Practice Problem 1:

The project includes a main application frame, the abstract class Shape, the class Rectangle that derives from Shape, and the ShapeOverlay class. The ShapeOverlay class extends Jpanel and holds an ArrayList of Shape objects, which it draws in it's paintComponent method.

Task: Create a Circle class that derives from shape. It needs to have a member variable int diameter, but otherwise, you can model it after the Rectangle class.

Uncomment lines 38 to 43 in ApplicationFrame.java

If your Circle class works, your output should look like the screen shot below.

Note that the way the ShapeOverlay uses Shape objects is an example of polymorphism.