

CSS

1. What is CSS?

The language responsible in defining the appearance of HTML elements and their destinations is CSS (Cascading Style Sheets).

It isolates the content and presentation inseparably, HTML composes the framework, and the style (CSS).

Named after the “cascading” effect that styles may originate in different sources and their priority rules cause them to cascade.

2. The CSS and its part in Web Development

Identifies color, fonts, spacing and layout.

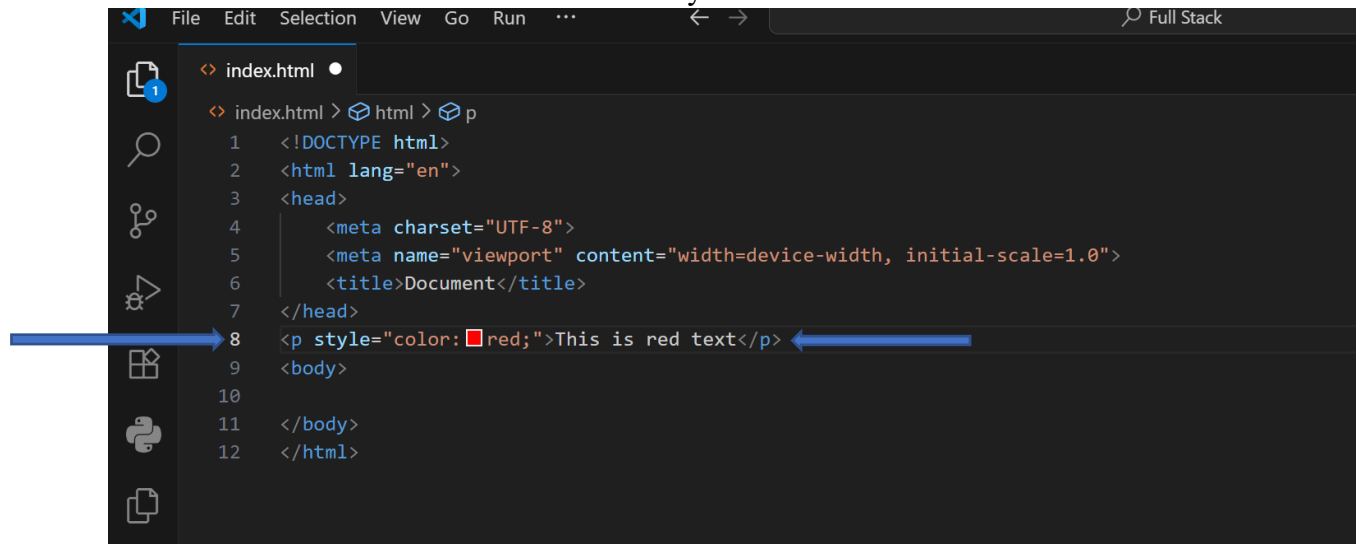
Makes the websites responsive to re-adjust to various screen sizes.

Enhances user experience by making sites appealing and user friendly.

Uses the media queries to guarantee cross-device accessibility.

3. Where to add CSS?

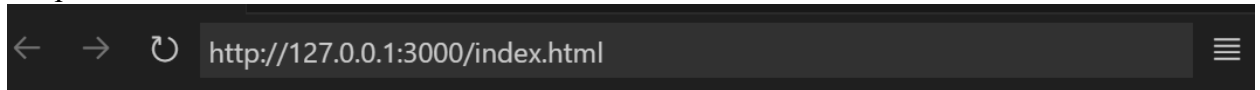
a. Inline CSS- inside the HTML elements style attributes.

A screenshot of a code editor interface, likely VS Code, showing an HTML file named 'index.html'. The editor has a dark theme. The file explorer on the left shows the file 'index.html'. The code is as follows:

```
<!DOCTYPE html>
<html lang="en">
<head>
  <meta charset="UTF-8">
  <meta name="viewport" content="width=device-width, initial-scale=1.0">
  <title>Document</title>
</head>
<p style="color: red;">This is red text</p>
<body>
</body>
</html>
```

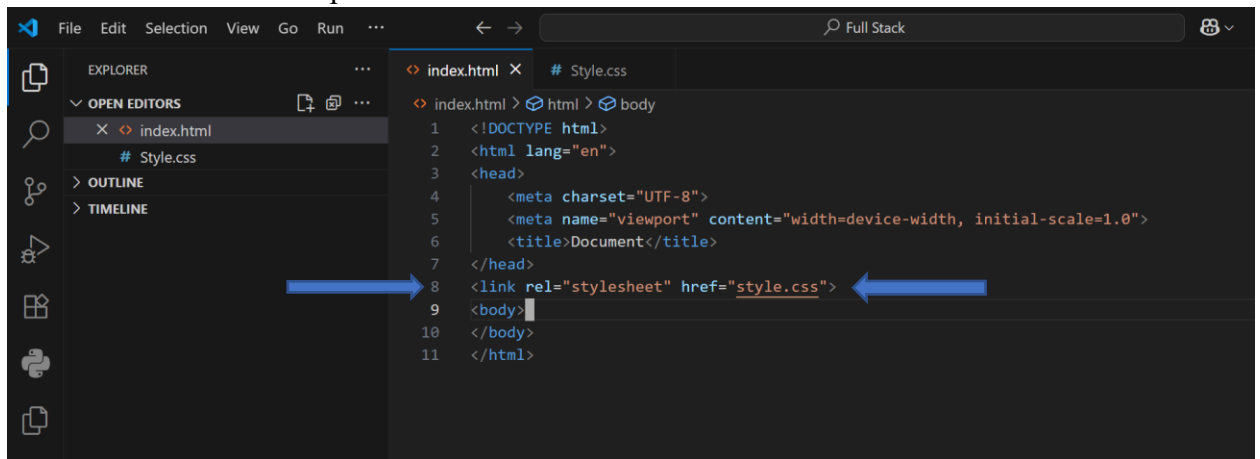
Line 8 is highlighted with a blue arrow pointing to it from the left. Another blue arrow points to the 'style' attribute in the paragraph tag. The text 'color: red;' is visible in the style attribute.

Output:



This is red text

- b. Internal CSS- Inside a `<style>` tag in the `<head>` section.
- c. External CSS- In a separate `.css` file linked via `<link>`



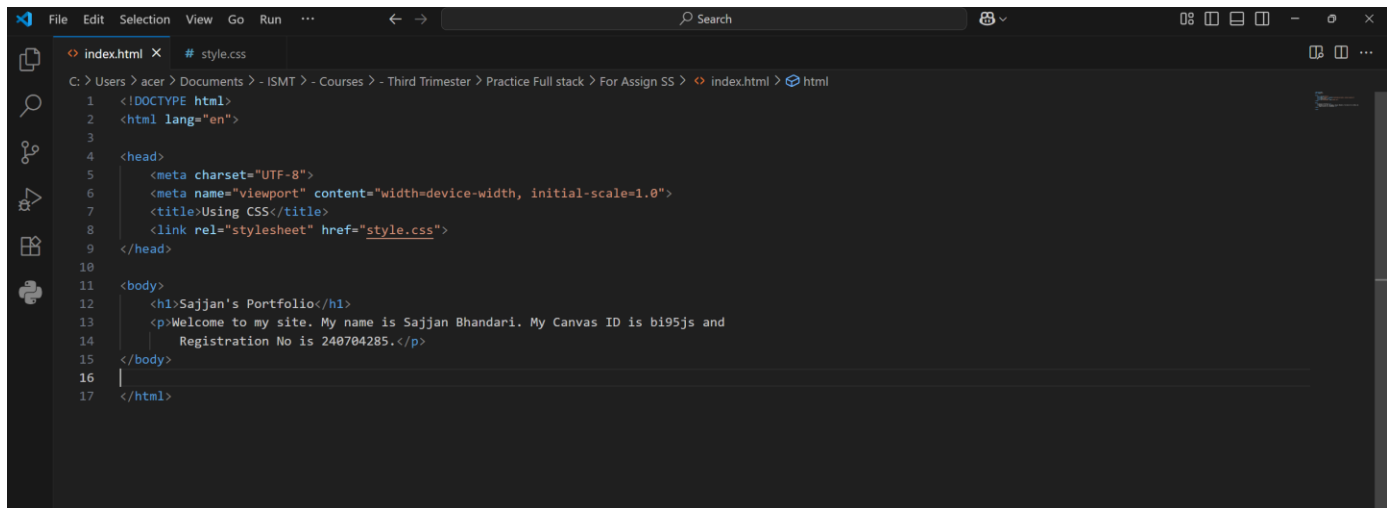
4. Common CSS Properties

- Color & Background: color, background-color, background-image.
- Typography: font-family, font-size, font-weight, line-height.
- Spacing: margin, padding.
- Borders & Shadows: border, border-radius, box-shadow.
- Layout: display, position, flexbox, grid.
- Effects: transition, transform, hover.

5. CSS Selectors

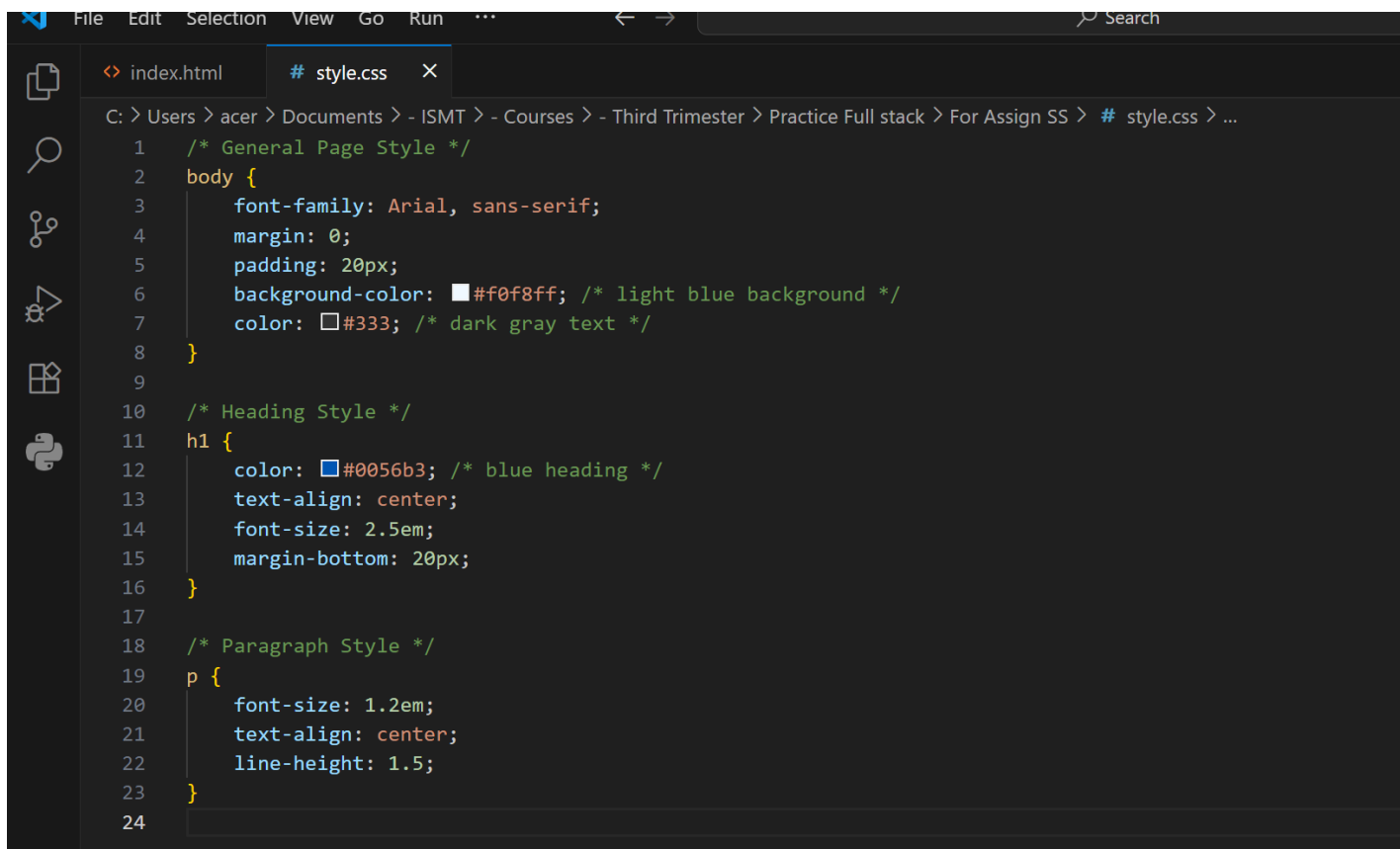
- Element selector: `p {}` — targets all `<p>` tags.
- Class selector: `.highlight {}` — targets elements with `class="highlight"`.
- ID selector: `#main {}` — targets element with `id="main"`.
- Descendant selector: `nav a {}` — targets `<a>` inside `<nav>`.
- Group selector: `h1, h2 {}` — styles both headings.

CSS examples in practice:

A screenshot of the Visual Studio Code editor. The 'index.html' file is open, showing the following HTML code:

```
1 <!DOCTYPE html>
2 <html lang="en">
3
4 <head>
5   <meta charset="UTF-8">
6   <meta name="viewport" content="width=device-width, initial-scale=1.0">
7   <title>Using CSS</title>
8   <link rel="stylesheet" href="style.css">
9 </head>
10
11 <body>
12   <h1>Sajjan's Portfolio</h1>
13   <p>Welcome to my site. My name is Sajjan Bhandari. My Canvas ID is b195js and
14     Registration No is 240704285.</p>
15 </body>
16
17 </html>
```

CSS:

A screenshot of the Visual Studio Code editor with the 'style.css' file open. The CSS code is as follows:

```
1 /* General Page Style */
2 body {
3   font-family: Arial, sans-serif;
4   margin: 0;
5   padding: 20px;
6   background-color: #f0f8ff; /* light blue background */
7   color: #333; /* dark gray text */
8 }
9
10 /* Heading Style */
11 h1 {
12   color: #0056b3; /* blue heading */
13   text-align: center;
14   font-size: 2.5em;
15   margin-bottom: 20px;
16 }
17
18 /* Paragraph Style */
19 p {
20   font-size: 1.2em;
21   text-align: center;
22   line-height: 1.5;
23 }
24
```

Output





- a. Here are more example's using Internal CSS- Inside a `<style>` tag in the `<head>` section.

```
File Edit Selection View Go Run Terminal Help
index.html X
C:\Users\acer> Documents > - ISMT > - Courses > - Third Trimester > Practice Full stack > For Assign SS > index.html > ...
2 <html lang="en">
3 <head>
6 <style>
7   .form-box {
8     width: 480px;      /* fixed width */
9     margin: 50px auto; /* center on screen */
10    padding: 20px;
11    border: 1px solid #ccc;
12    border-radius: 6px;
13    font-family: Arial, sans-serif;
14  }
15  .form-box input {
16    width: 100%;
17    padding: 8px;
18    margin: 8px 0;
19    border: 1px solid #aaa;
20    border-radius: 4px;
21  }
22  .form-box input[type="submit"] {
23    background: #3498db;
24    color: white;
25    border: none;
26    cursor: pointer;
27  }
28  .form-box input[type="submit"]:hover {
29    background: #2ecc71;
30  }
31 </style>
32 </head>
33 <body>
34
35 <form class="form-box">
36   <h3>Student Registration</h3>
37   <input type="text" placeholder="Full Name" required>
38   <input type="email" placeholder="Email" required>
39   <input type="password" placeholder="Password" required>
40   <input type="submit" value="Register">
41 </form>
42
43 </body>
44 </html>
45
OVR Ln 45, Col 1 Spaces: 4 UTF-8 CRLF ( ) HTML Port: 3000
```

Output:

