

Original Partner	<b>Problem</b> <b>4</b> <b>COMP</b> <b>10062</b>	Paired Partner ("grader")	SCORE OBTAINED <hr/> <b>5</b>
Student #		Student #	

## The SNOWMAN

```
import javafx.scene.paint.Color;
```

```
gc.setLineWidth(5); gc.strokeOval( x,y,width,height); gc.fillRect( x,y,width,height); gc.fillOval((x,y,width,height);
gc.strokeRect( x,y,width,height); gc.setFill(Color.web("white"));
```

The purpose of the exercise is to practice using the basic JavaFX drawing tools shown above. Be sure to try your solution out using the zip provided.

OB4. Complete the **Snowman** program below so that the product shot in figure 1 is realized EXACTLY. The canvas is 200 x 200. The base of the snowman is placed on the bottom and middle of the canvas.

You MAY NOT use the **Circle** class. Use the basic JavaFX drawing tools as shown above. Note that the x & y coordinates of the base oval represent the top left corner of an inscribed square. (see figure 2)

### Specifications

- The base of the snowman has its centre at column 100 and row 150.
- The radius of the base of the snowman is 100.
- The other two circles have radii of 50 and 25.
- The border colour must be 5 pixels thick and DARKGRAY. The background colour is GRAY.
- The fill colour is WHITE inside the circles.

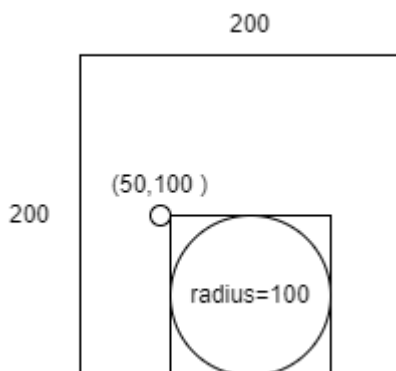


Figure 2. When making an oval using `fillOval()` or `strokeOval()` you must provide the top left corner of an inscribed square



Figure 1 Project Shot

```
public void start(Stage stage) throws Exception {  
    Group root = new Group();  
    Scene scene = new Scene(root);  
    Canvas canvas = new Canvas(200, 200); // Set canvas Size in Pixels  
    stage.setTitle("Snowman"); // Set window title  
    root.getChildren().add(canvas);  
    stage.setScene(scene);  
    GraphicsContext gc = canvas.getGraphicsContext2D();  
  
    // YOUR CODE STARTS HERE |
```

```
// YOUR CODE STOPS HERE  
stage.show();  
}
```