

COM2044 LAB 4 Q1

Title: Geometric Area Calculator

Create a class named ShapeAreaCalculator that calculates the area of various geometric shapes using **method overloading**.

Requirements:

1. Overload a method named calculateArea for the following shapes:
 - **Square**: calculateArea(int side)
 - **Rectangle**: calculateArea(int length, int width)
 - **Circle**: calculateArea(double radius)
 - **Triangle**: calculateArea(int base, double height)

Pi = 3.14159

```
Sum (5 + 10): 15.0
Product (2.5 * 4.0): 10.0
Power (2^3): 8.0
Square root of 16: 4.0
Log of 2.71828: 0.999999327347282
Absolute of -42.5: 42.5
Unknown operation: -1.0
```