

CSC 2310: PRINCIPLES OF COMPUTER PROGRAMMING

Lab 11

How to Submit

Please submit your answers to the lab instructor once you have completed.

Failure to submit will result in a **ZERO FOR THIS LAB. NO EXCEPTIONS.**

1. Write a class called Point that has two int fields x and y coordinates. The class should have the necessary accessors, mutators and constructors. (You may choose to write the compareTo method as well)
2. Write another class called Circle that has 2 fields; a double field called radius and a Point object that stores coordinates of the central point of the circle. The class should have the necessary accessors, mutators and constructors. Use the compareTo method to define a natural order for the Circle class. The objects should be ordered based on the area of the circle. If the circles have equal area then they should be ordered according to the x-coordinates and if the x-coordinates are same then use y-coordinates to define the order.
3. Also write a client class that creates an array of circles and use the Arrays.sort() method to see if the compareTo method you wrote works as intended.

You should have a correct main method(). (40 points)

Put all your codes in one file. Your file must be runnable. (40 points)

Your file name and class name should contain your first name. (20points)

Just submit .java file. Put your lab time on the comment board of dropbox.