

Advanced CSS

Assignment

Assignment Question

1. Explain the purpose of using the `var()` function in css. Also you have created two buttons with id named `primaryBtn` and `secondaryBtn` which should be given background colors using the `var()` function. The color code for `primaryColor` is `#00b7ff` and `secondaryColor` is `#6c757d`.

Answer: The `var()` function in CSS is used to insert the value of a custom property (a variable). Custom properties allow you to define values in one place and reuse them throughout your CSS, making it easier to maintain and update styles consistently. This is particularly useful for maintaining a consistent color scheme, font sizes, or other repetitive values in your stylesheets.

How to Use `var()` Function in CSS:

- 1. Define the Custom Properties:** Custom properties are defined using the `--` prefix within a `:root` selector or any other selector.
- 2. Reference the Custom Properties:** The `var()` function is used to reference these custom properties elsewhere in the CSS.

Code Solution:

```
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>Assignment</title>
7
8 </head>
9
10 <style>
11     :root {
12         --primaryColor: #00b7ff;
13         --secondaryColor: #6c757d;
14     }
15     button {
16         font-size: 25px;
17         border: none;
18         padding: 5px 20px;
19         color: white;
20     }
21     #primaryBtn {
22         background-color: var(--primaryColor);
23     }
24     #secondaryBtn {
25         background-color: var(--secondaryColor);
26     }
27 </style>
28 <body>
29     <button id="primaryBtn">Primary Button</button>
30     <button id="secondaryBtn">Secondary Button</button>
31 </body>
32 </html>
```

Browser

Output:



Explanation

- The `:root` selector is used to define global custom properties (`--primaryColor` and `--secondaryColor`).
- The `var(--primaryColor)` and `var(--secondaryColor)` functions are used to apply these colors to the background of the `#primaryBtn` and `#secondaryBtn` respectively.
- Additional styles like `color`, `border`, `padding`, `cursor`, and `font-size` are added for better visual appearance and usability of the buttons.

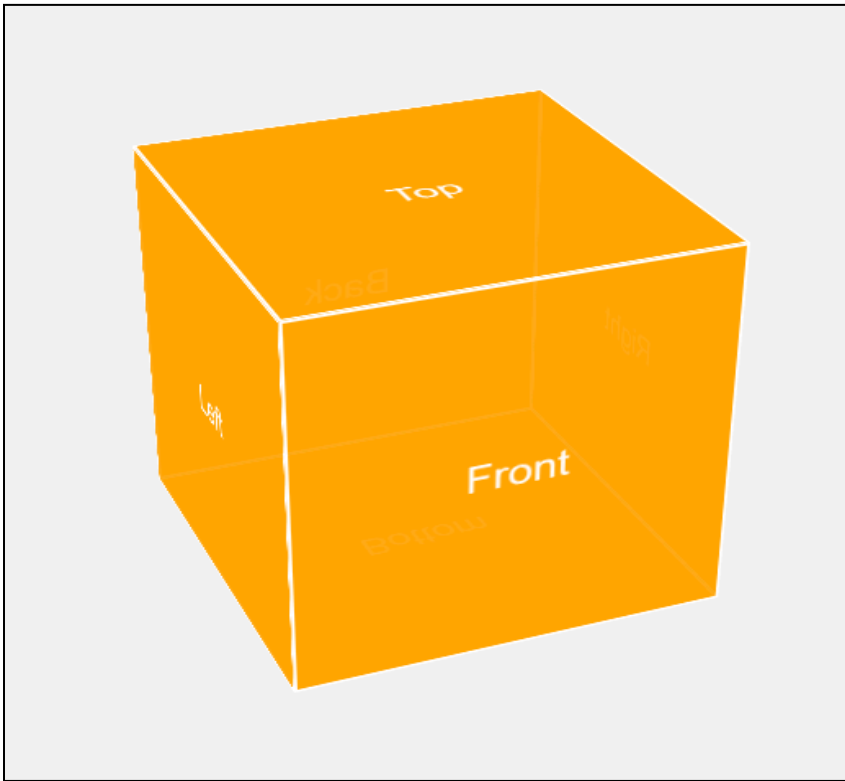
This approach makes it easy to update the colors across your entire project by changing the values in one place, enhancing both maintainability and consistency in your CSS.

2. Create a 3D cube using the transform property of CSS.

Answer:

```
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>3D Cube with CSS</title>
7      <link rel="stylesheet" href="styles.css">
8
9      <style>
10         body {
11             display: flex;
12             justify-content: center;
13             align-items: center;
14             height: 100vh;
15             background-color: #f0f0f0;
16             margin: 0;
17             perspective: 1000px;
18         }
19
20         .cube {
21             position: relative;
22             width: 200px;
23             height: 200px;
24             transform-style: preserve-3d;
25             transform: rotateX(-30deg) rotateY(-45deg);
26             animation: rotate 10s infinite linear;
27         }
28
29         .face {
30             position: absolute;
31             width: 200px;
32             height: 200px;
33             background: rgba(255, 165, 0, 0.9);
34             border: 2px solid #fff;
35             box-sizing: border-box;
36             display: flex;
37             justify-content: center;
38             align-items: center;
39             font-size: 20px;
40             font-family: Arial, sans-serif;
41             color: #fff;
42         }
43
44         .front { transform: translateZ(100px); }
45         .back { transform: rotateY(180deg) translateZ(100px); }
46         .left { transform: rotateY(-90deg) translateZ(100px); }
47         .right { transform: rotateY(90deg) translateZ(100px); }
48         .top { transform: rotateX(90deg) translateZ(100px); }
49         .bottom { transform: rotateX(-90deg) translateZ(100px); }
50
51         @keyframes rotate {
52             from {
53                 transform: rotateX(-30deg) rotateY(-45deg);
54             }
55             to {
56                 transform: rotateX(-30deg) rotateY(315deg);
57             }
58         }
59     </style>
60 </head>
61 <body>
62     <div class="cube">
63         <div class="face front">Front</div>
64         <div class="face back">Back</div>
65         <div class="face left">Left</div>
66         <div class="face right">Right</div>
67         <div class="face top">Top</div>
68         <div class="face bottom">Bottom</div>
69     </div>
70 </body>
71 </html>
72
73
```

Browser Output:



3. Create a simple circular loader which will rotate continuously to look like a loading screen on a website.

Answer:

```
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>Circular Loader</title>
7   <link rel="stylesheet" href="styles.css">
8   <style>
9     body {
10      display: flex;
11      justify-content: center;
12      align-items: center;
13      height: 100vh;
14      background-color: #f0f0f0;
15      margin: 0;
16    }
17
18    .loader {
19      border: 16px solid #f3f3f3; /* Light grey */
20      border-top: 16px solid #3498db; /* Blue */
21      border-radius: 50%;
22      width: 120px;
23      height: 120px;
24      animation: spin 2s linear infinite;
25    }
26
27    @keyframes spin {
28      0% { transform: rotate(0deg); }
29      100% { transform: rotate(360deg); }
30    }
31
32  </style>
33 </head>
34 <body>
35   <div class="loader"></div>
36 </body>
37 </html>
38
```

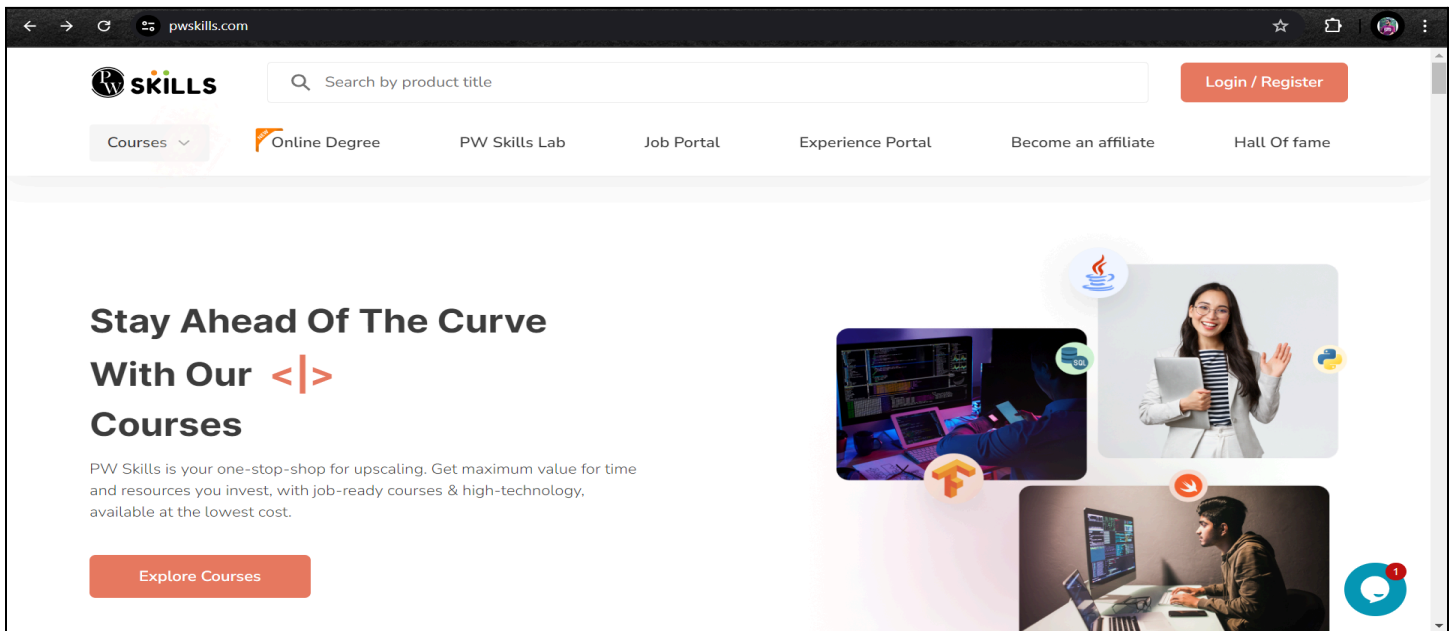
Browser output:



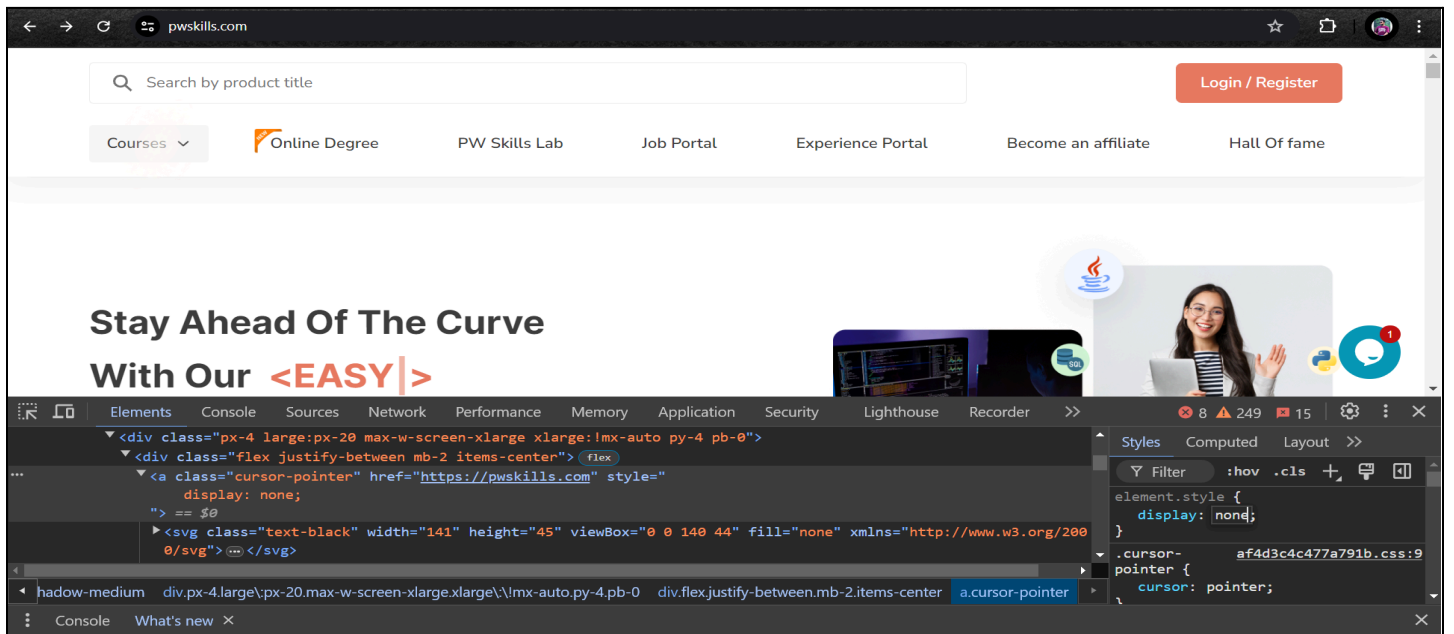
4. You have to visit the PW Skills website (<https://pwwskills.com/>) and have to hide the logo by using the developer tool. This should be done using the css and developer tool only, use of javascript is prohibited.

Answer:

Default Output:



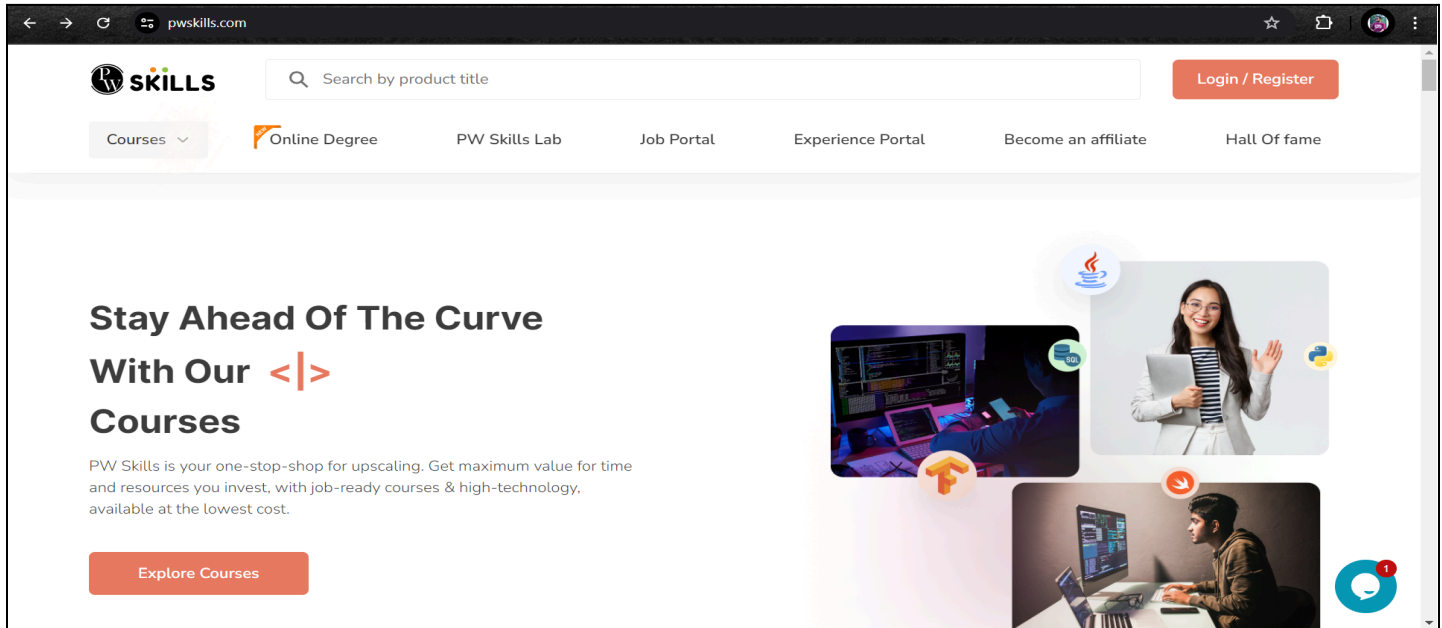
Final Output:



5. You have to visit the PW Skills website (<https://pwskills.com/>) and have to change the content of the 'Login / Register' button to 'Connect with us' using the developer tool. This should be done using the elements of developer tools only, use of javascript is prohibited.

Answer:

Default Output:



Final Output:

