```java
package PracticeProject;

public class Shape {

        double area;

    public void displayArea() {
        System.out.println("Area is : " + area);
    }

}
public class Circle extends Shape {
    private double radius;

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

    public void calculateArea() {
        area = 3.1415 * radius * radius;
    }
}
public class Rectangle extends Shape {
    private double length;
    private double width;

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

    public void calculateArea() {
        area = length * width;
    }
}
public class Square extends Shape{
       private double side;

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

    public void calculateArea() {
        area = side * side;
    }
}

public class Tringle extends Shape{
       private double base;
    private double height;

    public Tringle(double base, double height) {
        this.base = base;
        this.height = height;
    }

    public void calculateArea() {
        area = .5 * base * height;
    }
```

```
}
import java.util.ArrayList;

public class AreaOfShapes {
    public static void main(String[] args) {
        ArrayList<Shape> shapes = new ArrayList<>();

        Circle circle = new Circle(10);
        circle.calculateArea();
        shapes.add(circle);

        Rectangle rectangle = new Rectangle(4,6);
        rectangle.calculateArea();
        shapes.add(rectangle);

        Square square = new Square(10);
        square.calculateArea();
        shapes.add(square);

        Tringle tringle = new Tringle(10,20);
        tringle.calculateArea();
        shapes.add(tringle);



        try {
            for (Shape t : shapes) {
                t.displayArea();
            }
        } catch (Exception e) {
            System.out.println("An Exception occurred: ");
        } finally {
            System.out.println("Calculation Completed.");
        }
    }
}
```