```java
// Parent class

class GeometricShape {

    void displayArea() {

        System.out.println("Area calculation not implemented for this shape");

    }

}


// Child class 1

class Rectangle extends GeometricShape {

    double length;

    double width;


    Rectangle(double length, double width) {

        this.length = length;

        this.width = width;

    }

    @Override

    void displayArea() {

        System.out.println("Rectangle Area: " + (length * width));

    }

}


// Child class 2

class Circle extends GeometricShape {

    double radius;


    Circle(double radius) {

        this.radius = radius;

    }
```

```java
    @Override

    void displayArea() {

        System.out.println("Circle Area: " + (Math.PI * radius * radius));

    }

}


// Main class

public class GeometryCalculator {

    public static void main(String[] args) {

        try {

            // Creating objects

            Rectangle rectangle = new Rectangle(5, 10);

            Circle circle = new Circle(3);


            // Adding objects to ArrayList

            ArrayList<GeometricShape> shapes = new ArrayList<>();

            shapes.add(rectangle);

            shapes.add(circle);


            // Displaying areas using loop

            for (GeometricShape shape : shapes) {

                shape.displayArea();

            }

        } catch (Exception e) {

            System.out.println("An error occurred: " + e.getMessage());

        } finally {

            System.out.println("Program execution completed.");

        }

    }

}
```