CSCD 210
Lab 9

SPECIFICATION
You will write a statistics program which will maintain an array of int values and then perform various operations on the array:

1) Add a value to the array
2) Delete a value from the array (by value)
3) Delete a value from the array (by location)
4) Display the array
5) Compute the mean of the array
6) Compute the median of the array
7) Compute the midpoint of the array
8) Compute the mode of the array
9) Quit

When the program starts you will ask the user for a number that is 1 or greater. You must ensure the value is 1 or greater. After you obtain the value for the number of elements in the array. You will then fill the array with values by prompting the user to enter integers.

The user can then select any of the above choices. I have provided a main for you which you can't change, or add to.

For 1) adding a value to the array by adding a new element in the array, the user will specify that value.

For 2) and 3) the user can't delete if there are no elements remaining in the array

For 4) if the array is empty (length is 0) state the array is empty otherwise print the array as [value, value, value]

For 5) through 8) if the array is empty (length of 0) throw the illegal argument exception otherwise print the selection name is: and the value (e.g. Mean is: 1.5).

After you compile and execute your program capture the output (for 3 separate runs), and save the output into a text file named **cscd210lab9out.txt** ensuring you test each option.

NOTE: You CANNOT use try/catch for this lab, you don't need them.

NOTE: You CANNOT use Arrays.sort()

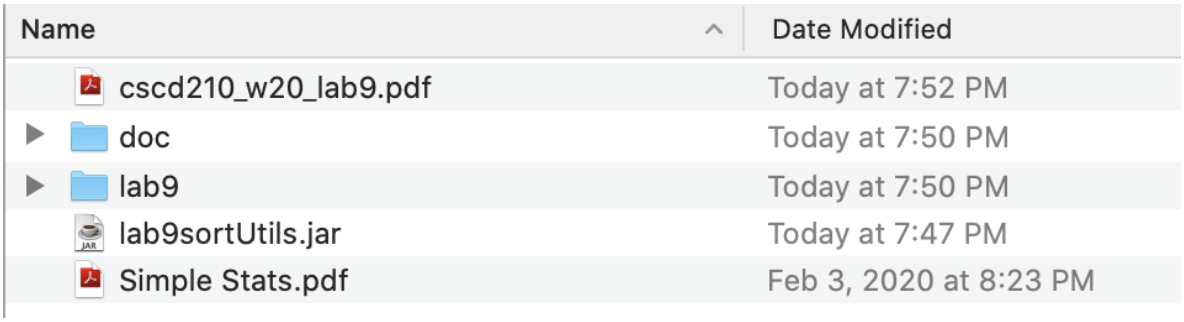
NOTE: The next page explains how to import that jar into your eclipse project.

TO TURN IN:

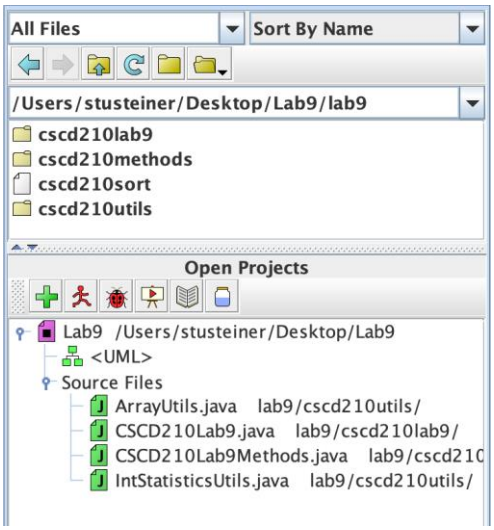
A zip file that contains your Lab9, which contains:
- All the packages, your and my java code and my jarfile
- cscd210lab9out.txt

Name the zip file your last name first letter of your first name lab9.zip (Example: steinerslab9.zip)

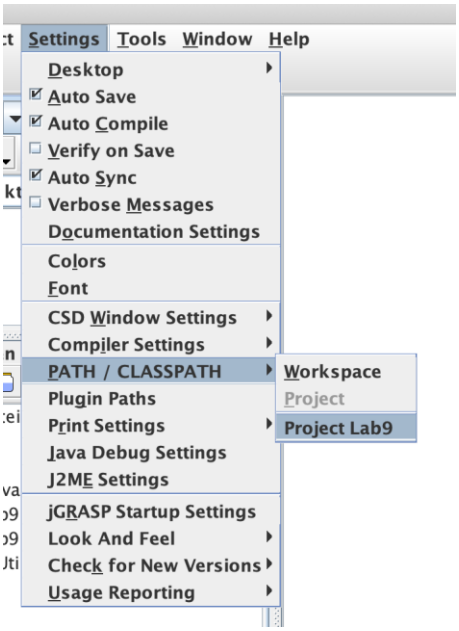
1) Unzip Lab9.zip into your workspace so you should have a Lab9 folder with the following in that folder



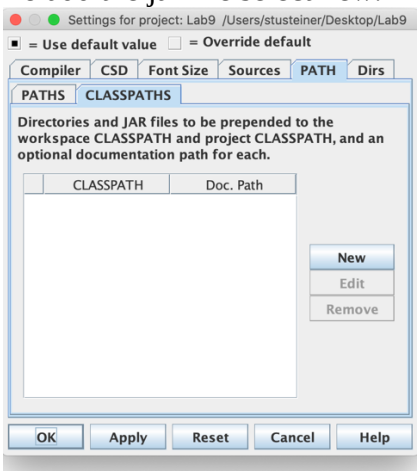
2) Open jGrasp and create a new project. Drag and drop your java files



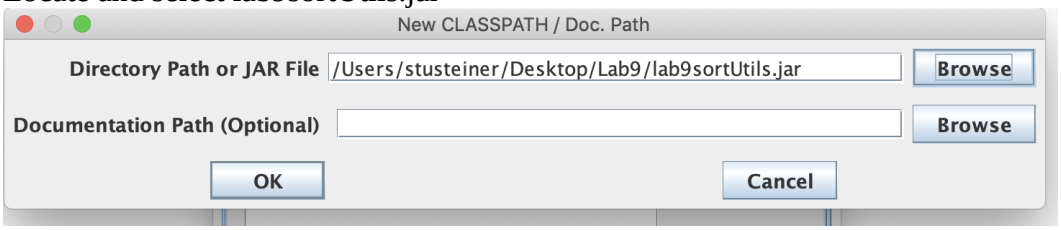
3) To add my code from the jar file select settings -> path/classpath -> project Lab 9



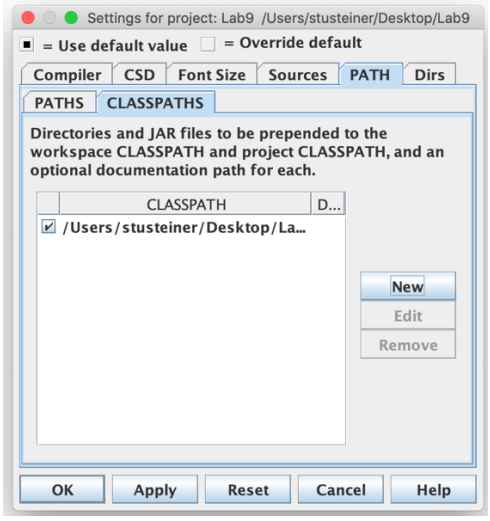
4) To add the jar file select new.



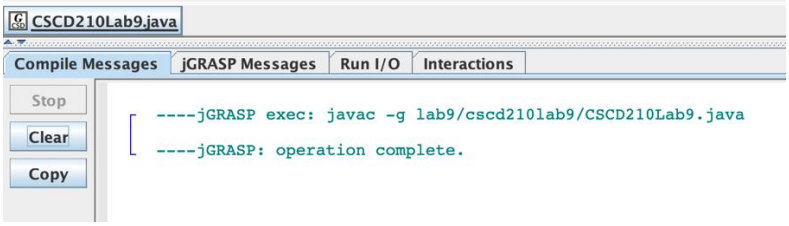
5) Locate and select lab9sortUtils.jar



6) Select apply and ok



7) Compile your code



If you don't use my jar file. If you write your own sort. If you open my jar file. If you use any other classes than what you are required to write from the API or any sorts from the API you will receive 0 points for this lab.