

Project : Geometric Calculator

```
package areas;
import java.util.Scanner;

public class GeometricCalculator{

    public static void main(String[] args) {
        Scanner scanner = new Scanner(System.in);

        // Example usage
        double rectangleArea = calculateRectangleArea(5, 8);
        double circleArea = calculateCircleArea(4);
        double triangleArea = calculateTriangleArea(3, 6);

        System.out.println("Rectangle Area: " + rectangleArea);
        System.out.println("Circle Area: " + circleArea);
        System.out.println("Triangle Area: " + triangleArea);

        // You can also take input from the user for dynamic calculations
        System.out.print("\nEnter the base and height of a triangle: ");
        double base = scanner.nextDouble();
        double height = scanner.nextDouble();
        double userTriangleArea = calculateTriangleArea(base, height);
        System.out.println("User Input Triangle Area: " + userTriangleArea);

        scanner.close();
    }

    public static double calculateRectangleArea(double length, double width) {
        // Calculate the area of a rectangle
        return length * width;
    }

    public static double calculateCircleArea(double radius) {
        // Calculate the area of a circle
        return Math.PI * Math.pow(radius, 2);
    }

    public static double calculateTriangleArea(double base, double height) {
        // Calculate the area of a triangle
        return 0.5 * base * height;
    }
}
```

