Exp no: 01	**INTRODUCTION TO HTML AND CSS**
Date:	

Aim:

a. To create a web page that embeds an image map (such as a campus or country map) and uses:

- Hotspots (clickable regions on the map),

- Frames to display linked content,

- Hyperlinks for navigation.

b. To create a single web page that demonstrates the use of all three types of CSS:
- Inline CSS
- Internal (Embedded) CSS
- External CSS

Algorithm:

a. To create a web page that embeds an image map (such as a campus or country map)
- Start the HTML document with the <html>, <head>, and <body> tags.
- Create frames using the <frameset> and <frame> tags (or use <iframe> if frameset is deprecated).
- Insert a map image using <img> with the usemap attribute.
- Define hotspots on the image using the <map> and <area> tags.
- Use shapes like rect, circle, or poly.
- Assign coordinates and link each area to different pages or targets.
- Link the hotspots to pages that will open inside a specific frame using the target attribute.
- Add navigation hyperlinks as needed to demonstrate page linking.
- Ensure proper naming of frames using name attributes.
- Save the HTML files and open the main HTML file in a browser.
- Test all hotspots, links, and frames for correct navigation and display.
- End.

b. To create a single web page that demonstrates the use of all three types of CSS:

- Start the HTML document using <html>, <head>, and <body>.

- Create content like headings, paragraphs, and divs.

- Apply:

- Inline CSS: Use style attribute directly within an HTML tag.

- Internal CSS: Add a <style> block inside the <head> section.

- External CSS: Create a separate .css file and link it using the <link> tag in the <head>.

- Apply different styles using each CSS method to highlight their differences.

- Save the HTML and CSS files.

- Open the HTML page in a browser to view the result.

- End.

HTML CODE:

a. Embedded.html:

```html
<!DOCTYPE html>
<html lang="en">
<head>
    <meta charset="UTF-8">
    <meta name="viewport" content="width=device-width, initial-scale=1.0">
    <title>CSS Styling Example</title>

    <!-- Google Font -->
    <link
href="https://fonts.googleapis.com/css2?family=Poppins:wght@300;400;600&display=swap" rel="stylesheet">

    <style>
        /* General Styles */
        body {
            font-family: 'Poppins', sans-serif;
            background: linear-gradient(to right, #4972af, #398dd1);
            margin: 0;
            padding: 0;
            display: flex;
            flex-direction: column;
            align-items: center;
            justify-content: center;
            height: 100vh;
            text-align: center;
```

```css
        }

        /* Styling for Heading */
        h1 {
            font-size: 2.5rem;
            color: #ffffff;
            text-shadow: 2px 2px 5px rgba(0, 0, 0, 0.3);
            margin-bottom: 20px;
        }

        /* Stylish Paragraph */
        p {
            font-size: 1.2rem;
            padding: 10px;
            background-color: rgba(255, 255, 255, 0.2);
            border-radius: 10px;
            box-shadow: 0px 4px 8px rgba(0, 0, 0, 0.2);
            color: white;
        }

        /* Stylish Box */
        .box {
            background: rgba(255, 255, 255, 0.3);
            padding: 20px;
            border-radius: 15px;
            border: 2px solid rgba(255, 255, 255, 0.6);
            width: 320px;
            text-align: center;
            font-size: 1.2rem;
            color: white;
            box-shadow: 0px 5px 10px rgba(0, 0, 0, 0.3);
            margin-top: 20px;
            transition: transform 0.3s ease-in-out;
        }

        /* Hover Effect */
        .box:hover {
            transform: scale(1.05);
        }
    </style>
</head>
<body>

    <h1>Welcome to CSS Styling</h1>

    <p>This is an inline styled paragraph with an attractive design.</p>

    <div class="box">
```

```
        This box is styled with a modern look.
    </div>

</body>
</html>
```

b. Map.html:

```html
<!DOCTYPE html>
<html lang="en">
<head>
    <meta charset="UTF-8">
    <meta name="viewport" content="width=device-width, initial-scale=1.0">
    <title>Interactive Map with Hotspots</title>

    <!-- External CSS -->
    <link rel="stylesheet" href="styles.css">

    <!-- Font Awesome Icons -->
    <link rel="stylesheet" href="https://cdnjs.cloudflare.com/ajax/libs/font-
awesome/6.0.0/css/all.min.css">
</head>
<body>

    <!-- Header Section -->
    <header>
        <h1>Interactive Map with Hotspots</h1>
    </header>

    <!-- Main Content -->
    <main>
        <!-- Embedded Map Container -->
        <div class="map-container">
            <iframe
src="https://www.google.com/maps/embed?pb=!1m18!1m12!1m3!1d3153.8354345093747!
2d144.9537353153166!3d-
37.816279742021234!2m3!1f0!2f0!3f0!3m2!1i1024!2i768!4f13.1!3m3!1m2!1s0x6ad642a
f0f11fd81%3A0xf577d2d2f2c12b9e!2sFlinders%20Street%20Station!5e0!3m2!1sen!2sau
!4v1625070000000!5m2!1sen!2sau"
                width="100%"
                height="450"
                style="border:0; border-radius: 10px;"
                allowfullscreen=""
                loading="lazy">
        </iframe>

        <!-- Hotspots with Tooltips -->
```

```html
            <div class="hotspot" style="top: 30%; left: 40%;"
onclick="showLocation('location1')">
                <i class="fas fa-map-marker-alt"></i>
                <span class="tooltip">Location 1</span>
            </div>
            <div class="hotspot" style="top: 50%; left: 60%;"
onclick="showLocation('location2')">
                <i class="fas fa-map-marker-alt"></i>
                <span class="tooltip">Location 2</span>
            </div>
        </div>

        <!-- Content Section for Locations -->
        <div class="content-section">
            <div id="location1" class="location-content hidden">
                <h2>Location 1 Details</h2>
                <p>This is the information about Location 1, highlighting its
unique features and attractions.</p>
            </div>
            <div id="location2" class="location-content hidden">
                <h2>Location 2 Details</h2>
                <p>This is the information about Location 2, giving insights
into its history and significance.</p>
            </div>
        </div>
    </main>

    <!-- Footer -->
    <footer>
        <p>&copy; 2025 Interactive Map Project</p>
    </footer>

    <!-- JavaScript for Dynamic Interaction -->
    <script>
        function showLocation(locationId) {
            // Hide all location content sections
            document.querySelectorAll('.location-content').forEach(content =>
{
                content.classList.add('hidden');
            });

            // Show the selected location
            document.getElementById(locationId).classList.remove('hidden');
        }
    </script>

</body>
</html>
```

CSS CODE:

```css
/* General Styles */
body {
    font-family: 'Poppins', sans-serif;
    margin: 0;
    padding: 0;
    background: linear-gradient(to right, #4b79a1, #283e51);
    color: #fff;
    text-align: center;
}

/* Header */
header {
    background: rgba(7, 87, 18, 0.63);
    padding: 15px 0;
    font-size: 1.8rem;
    font-weight: 600;
    box-shadow: 0 4px 8px rgba(74, 110, 175, 0.2);
}

/* Main Content */
main {
    padding: 30px;
}

/* Map Container */
.map-container {
    position: relative;
    width: 90%; /* Adjusted for responsiveness */
    max-width: 700px; /* Keeps it well-sized on larger screens */
    height: 450px;
    margin: 20px auto;
    background: rgba(255, 255, 255, 0.15);
    border-radius: 15px;
    overflow: hidden;
    box-shadow: 0px 8px 20px rgba(70, 82, 151, 0.322);
    transition: transform 0.3s ease-in-out, box-shadow 0.3s ease-in-out;
}

/* Smooth hover effect */
.map-container:hover {
    transform: scale(1.02);
    box-shadow: 0px 10px 25px rgba(0, 0, 0, 0.5);
}

/* Ensuring iframe fills container and gets rounded corners */
.map-container iframe {
```

```css
    width: 100%;
    height: 100%;
    border: none;
    border-radius: 15px;
}

/* Hotspots */
.hotspot {
    position: absolute;
    width: 25px;
    height: 25px;
    background: radial-gradient(circle, red, darkred);
    border-radius: 50%;
    transform: translate(-50%, -50%);
    cursor: pointer;
    transition: transform 0.3s ease-in-out, box-shadow 0.3s ease-in-out;
}

.hotspot:hover {
    transform: scale(1.2);
    box-shadow: 0 0 10px rgba(255, 0, 0, 0.8);
}

/* Hide text but keep accessibility */
.hotspot-link {
    display: block;
    width: 100%;
    height: 100%;
    text-indent: -9999px;
}

/* Content Frames */
.content-frames {
    margin-top: 30px;
}

iframe {
    border: none;
    width: 80%;
    height: 350px;
    border-radius: 10px;
    box-shadow: 0px 5px 15px rgba(0, 0, 0, 0.3);
    transition: transform 0.3s ease-in-out;
}

iframe:hover {
    transform: scale(1.02);
}
```
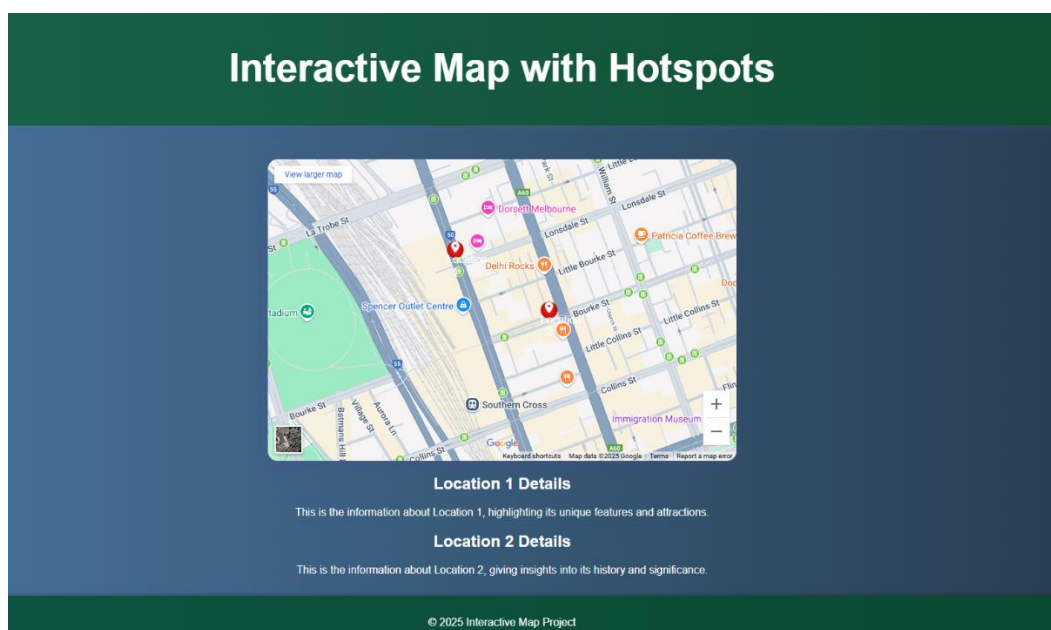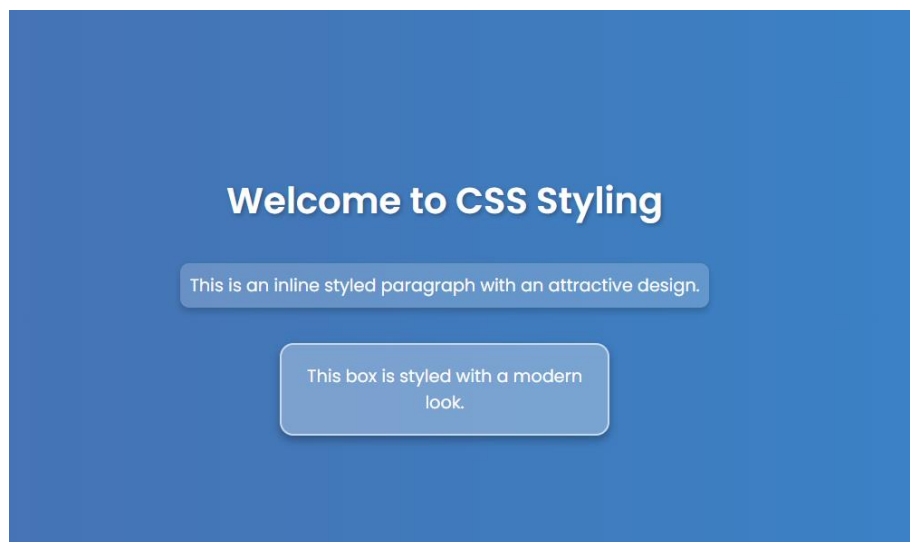
```css
/* Footer */
footer {
    background: rgba(16, 77, 39, 0.8);
    padding: 15px 0;
    position: fixed;
    bottom: 0;
    width: 100%;
    font-size: 1rem;
    font-weight: 300;
    box-shadow: 0 -2px 5px rgba(0, 0, 0, 0.2);
}
```

Output:

Result:

      Thus the required web page has been successfully implemented using HTML and CSS.