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Assignment no 5

Findarea.php

```html
<!DOCTYPE html>
<html lang="en">
<head>
    <meta charset="UTF-8">
    <meta name="viewport" content="width=device-width, initial-scale=1.0">
    <title>Document</title>
    <link rel="stylesheet" href="style.css">
</head>
<body>
<form method="post" action="" class="form">
<div class="first">
<label class="particles-checkbox-container">
  <input type="radio" class="particles-checkbox" name="shape" value="triangle" onclick="showParameters('triangle')">
  <span>Triangle</span>
</label>
<label class="particles-checkbox-container">
  <input type="radio" class="particles-checkbox" name="shape" value="square" onclick="showParameters('square')">
  <span>Sqaure</span>
</label>
<label class="particles-checkbox-container">
  <input type="radio" class="particles-checkbox" name="shape" value="circle" onclick="showParameters('circle')">
  <span>Circle</span>
</label>
</div>
<div class="second">
<div class="shape-parameters" id="triangle-params">
    Base: <input type="text" name="base" class="parameter"><br>
    Height: <input type="text" name="height" class="parameter"><br>
  </div>
  <div class="shape-parameters" id="square-params">
    Side: <input type="text" name="side" class="parameter"><br>
  </div>
  <div class="shape-parameters" id="circle-params">
    Radius: <input type="text" name="radius" class="parameter"><br>
  </div>
  <button type="submit" class="btn" style="margin-top: 10px; margin-bottom:20px;">Calculate</button>
  <?php
class Shape {
  protected $name;
  public function __construct($name) {
    $this->name = $name;
  }
  public function getName() {
    return $this->name;
  }
  public function calculateArea() {
    // Base class method, to be overridden by subclasses
    return 0;
  }
}
class Triangle extends Shape {
  private $base;
  private $height;

  public function __construct($base, $height) {
    parent::__construct("Triangle");
    $this->base = $base;
    $this->height = $height;
```

```php
    }

    public function calculateArea() {

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

    }

  }

  class Square extends Shape {

    private $side;

    public function __construct($side) {

      parent::__construct("Square");

      $this->side = $side;

    }

    public function calculateArea() {

      return $this->side * $this->side;

    }

  }

  class Circle extends Shape {

    private $radius;

    public function __construct($radius) {

      parent::__construct("Circle");

      $this->radius = $radius;

    }

    public function calculateArea() {

      return M_PI * $this->radius * $this->radius;

    }

  }

  if (isset($_POST['shape'])) {

    $selectedShape = $_POST['shape'];


    switch ($selectedShape) {

      case 'triangle':

        $triangle = new Triangle($_POST[ 'base'],
$_POST['height']);

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

        break;

      case 'square':

        $square = new Square($_POST['side']);

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

        break;

      case 'circle':

        $circle = new Circle($_POST['radius']);

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

        break;

      default:

        echo "Please select a shape.";

        break;

    }

  }

  ?>

</div>

</form>

</body>

<script>

  function showParameters(shape) {

    // Hide all shape parameter divs

    document.querySelectorAll('.shape-parameters').forEach(function (div) {

      div.style.display = 'none';

    });


    // Show the selected shape parameter div

    document.getElementById(shape + '-params').style.display = 'block';

  }

</script>

</html>
```
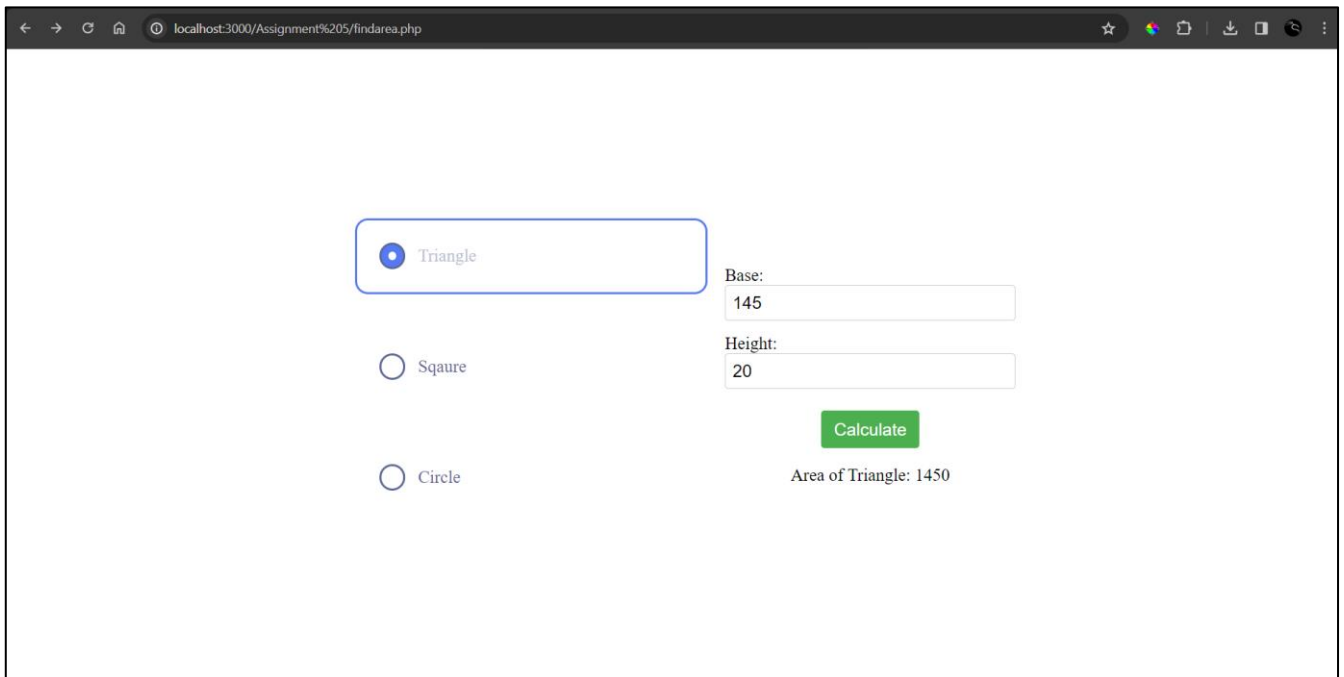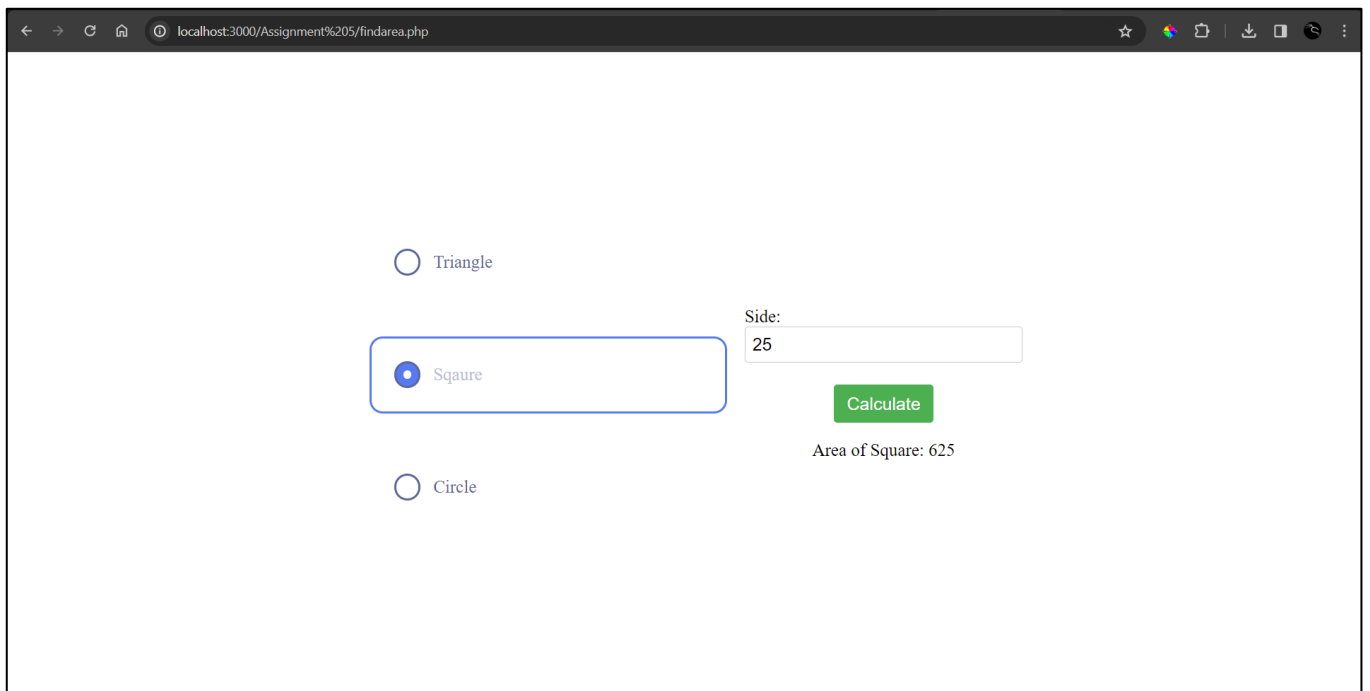
Output:

○ Triangle

Radius:

85

○ Sqaure

Calculate

● Circle

Area of Circle: 22698.006922186