

Close Lab 6: Enabling GeometricObject comparable**Problem Description:**

(*Enabling GeometricObject comparable*) Modify the GeometricObject class to implement the Comparable interface, and define a static max method in the GeometricObject class for finding the larger of two GeometricObject objects.

Draw the UML diagram and implement the new GeometricObject class.

Write a test program that uses the max method to find the larger of two circles and the larger of two rectangles.

Design:

Draw the UML class diagram here

Coding:

```
public class Test {
    // Main method
    public static void main(String[] args) {
        // Create two comparable circles
        Circle1 circle1 = new Circle1(5);
        Circle1 circle2 = new Circle1(4);

        // Display the max circle
        Circle1 circle = (Circle1)GeometricObject1.max(circle1, circle2);
        System.out.println("The max circle's radius is " +
            circle.getRadius());
        System.out.println(circle);
    }
}

abstract class GeometricObject1 implements Comparable {
    // Implement it
}

// Circle.java: The circle class that extends GeometricObject
class Circle1 extends GeometricObject1 {
    // Implement it
}
```

Submission:

Follow our class coding standard to complete this lab, check out for credit.