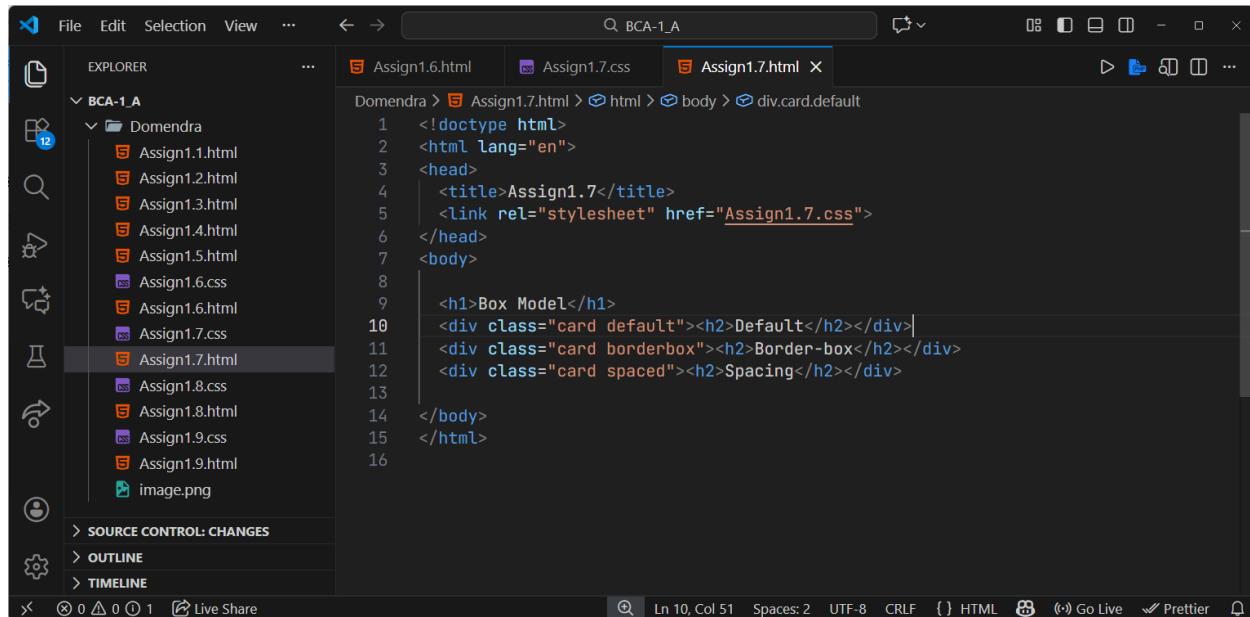


2.2. CSS Box Model & Spacing

Design a card layout using div elements to demonstrate the box model.

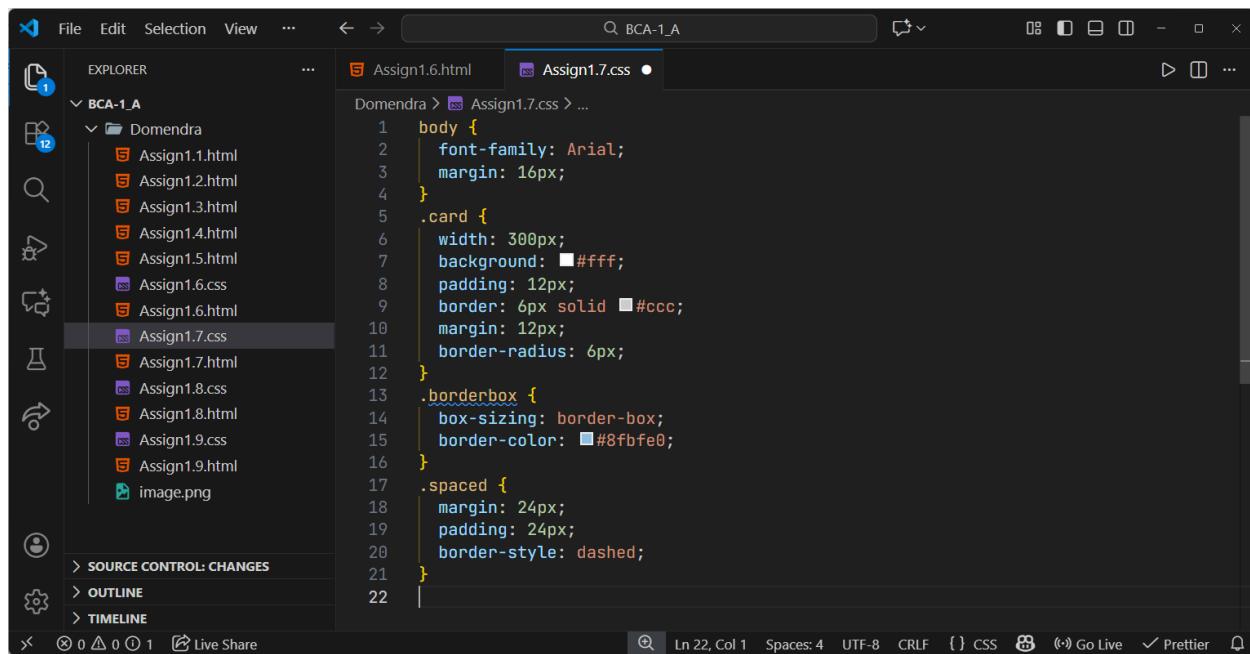
Code:

HTML



```
<!DOCTYPE html>
<html lang="en">
<head>
    <title>Assign1.7</title>
    <link rel="stylesheet" href="Assign1.7.css">
</head>
<body>
    <h1>Box Model</h1>
    <div class="card default"><h2>Default</h2></div>
    <div class="card borderbox"><h2>Border-box</h2></div>
    <div class="card spaced"><h2>Spacing</h2></div>
</body>
</html>
```

CSS



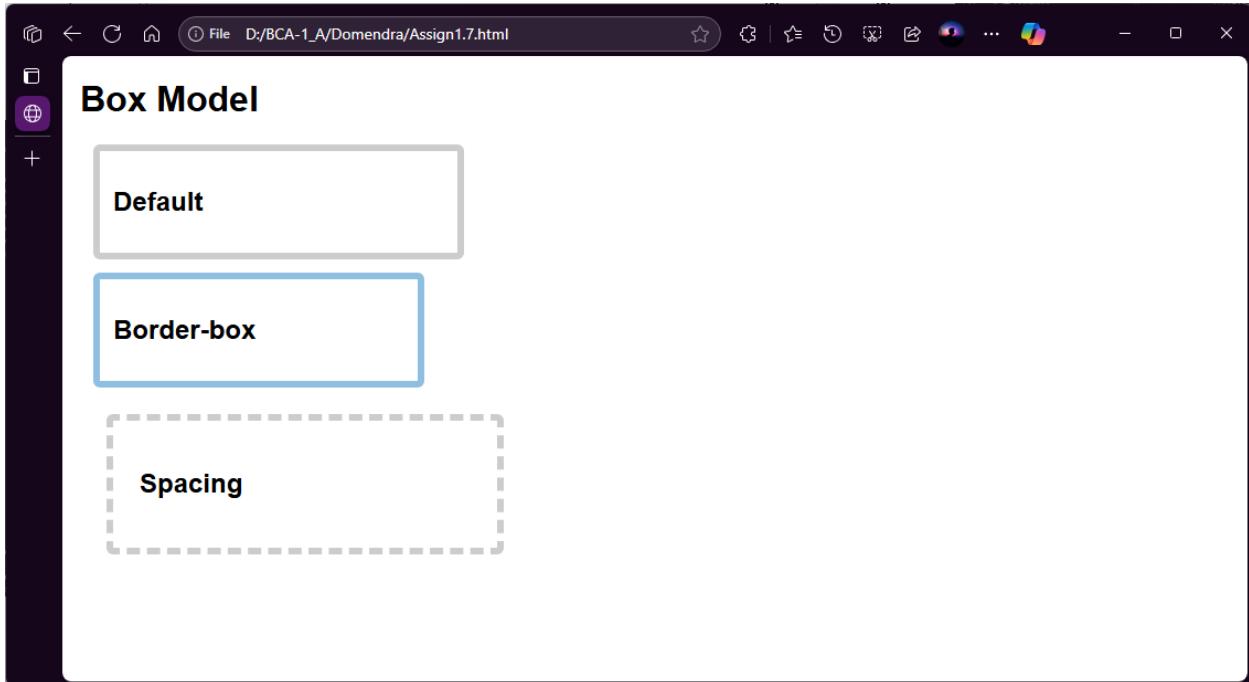
```
body {
    font-family: Arial;
    margin: 16px;
}

.card {
    width: 300px;
    background: #fff;
    padding: 12px;
    border: 6px solid #ccc;
    margin: 12px;
    border-radius: 6px;
}

.borderbox {
    box-sizing: border-box;
    border-color: #8fbfe0;
}

.spaced {
    margin: 24px;
    padding: 24px;
    border-style: dashed;
}
```

Output:



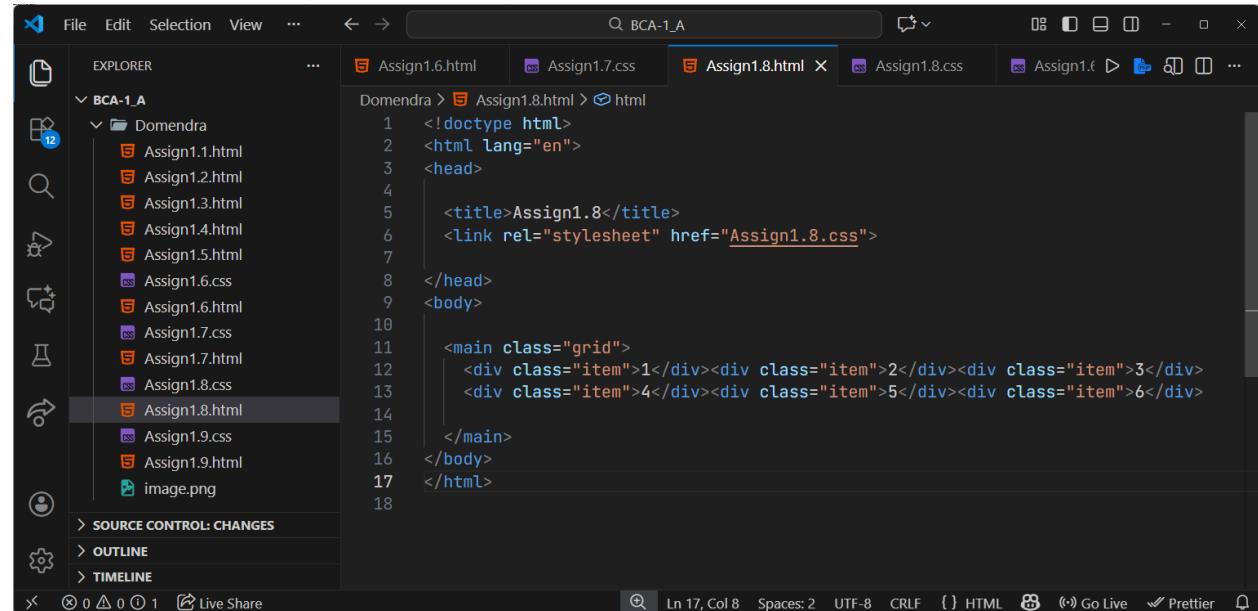
2.3. Create a webpage that adjusts its layout based on screen size using CSS media queries.

Requirements:

- On large screens: Display three columns.
- On tablets: Display two columns.
- On mobile: Display one column.
- Add different background colors for each view.

Code:

HTML



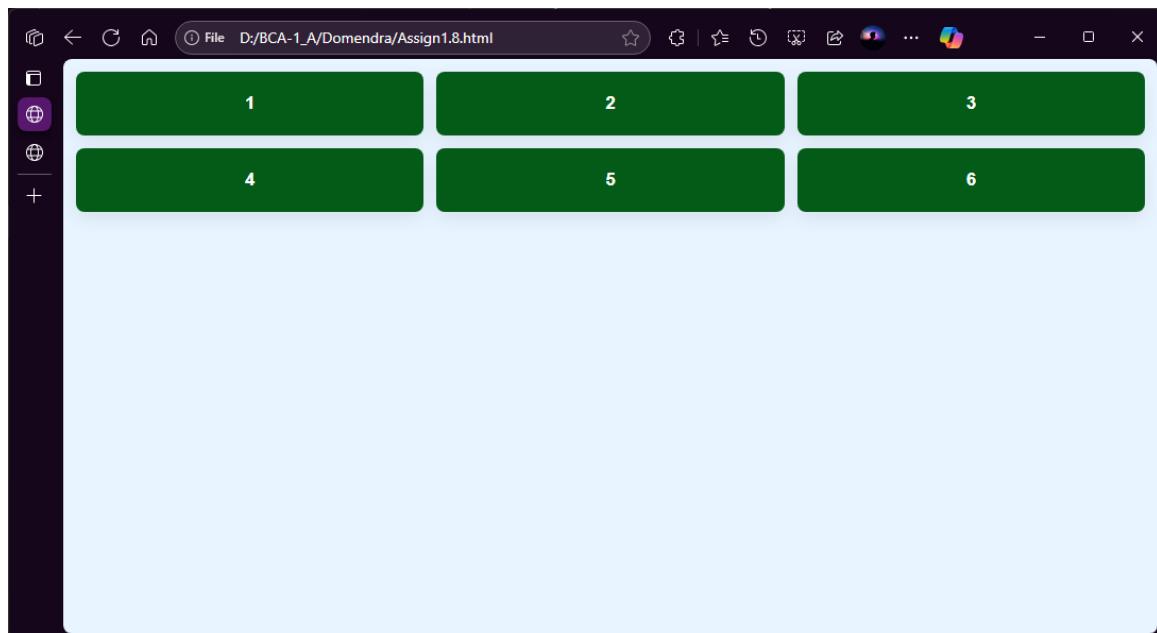
The screenshot shows a code editor interface with the following details:

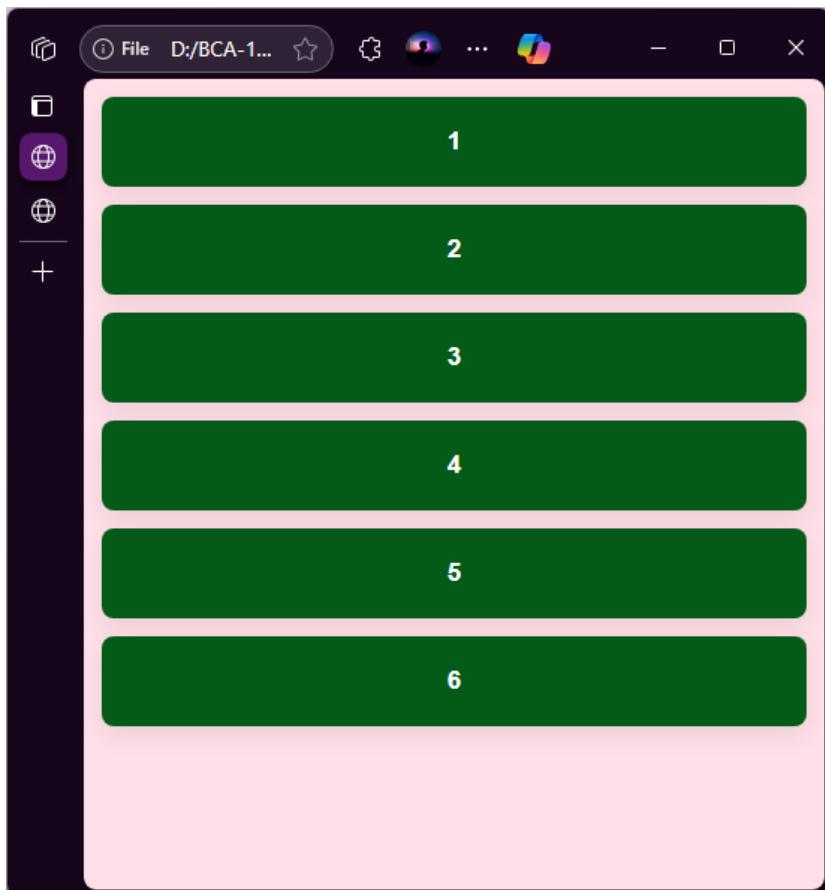
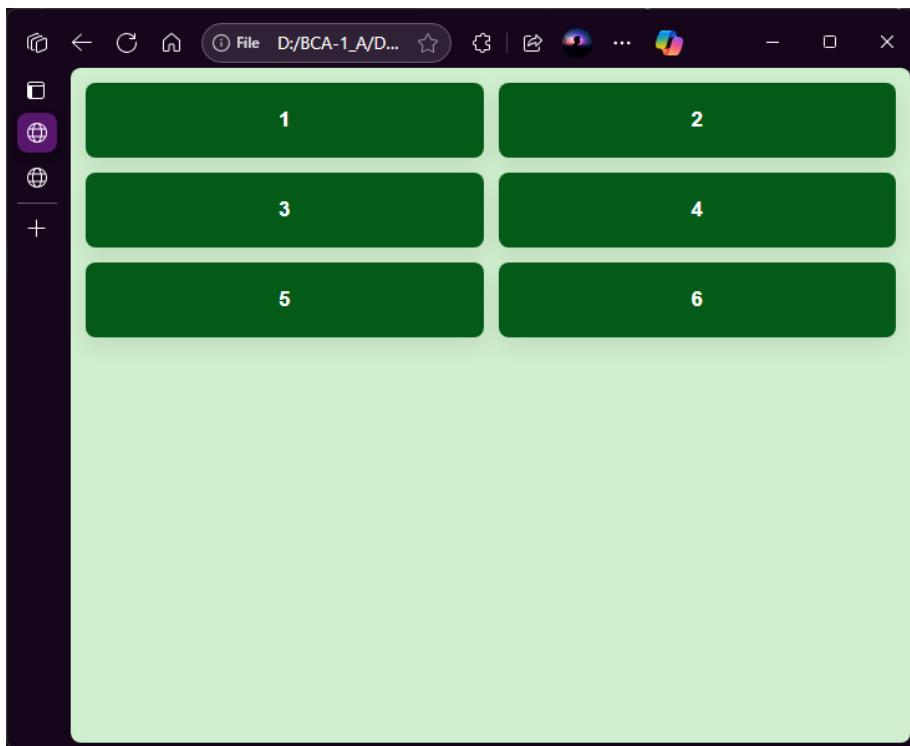
- File Explorer (Left):** Shows a project structure under "BCA-1_A". The "Domendra" folder contains files: Assign1.1.html, Assign1.2.html, Assign1.3.html, Assign1.4.html, Assign1.5.html, Assign1.6.css, Assign1.6.html, Assign1.7.css, Assign1.7.html, Assign1.8.css, Assign1.8.html, Assign1.9.css, Assign1.9.html, and image.png. The "Assign1.8.html" file is currently selected.
- Code Editor (Right):** Displays the content of the "Assign1.8.html" file. The code uses a grid layout with six items labeled 1 through 6.

```
<!DOCTYPE html>
<html lang="en">
<head>
<title>Assign1.8</title>
<link rel="stylesheet" href="Assign1.8.css">
</head>
<body>
<main class="grid">
<div class="item">1</div><div class="item">2</div><div class="item">3</div>
<div class="item">4</div><div class="item">5</div><div class="item">6</div>
</main>
</body>
</html>
```
- Bottom Status Bar:** Shows the line number (Ln 17, Col 8), spaces (Spaces: 2), encoding (UTF-8 CRLF), file type (HTML), and other status indicators.

```
1 body {  
2   font-family: Arial;  
3   margin: 0;  
4   padding: 12px;  
5   background: #e8f4ff;  
6   color: #111;  
7 }  
8 .grid {  
9   display: grid;  
10  grid-template-columns: repeat(3, 1fr);  
11  gap: 12px;  
12 }  
13 .item {  
14   padding: 20px;  
15   background: #045a17;  
16   color: #fff;  
17   border-radius: 8px;  
18   text-align: center;  
19   font-weight: 700;  
20   font-size: 1.05rem;  
21   box-shadow: 0 6px 18px rgba(0, 0, 0, 0.08);  
22 }  
23 @media (max-width: 1024px) {  
24   .grid {  
25     grid-template-columns: repeat(2, 1fr);  
26   }  
27   body {  
28     background: #cfeedd;  
29   }  
30 }  
31 @media (max-width: 600px) {  
32   .grid {  
33     grid-template-columns: 1fr;  
34   }  
35   body {  
36     background: #ffdfe8;  
37   }  
38 }
```

Output:





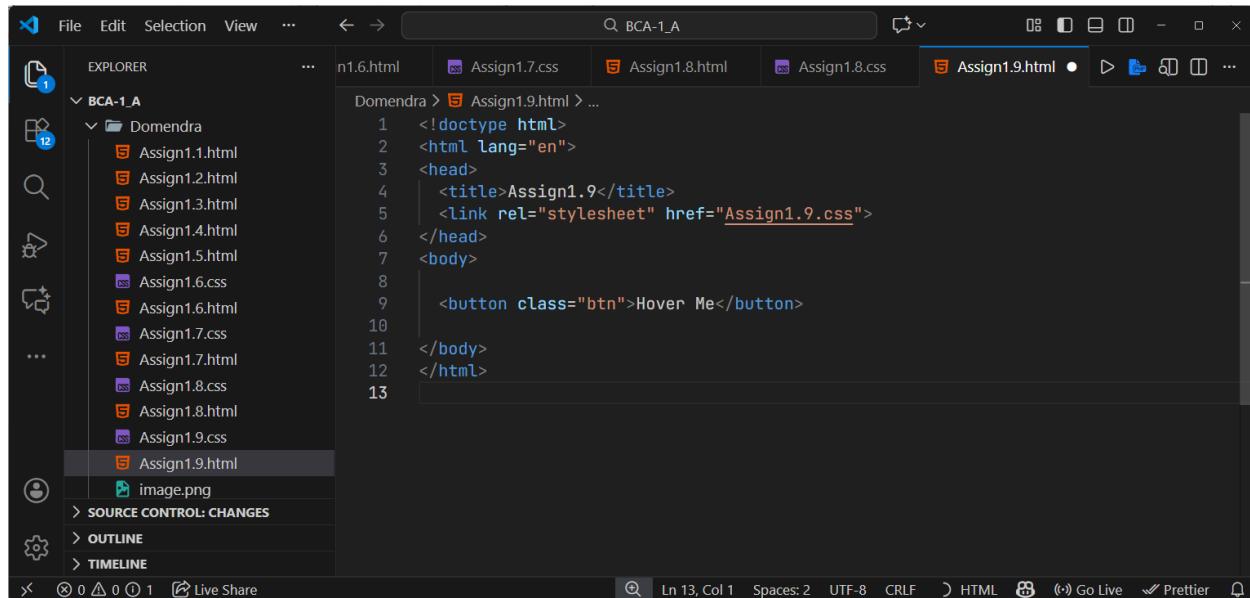
2.4. CSS Animations and Transitions

Create an animated button using CSS.

Requirements: On hover, the button should smoothly change color and increase in size.

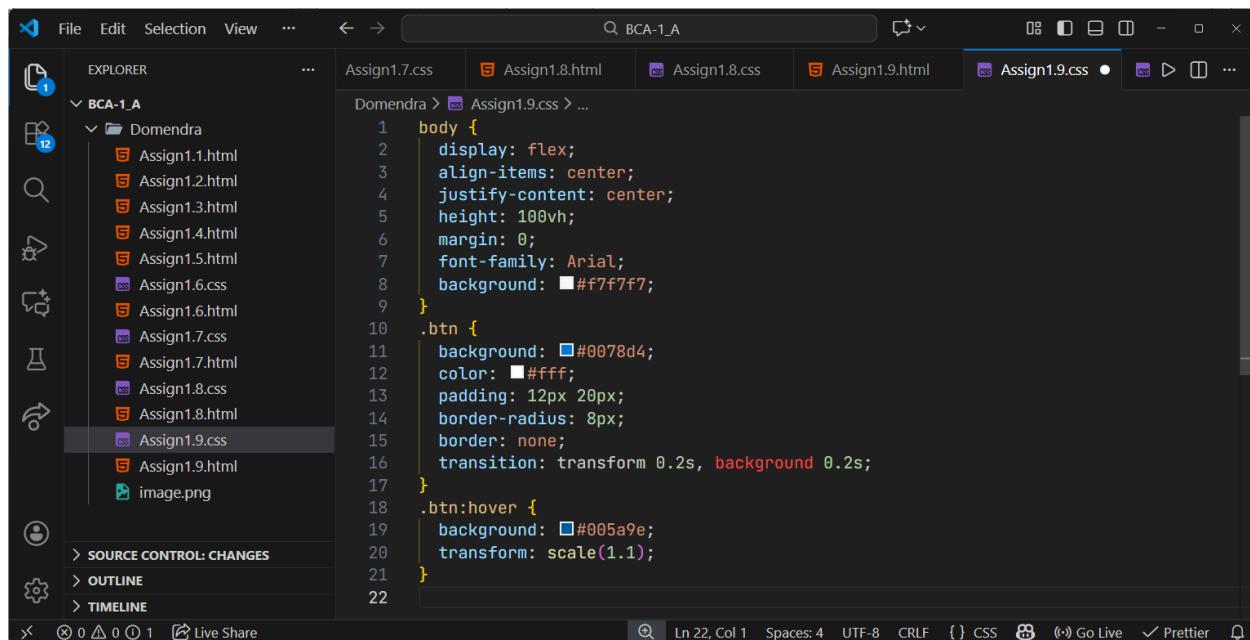
Code:

HTML



```
<!DOCTYPE html>
<html lang="en">
<head>
    <title>Assign1.9</title>
    <link rel="stylesheet" href="Assign1.9.css">
</head>
<body>
    <button class="btn">Hover Me</button>
</body>
</html>
```

CSS



```
body {
    display: flex;
    align-items: center;
    justify-content: center;
    height: 100vh;
    margin: 0;
    font-family: Arial;
    background: #f7f7f7;
}

.btn {
    background: #0078d4;
    color: #fff;
    padding: 12px 20px;
    border-radius: 8px;
    border: none;
    transition: transform 0.2s, background 0.2s;
}

.btn:hover {
    background: #005a9e;
    transform: scale(1.1);
}
```

Output:

