

		PUNE INSTITUTE OF COMPUTER TECHNOLOGY, PUNE - 411043	
		DEPARTMENT OF ELECTRONICS AND TELECOMMUNICATION ENGG.	
		ACADEMIC YEAR : 2023-24 SEM: 1	
CLASS : BE VII [S7]		SUBJECT : JavaScript	
EXPT. NO. : 1	Roll No.: 42371	DATE :	
CODE :			
HTML code-			
<pre> <!DOCTYPE html> <html lang="en"> <head> <meta charset="UTF-8"> <meta http-equiv="X-UA-Compatible" content="IE=edge"> <meta name="viewport" content="width=device-width, initial-scale=1.0"> <script src="script.js"></script> <title>Exp 1</title> <style> body { text-align: center; } </style> </head> <body > <h1>Area Calculator</h1> <hr> <h4>Gouri Umate
 42371 </h4> <div> <h3>Area of Triangle (Heron's Formula)</h3> <label>Side 1</label> <input type="number" id="side1"> <label>Side 2</label> <input type="number" id="side2"> <label>Side 3</label> <input type="number" id="side3">

 <button onclick="triangle()">Calculate</button> <p>Area of Triangle = </p> </div> </div> </pre>			



```
<h3>Area of Circle</h3>
  <label>Radius</label>
  <input type="number" id="radius" size="18" onfocus="this.value=''">
  <br><br>

  <button onclick="circle()">Calculate</button>

  <p>Area of Circle = <span id="circle"></span></p>
</div>

<div>
  <h3>Area of Rectangle</h3>
  <label for="Length">Length</label>
  <input type="number" id="length" size="18" onfocus="this.value=''">

  <label for="width">Width</label>
  <input type="number" id="width" size="18" onfocus="this.value=''">
  <br><br>
  <button onclick="rectangle()">Calculate</button>

  <p>Area of Rectangle = <span id="rectangle"></span></p>
</div>
</body>
</html>
```

Javascript code :

```
function triangle()
{
  var s1 = parseFloat(document.getElementById("side1").value);
  var s2 = parseFloat(document.getElementById("side2").value);
  var s3 = parseFloat(document.getElementById("side3").value);

  var sum = (s1+s2+s3)/2;
  var area = Math.sqrt(sum*((sum-s1)*(sum-s2)*(sum-s3)));
  if (s1>0 && s2> 0 && s3>0){
    if(s1+s2 > s3 && s1+s3>s2 && s2+s3>s1){
      if (area > 0){
        document.getElementById("triangle").innerHTML = area.toFixed(2);
      }else{
        document.getElementById("triangle").innerHTML = "Invalid Input";
      }
    }
  }
  else{
    document.getElementById("triangle").innerHTML = "Sides of triangle are invalid";
  }
}
```



```
else{
    document.getElementById("triangle").innerHTML = "Invalid Input";
}

}

function rectangle()
{
    var s1 = parseFloat(document.getElementById("length").value);
    var s2 = parseFloat(document.getElementById("width").value);
    if(s1 >0 && s2 >0){
        var area = s1*s2;
        document.getElementById("rectangle").innerHTML = area.toFixed(2);
    }
    else{
        document.getElementById("rectangle").innerHTML = "Invalid Input";
    }
}

function circle()
{
    var r = parseFloat(document.getElementById("radius").value);
    if(r > 0){
        var area = (22/7)*r*r;
        document.getElementById("circle").innerHTML = area.toFixed(2);
    }else{
        document.getElementById("circle").innerHTML = "Invalid Input";
    }
}

window.onload = function() {
    document.getElementById('side1').value = "";
    document.getElementById('side2').value = "";
    document.getElementById('side3').value = "";
    document.getElementById('length').value = "";
    document.getElementById('width').value = "";
    document.getElementById('radius').value = "";
}
```



OUTPUT :

Area Calculator

Gouri Umate
42371

Area of Triangle (Heron's Formula)

Side 1 Side 2 Side 3

Area of Triangle = 4.68

Area of Circle

Radius

Area of Circle = Invalid Input

Area of Rectangle

Length Width

Area of Rectangle = 6.00