

```
package classes;

public class Rectangle extends GeometricObject implements Comparable {
    public Rectangle() {
        this.height = 1;
        this.width = 1;
    }

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

    public Rectangle(double width, double height, String color, boolean is_filled) {
        this.height = height;
        this.width = width;
        this.setColor(color);
        this.setIsFilled(is_filled);
    }

    @Override
    public int compareTo(Comparable comparable) {
        if (!(comparable instanceof Rectangle rectangle)) return 0;
        if (this.getArea() > rectangle.getArea()) return 1;
        else if (this.getArea() < rectangle.getArea()) return -1;
        return 0;
    }

    @Override
    public double getArea() {
        return this.width * this.height;
    }

    @Override
    public double getPerimeter() {
        return (this.width * 2) + (this.height * 2);
    }

    private double width;
    private double height;

    public double getWidth() {
        return this.width;
    }

    public void setWidth(double width) {
        this.width = width;
    }

    public double getHeight() {
        return this.height;
    }

    public void setHeight(double height) {
        this.height = height;
    }
}
```