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package labs.lab8.pro2;

import classes.Circle;
import classes.Rectangle;

import java.util.Scanner;

public class Lab8_Pro2_64010009 {

    public static void main(String[] args) {

        Scanner scanner = new Scanner(System.in);

        double circleRadius1, circleRadius2;
        while (true) {
            System.out.print("Creating circle 1, input radius: ");
            circleRadius1 = scanner.nextDouble();

            if (circleRadius1 > 0) break;
            System.out.println("ERROR: invalid input, try again!");
        }
        while (true) {
            System.out.print("Creating circle 2, input radius: ");
            circleRadius2 = scanner.nextDouble();

            if (circleRadius2 > 0) break;
            System.out.println("ERROR: invalid input, try again!");
        }
        System.out.println("-----");
        Circle circle1 = new Circle(circleRadius1);
        Circle circle2 = new Circle(circleRadius2);

        if (circle1.compareTo(circle2) == 1) {
            System.out.printf("The max circle's radius is %.1f\n", circle1.getRadius());
        } else {
            System.out.printf("The max circle's radius is %.1f\n", circle2.getRadius());
        }
        System.out.println("=====");

        double rectangleWidth1, rectangleHeight1;
        double rectangleWidth2, rectangleHeight2;
        while (true) {
            System.out.print("Creating rectangle 1, input width and height: ");
            rectangleWidth1 = scanner.nextDouble();
            rectangleHeight1 = scanner.nextDouble();

            if (rectangleWidth1 > 0 && rectangleHeight1 > 0) break;
            System.out.println("ERROR: invalid input, try again!");
        }
        while (true) {
            System.out.print("Creating rectangle 2, input width and height: ");
            rectangleWidth2 = scanner.nextDouble();
            rectangleHeight2 = scanner.nextDouble();

            if (rectangleWidth2 > 0 && rectangleHeight2 > 0) break;
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        System.out.println("ERROR: invalid input, try again!");
    }
    System.out.println("-----");
    Rectangle rectangle1 = new Rectangle(rectangleWidth1, rectangleHeight1);
    Rectangle rectangle2 = new Rectangle(rectangleWidth2, rectangleHeight2);

    if (rectangle1.compareTo(rectangle2) == 1) {
        System.out.printf("The max rectangle's width and height are %.1f, %.1f\n",
            rectangle1.getWidth(),
            rectangle1.getHeight()
        );
    } else {
        System.out.printf("The max rectangle's width and height are %.1f, %.1f\n",
            rectangle2.getWidth(),
            rectangle2.getHeight()
        );
    }
    System.out.println("=====");

    scanner.close();
}
}
```