

```

package com.mycompany.inheritance;

/**
 *
 * @author 1BSCCSA59
 */
abstract class Shape{
    public abstract double calculateArea();
}

class Circle extends Shape{
    private double radius;

    public Circle(double radius){
        this.radius=radius;
    }

    @Override
    public double calculateArea(){
        return 3.14*radius*radius;
    }
}

class Rectangle extends Shape{
    private double length,width;

    public Rectangle(double length,double width){
        this.length=length;
        this.width=width;
    }

    @Override
    public double calculateArea(){
        return length*width;
    }
}

class Square extends Shape{
    private double side;

    public Square(double side){
        this.side=side;
    }

    @Override
    public double calculateArea(){
        return side*side;
    }
}

public class Inheritance {

    public static void main(String[] args) {

```

```
Shape circle=new Circle(2);
Shape rectangle=new Rectangle(4,6);
Shape square=new Square(4);
System.out.println("circle area:"+circle.calculateArea());
System.out.println("Rectangle Area:"+rectangle.calculateArea());
System.out.println("square Area:"+square.calculateArea());
}
}

| --- EXECUTION (DEBUG-ON) & INTERRUPT ---
circle area:12.56
Rectangle Area:24.0
square Area:16.0
-----
BUILD SUCCESS
-----
Total time: 0.775 s
Finished at: 2025-12-11T13:50:56+05:30
```