Practical : 5C (Hands on Javascript)

Aim: To Demonstrate the use of Javascript.

Question: Write a javascript program to display the area of circle

Concepts:

Tag / Element	Attribute / Method / Value	Purpose / Usage
<script src="area.js">	—	Links an external JavaScript file containing the logic to calculate area
var r = 10;	—	Declares a variable for the radius of the circle
Math.PI	—	Built-in JavaScript constant for the value of π (pi)
r * r * Math.PI	—	Formula used to calculate the area of the circle
document.write()	—	Dynamically writes the radius and area to the HTML document

Difference between var and let:

var	let
Function-scoped	Block-scoped
Allows re-declaration	Does **not** allow re-declaration

Difference between console.log() and document.write():

console.log()	document.write()
Outputs to the browser console (debug)	Writes directly to the web page
Mainly used for debugging	Used to display content on the document

Code:

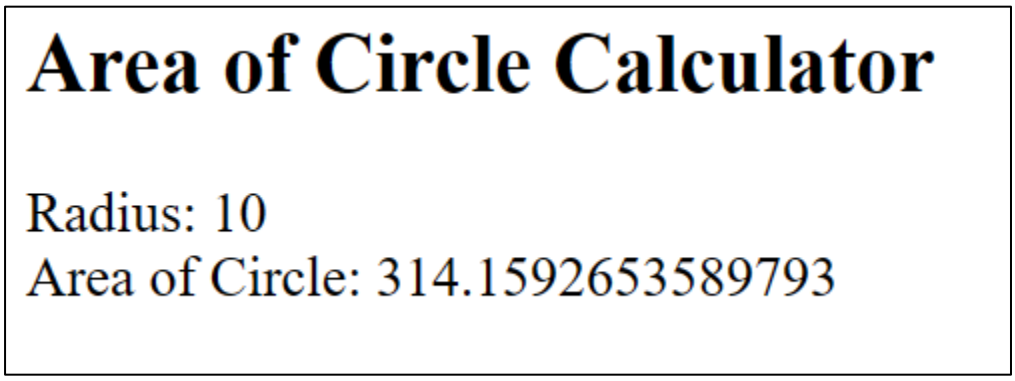
index.html

```
<!DOCTYPE html>
<html lang="en">
  <head>
    <meta charset="UTF-8" />
    <meta name="viewport" content="width=device-width, initial-scale=1.0" />
    <title>Q3</title>
    <script src="area.js" />
  </head>
  <body></body>
</html>
```

myjs.js

```
document.write("<h2>Area of Circle Calculator</h2>");
let r = 10;
var area = r * r * Math.PI;
document.write("Radius: " + r + "<br>");
document.write("Area of Circle: " + area);
```

Output:



Conclusion:

Through this practical, I learnt how to use JavaScript to perform mathematical calculations and display results on a webpage. By applying the formula for the area of a circle using Math.PI and variables, I understood how JavaScript can handle real-time computation and output using external scripts.