**Assignment 5:**

**assign5.php**

<!DOCTYPE html>

<html>

<head>

    <title>Shape Area Calculator</title>

    <link rel="stylesheet" href="style.css">

</head>

<body>

<div class="container">

    <h2>Select a shape and enter the appropriate value to calculate its area:</h2>

    <form method="post" action="<?php echo htmlspecialchars($\_SERVER["PHP\_SELF"]); ?>">

        <input type="radio" id="triangle" name="shape" value="triangle">

        <label for="triangle">Triangle</label>

        <input type="radio" id="square" name="shape" value="square">

        <label for="square">Square</label>

        <input type="radio" id="circle" name="shape" value="circle">

        <label for="circle">Circle</label><br>

        <input type="text" id="inputValue" name="inputValue" placeholder="Enter value">

        <input type="submit" value="Calculate">

    </form>

    <div class="result">

        <?php

        class Shape {

            public function calculateArea() {

                // Base class doesn't have a specific formula

                return 0;

            }

        }

        class Triangle extends Shape {

            public $base;

            public $height;

            public function \_\_construct($base, $height) {

                $this->base = $base;

                $this->height = $height;

            }

            public function calculateArea() {

                return 0.5 \* $this->base \* $this->height;

            }

        }

        class Square extends Shape {

            public $side;

            public function \_\_construct($side) {

                $this->side = $side;

            }

            public function calculateArea() {

                return pow($this->side, 2);

            }

        }

        class Circle extends Shape {

            public $radius;

            public function \_\_construct($radius) {

                $this->radius = $radius;

            }

            public function calculateArea() {

                return M\_PI \* pow($this->radius, 2);

            }

        }

        if ($\_SERVER["REQUEST\_METHOD"] == "POST") {

            if (isset($\_POST["shape"]) && isset($\_POST["inputValue"])) {

                $shapeType = $\_POST["shape"];

                $inputValue = $\_POST["inputValue"];

                if ($shapeType === "triangle") {

                    $triangle = new Triangle($inputValue, $inputValue); // Use inputValue for both base and height

                    echo "Area of Triangle: " . $triangle->calculateArea();

                } elseif ($shapeType === "square") {

                    $square = new Square($inputValue); // Use inputValue for side

                    echo "Area of Square: " . $square->calculateArea();

                } elseif ($shapeType === "circle") {

                    $circle = new Circle($inputValue); // Use inputValue for radius

                    echo "Area of Circle: " . $circle->calculateArea();

                }

            }

        }

        ?>

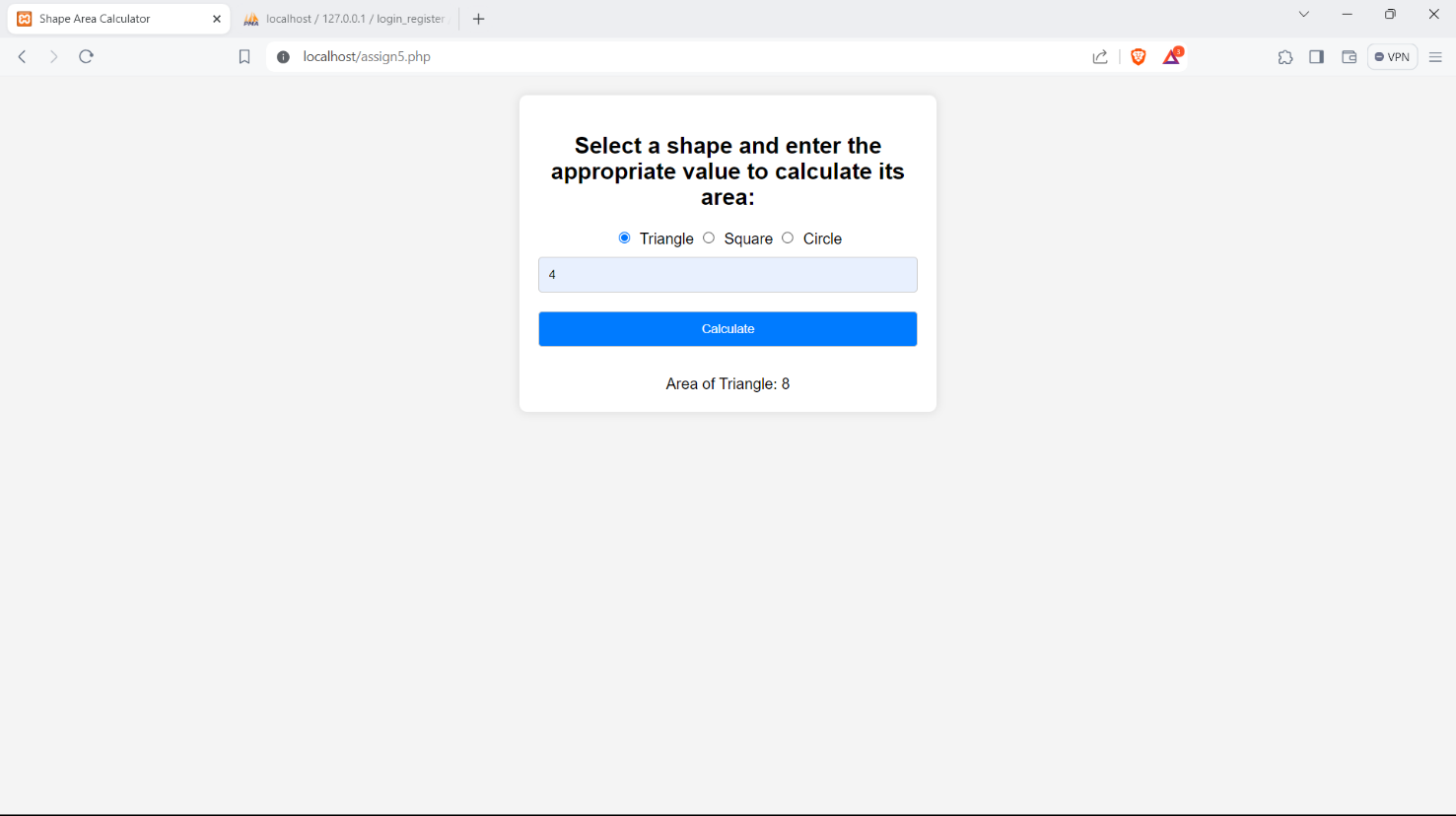
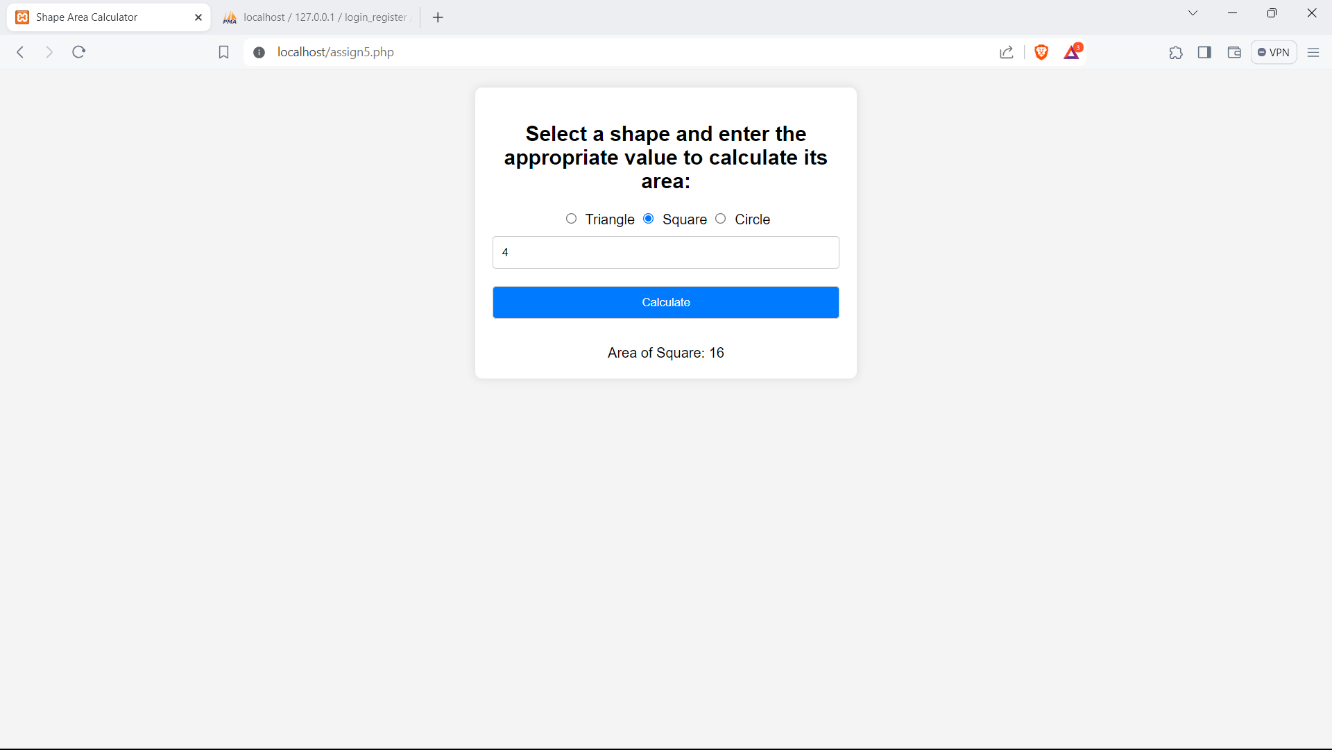
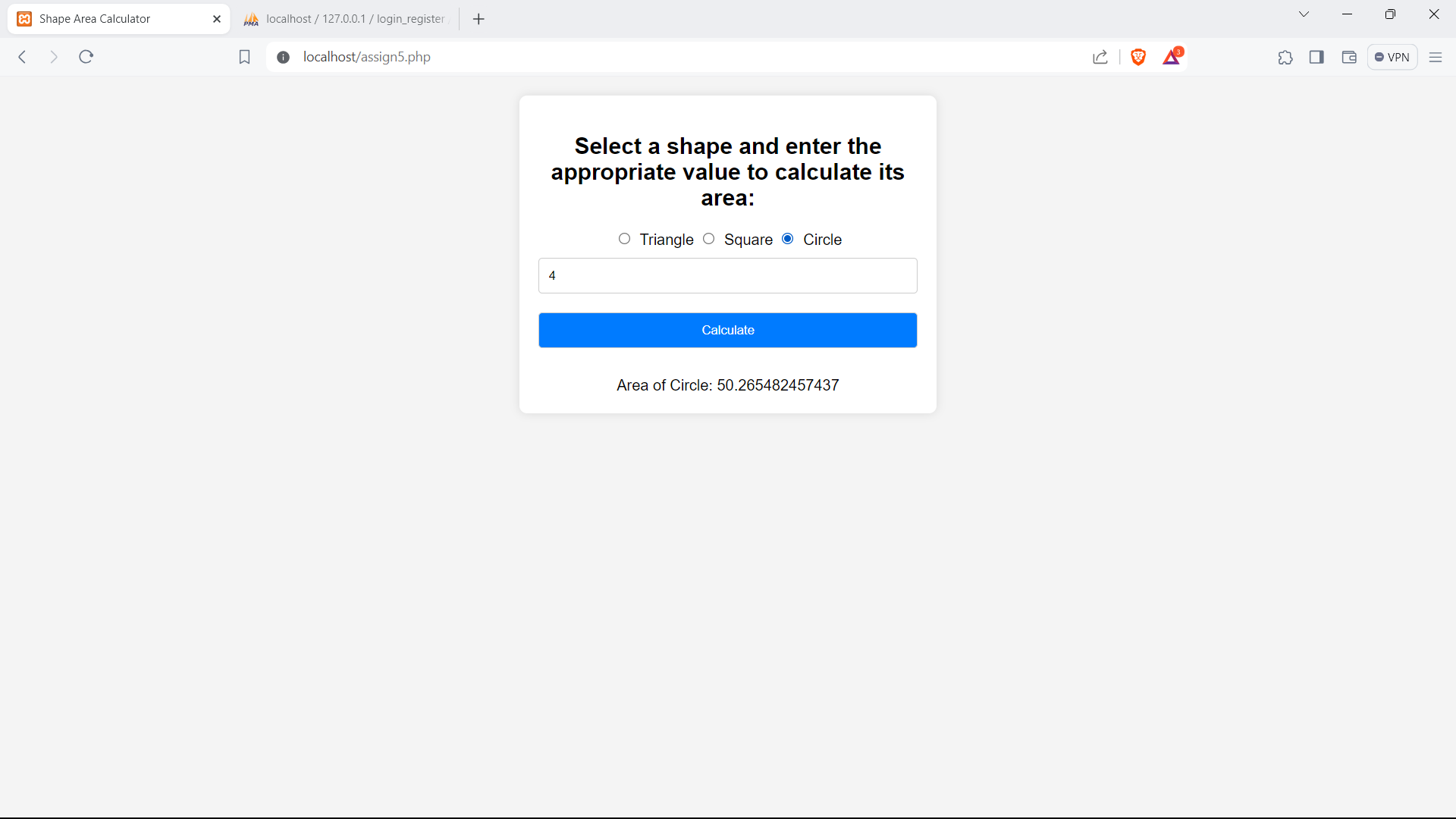
    </div>

</div>

</body>

</html>

**Output:**

**  **