1. Fill in some code for Rectangle class, following guidelines given through comments.

```java
public class Rectangle {
    // instance variables
    private int width;
    private int height;
    private boolean visible; // true=visible; false=hidden

    // constructor
    public Rectangle(int x, int y, boolean z) {
        width = x;
        height = y;
        visible = z;
    }

    // getWidth(): Returns the width of the rectangle

    // sizeUp(): increases width and height to twice original size
    // (no parameters)

    // hide(): change visible to make the Rectangle hidden
}
```

2) Write client code that uses the Rectangle class:

a) Instantiate a visible Rectangle object rect1 of width 10 and height 25.

```java

b) Suppose you have two a Rectangle objects rect1 and rect2. Write some code to print the sum of their widths
```
1. Fill in some code for a `Circle` class, following guidelines given through comments.

```java
public class Circle {
    // instance variables
    private double xPosition;
    private double yPosition;
    private double radius;

    // constructor
    public Circle(double x, double y, double z) {
        xPosition = x;
        yPosition = y;
        radius = z;
    }

    // Another constructor - no parameters,
    // instantiates a circle of radius 1 positioned at (0,0)

    // move(): Move the circle to position (x,y) given by parameters

    // toString(): Returns an appropriate string describing the Circle
    // eg: “Circle of radius 7.302 at (0.34, -4.2222)”
}
```

2) Write client code that uses the `Circle` class:

a) Instantiate a `Circle` object with radius 7.302 at (0.34, -4.2222) and assign to a variable `circl`.

b) Instantiate a `Circle` object with radius 1 at (0, 0) and assign to a variable `circ2`. (Use 2nd constructor.)

c) Move `circ2` to position (0.34, -4.2222), i.e., same as `circl` so now one circle will be inside the other.