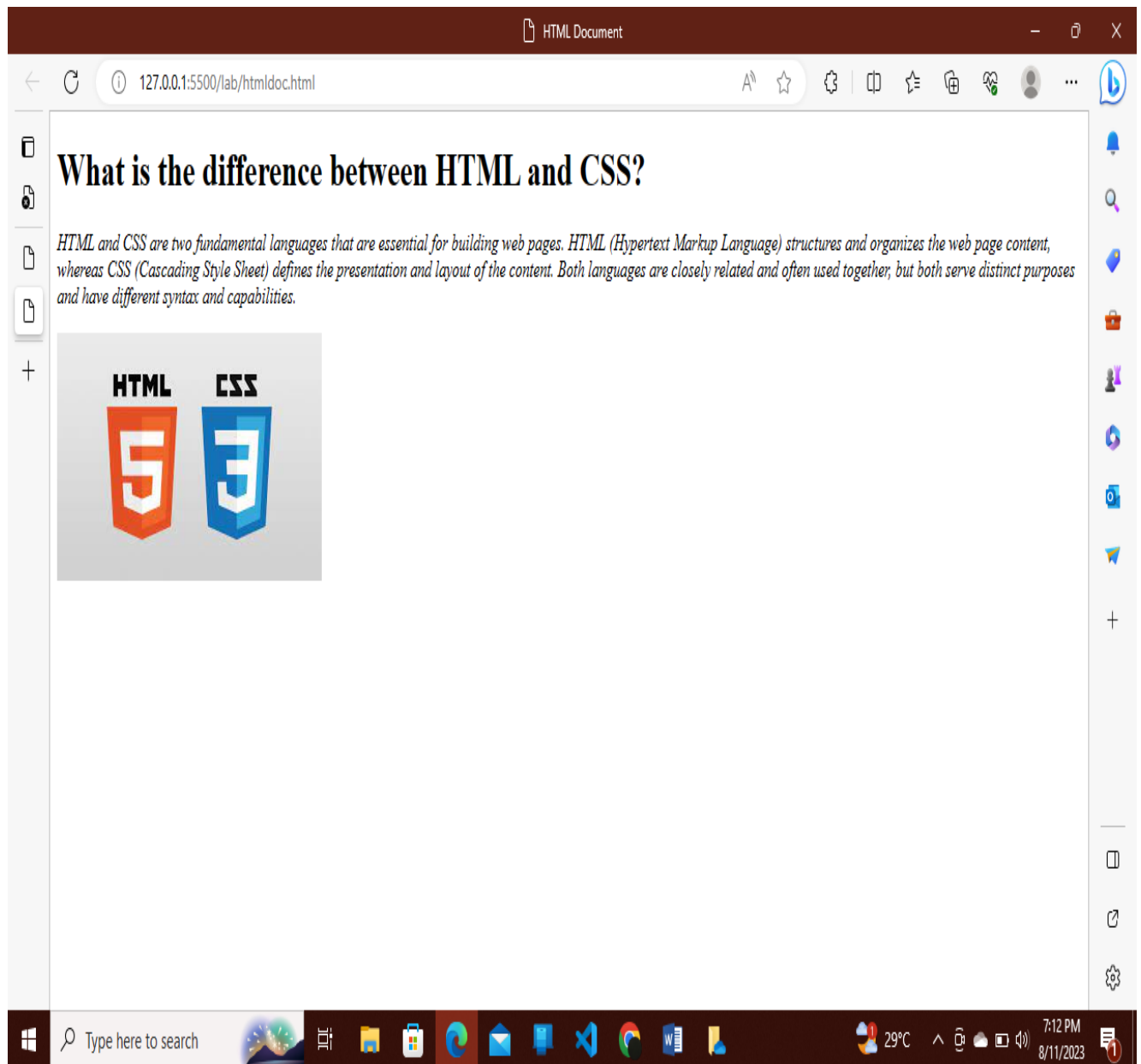1. Create a simple HTML document structure with a heading, a paragraph, and an image.

Text Formatting:

Apply bold and italic formatting to specific words within a paragraph.

```html
<!DOCTYPE html>
<html>
<head>
    <title> HTML Document</title>
</head>
<body>
    <h1>What is the difference between HTML and CSS?</h1>
    <p>
    <i> HTML and CSS are two fundamental languages that are essential
for building web pages. HTML
            (Hypertext Markup Language) structures and organizes the
web page content, whereas  CSS
            (Cascading Style Sheet) defines the presentation and
layout of the content. Both languages are
            closely related and often used together,  but both serve
distinct purposes and have different
            syntax and capabilities.</i>
        </p>
    <img src="htmlcss.jpeg" alt="Placeholder Image">
</body>
</html>
```

Output:

What is the difference between HTML and CSS?

HTML and CSS are two fundamental languages that are essential for building web pages. HTML (Hypertext Markup Language) structures and organizes the web page content, whereas CSS (Cascading Style Sheet) defines the presentation and layout of the content. Both languages are closely related and often used together, but both serve distinct purposes and have different syntax and capabilities.

2. Create an ordered (numbered) and an unordered (bulleted) list.

Hyperlinks: Create a hyperlink that opens in a new tab.

```html
<!DOCTYPE html>
<html>
<head>
    <title>List and Hyperlink</title>
</head>
<body>

<h2>Ordered List:</h2>
<ol>
    <li>Dog</li>
    <li>Cat</li>
    <li>Pig</li>
    <li>Rat</li>
    <li>Rabbit</li>
</ol>

<h2>Unordered List:</h2>
<ul>
    <li>Lion</li>
    <li>Tiger</li>
    <li>Girafee</li>
    <li>Monkey</li>
    <li>Zebra</li>
</ul>

<h2>Hyperlink :</h2>
<p> <a href="https://en.wikipedia.org/wiki/Animal" target="_blank">Animals
Wikepedia</a>.</p>

</body>
</html>
```

3. Insert an image and provide appropriate alt text.

Style the image with CSS to control its size.

```
<!DOCTYPE html>
<html>
<head>
    <title>Image with css</title>
    <style>
        /* CSS to control the size of the image */
        .image-container {
            max-width: 300px; /* Maximum width for the image container */
            margin: 0 auto; /* Center the image container */



        }
        .image-container img {
            width: 100%; /* Make the image fill the container width */
            height: auto; /* Automatically adjust the height while maintaining
aspect ratio */

        }
        .center-heading {
            text-align: center; /* Center the heading */
        }
        .larger-font {
            font-size: 15px;
        }
    </style>
</head>
<body>

    <div class="center-heading">
        <h2>Image of Tajmahal</h2>
<div class="image-container">

    <img src="tajmahal.jpeg" alt="The Tajmahal is the popular monument.">
    </div>

</body>
</html>
```
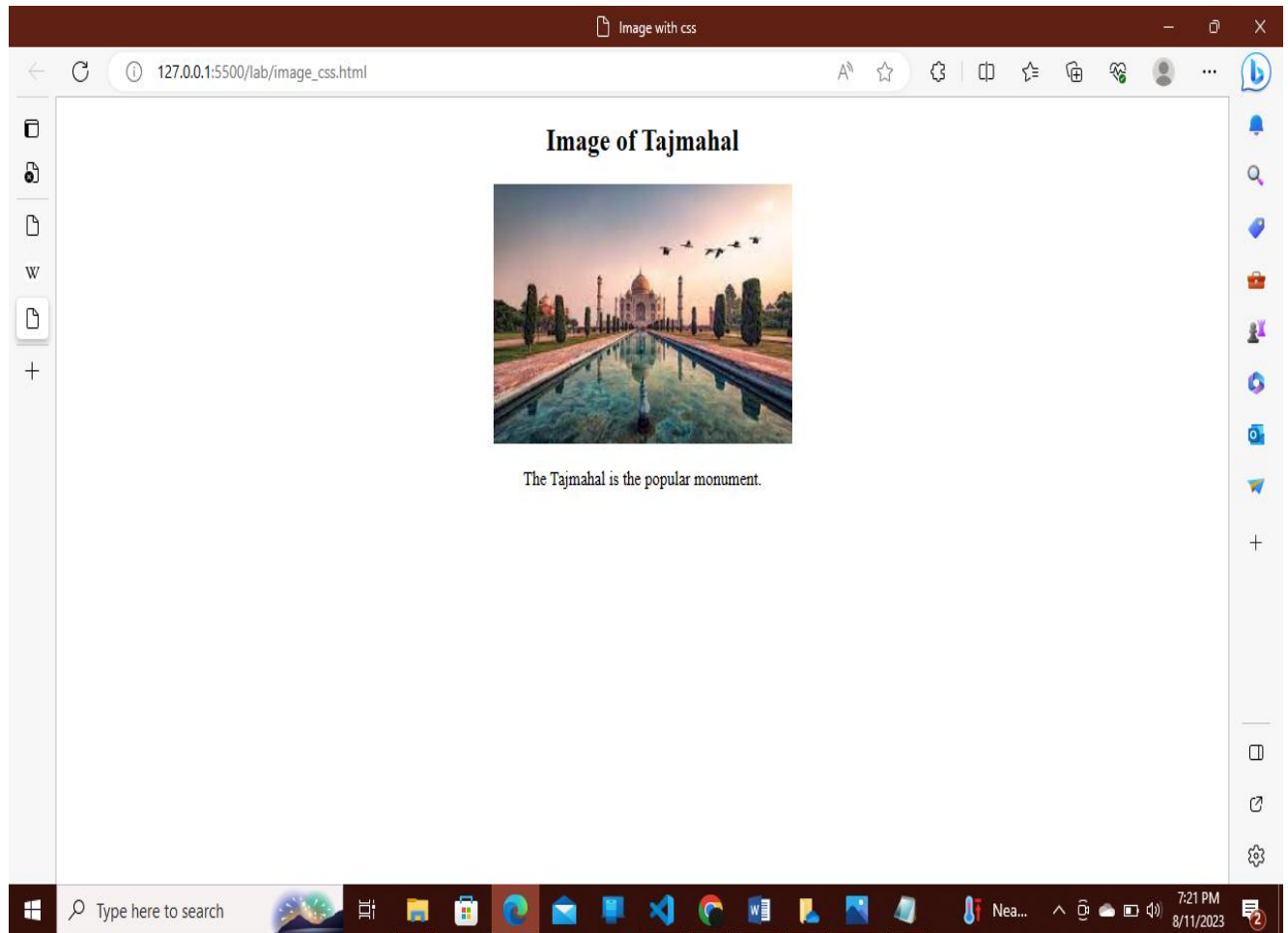
4.Explain the CSS box model and its components (margin, border, padding, content).

Adjust the width, height, margin, padding, and border of an element.

```html
<!DOCTYPE html>
<html>
<head>
    <title>CSS Box Model </title>
    <style>
        .box {
            width: 500px; /* Width of the content area */
            height: 10px; /* Height of the content area */
            padding: 20px; /* Padding around the content area */
            border: 5px solid #4833a5; /* Border around the padding */
            margin: 20px; /* Margin outside the border */
            color: black;
            font-size: 25px;
        }

    </style>
</head>
<body>
    <h1>    Border styles</h1>


<div class="box">
    Aaradhya is a good girl.
</div>
<div class="box">
    Bittu is a good boy.
</div>

</body>
</html>
```
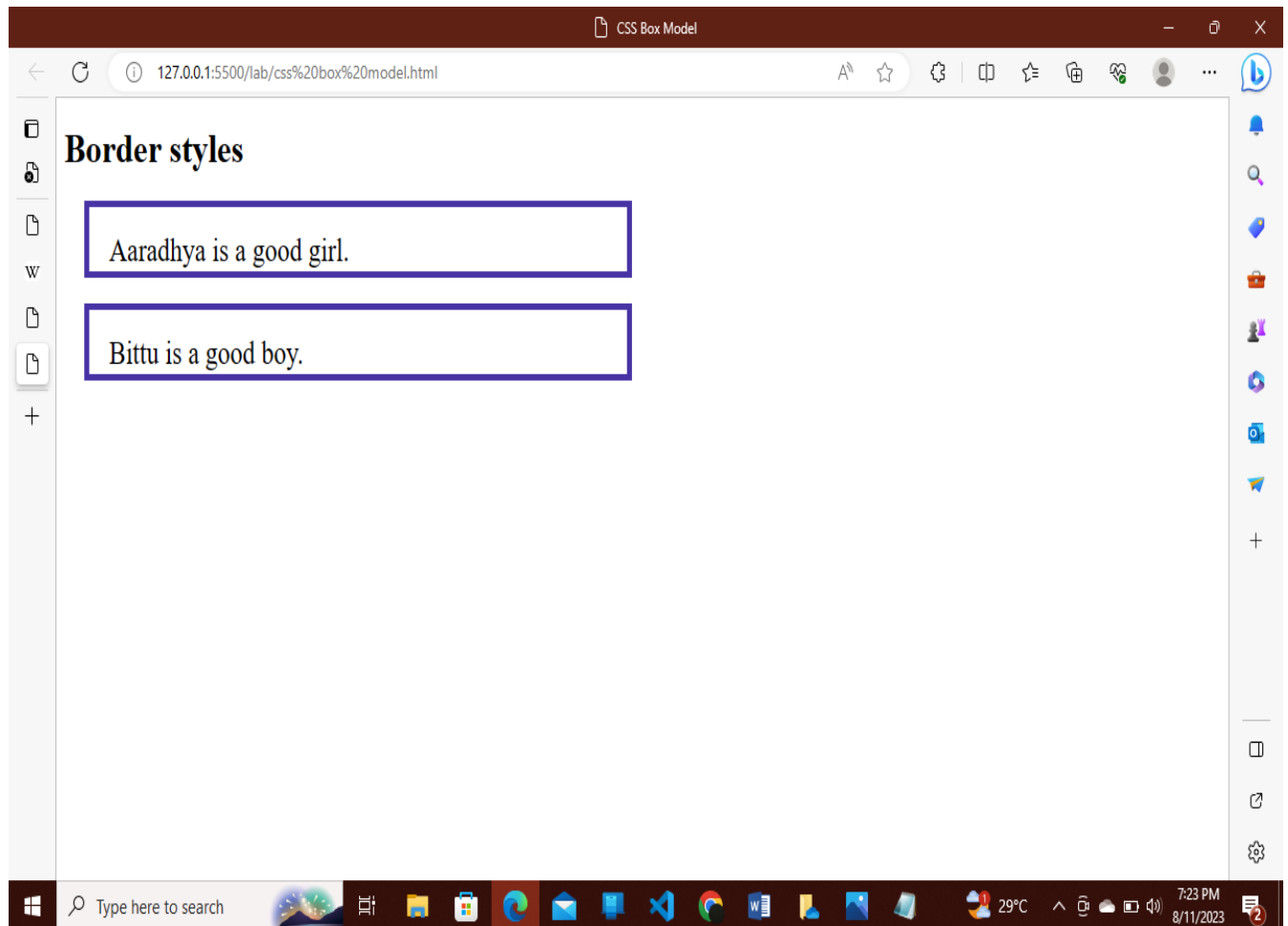
5. Create a simple form with text fields, radio buttons, checkboxes, and a submit button.

Apply CSS styles to improve the form's appearance.

```html
<!DOCTYPE html>
<html>
<head>
    <title>Styled Form </title>
    <style>
        body {
            font-family: Arial, sans-serif;
            background-color: #f2f2f2;
            margin: 0;
            padding: 0;
            display: flex;
            justify-content: center;
            align-items: center;
            height: 100vh;
        }

        .form-container {
            background-color: #ffffff;
            padding: 30px;
            border-radius: 8px;
            box-shadow: 0 2px 6px rgba(0, 0, 0, 0.1);
        }

        .form-container label {
            font-weight: bold;
            display: inline-block;
            margin-bottom: 5px;
        }

        .form-container input[type="text"],
        .form-container input[type="email"],
        .form-container input[type="radio"],
        .form-container input[type="checkbox"],
```

```css
        .form-container input[type="tel"] {
            margin-bottom: 10px;
            padding: 8px;
            border: 1px solid #000;
            border-radius: 4px;
            font-size: 14px;
        }

        .form-container input[type="radio"],
        .form-container input[type="checkbox"] {
            margin-right: 5px;
        }

        .form-container button[type="submit"] {
            background-color: #000;
            color: white;
            padding: 10px 20px;
            border: none;
            border-radius: 4px;
            cursor: pointer;
            font-size: 14px;
        }

        .form-container button[type="submit"]:hover {
            background-color: #111;
        }

        .form-row {
            display: flex;
            align-items: center;
            margin-bottom: 10px;
        }

        .form-row label {
            margin-right: 10px;
        }

        .form-row input[type="radio"] {
            margin-right: 5px;
        }
    </style>
</head>
<body>

<div class="form-container">
```

```html
    <form>
        <div class="form-row">
            <label for="name">Name:</label>
            <input type="text" id="name" name="name" required>
        </div>



    <div class="form-row">
            <label>Gender:</label>
            <input type="radio" id="male" name="gender" value="male">
            <label for="male">Male</label>
            <input type="radio" id="female" name="gender" value="female">
            <label for="female">Female</label>
        </div>

        <div class="form-row">
            <label for="email">Email id:</label>
            <input type="email" id="email" name="email" required>
        </div>

        <div class="form-row">
            <label>Mobile No :</label>
            <input type="tel" id="mobile" name="mobile" required pattern="[0-
9]{10}" placeholder="e.g., 9876543210">
        </div>

        <button type="submit">Submit</button>
    </form>
</div>

</body>
</html>
```
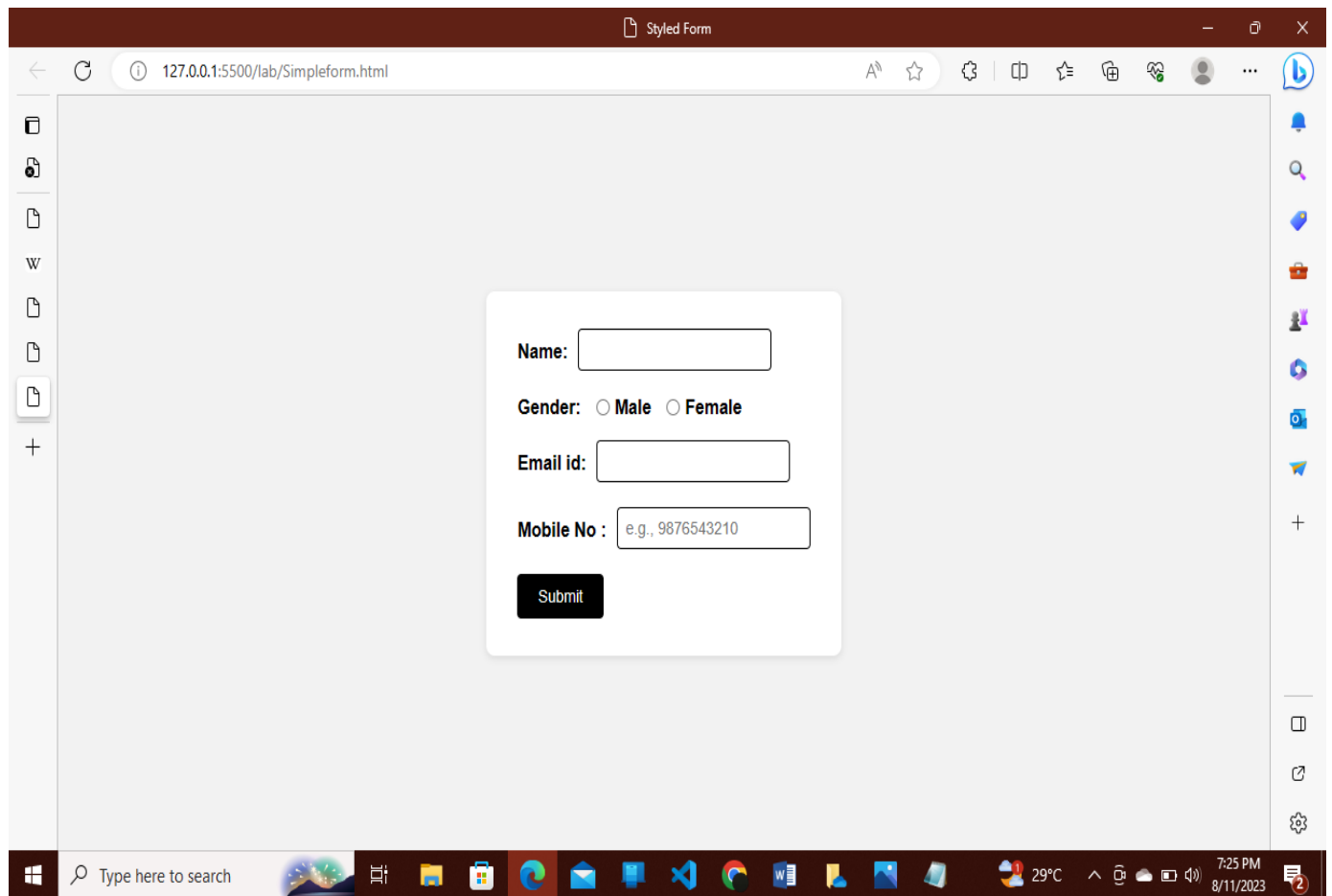
6. How do you link an external CSS stylesheet to an HTML document?

```html
<!DOCTYPE html>
<html>
<head>
    <title>CSS LINK</title>
    <link  rel="html css"
type="text/css"https://1drv.ms/u/s!AmRJwCy2BZLgsEWfQojSDrXE653S?e=Y5dpTA>


</head>
<body>
    <!-- Your HTML content goes here -->
</body>
</html>
```

OUTPUT:
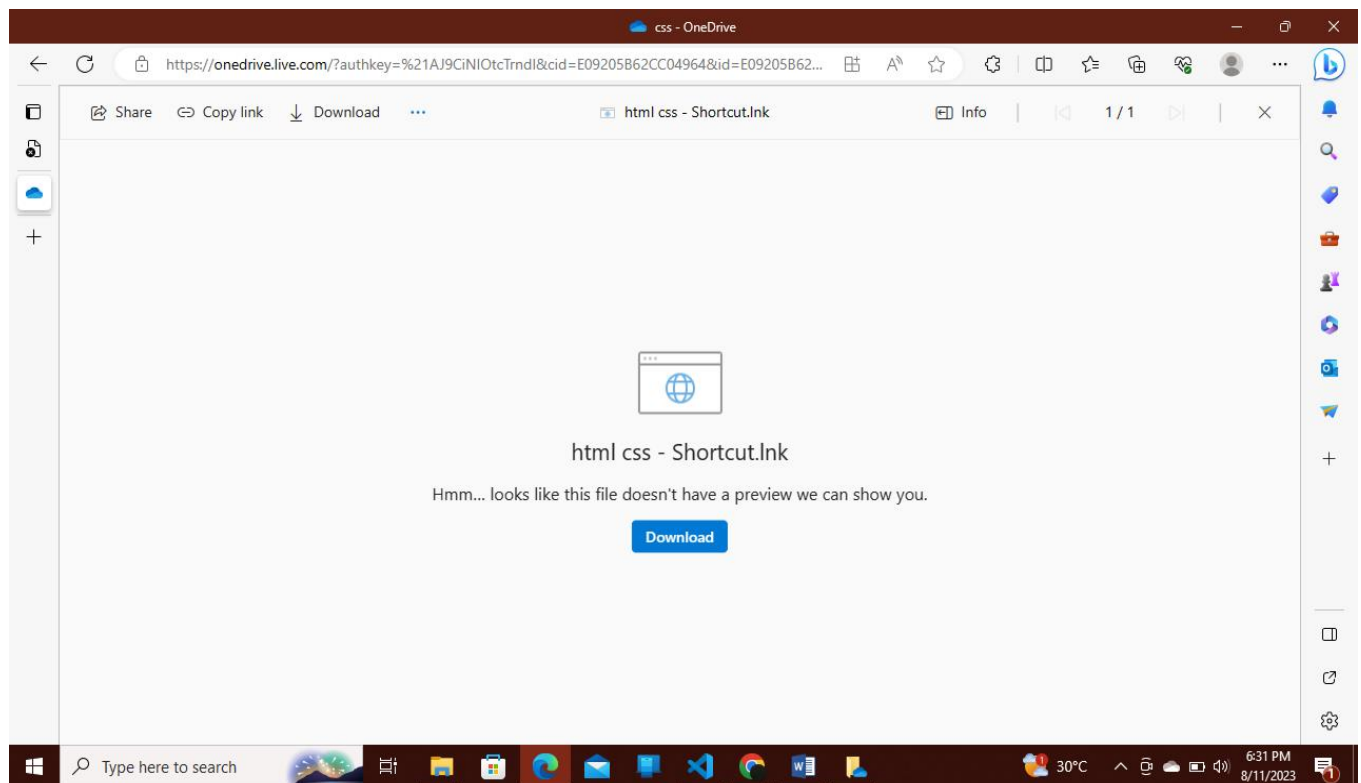
7. What is the purpose of the style attribute in HTML tags?

```html
<!DOCTYPE html>
<html>
<head>
    <title> Style Attribute</title>
</head>

<body>
    <h1 style="color:blue;text-align:center">Style Attribute</h1>
    <p style="color:green;font-size : 25px;">The style attribute specifies an
inline style for an element.</p>
    <p1 style="color: brown;font-size: 25px;">The style attribute will override
any style set globally.</p>
</body>
</html>
```

OUTPUT: