Exercises: Serialization

In your OOP exercises, you made Circle and Rectangle classes (with parent class Shape). Copy that code (or my version) into your new Eclipse project, but modify it as necessary for this exercise.

1. Make a program that generates an array or List of shapes with random parameters. Loop down the array/list and find some information about each shape. Send the List or array to a file.

2. Write another program that reads the List or array out of the file. Verify that it contains the same data.

3. Make a CircleServer that returns the same array or List as in problem 1, but gives it to network clients that connect, instead of putting it in a file.

4. Make a CircleClient that connects to your server and gets the array or list of shapes. Verify that the client gets the same data as the server sent.