CMPT 220 - Program 4
Program Due: Monday, February 24th, before 9:00 a.m. (submitted and printed)
Bring printout to class to turn in
Name the project **Prog4YourLastName**
Name the class **ArraysYourLastName**

The purpose of this assignment is to use various types of arrays. You are to write a program that prints the following menu:

1) Let's Go Golfing!
2) More Evens or More Odds?
3) How Many Mins?
0) Quit

Based on the user input, the following should take place.

If the user chooses **1**, your program should call a method to accomplish the following: You should prompt for (and store into an array) exactly 9 integer values, one at a time, representing the Par values for each hole. You should then prompt for (and store into another array) exactly 9 integer values, one at a time, representing the player's number of strokes for each hole. You should pass these arrays to a helper method (yes, this method will call that helper method!). The helper method will calculate and print out the number of Eagles (2 under par), Birdies (1 under par), Pars (0 under par), Bogeys (1 over par), Double Bogeys (2 over par) and Other (any other result). For example, if the Par for a hole is 3 and the player needed 4 strokes, she would get a Bogey (since she needed one stroke over par). If she needed only one stroke on that hole instead, she'd get an Eagle (since she needed two strokes under par).

If the user chooses **2**, your program should call a method to accomplish the following: You should prompt the user to enter a list of ***up to*** 10 integers into an array. The user will indicate she is finished by entering the value zero. (Zero should NOT be considered one of the values!) Call a helper method (passing it the data it needs), which will calculate and print a message indicating whether there are more Even numbers or Odd numbers in the array, then print either the Even numbers (if there were more Even numbers) or the Odd numbers (if there were more Odd numbers). In case of a tie, print out the **entire** array. (Do not declare new, local arrays in your method – only use the array that is passed in as a parameter.)

If the user chooses **3**, your program should prompt for and read ***up to*** 8 positive integers into an array. The user will indicate she is finished by entering a non-positive number. (This non-positive number should NOT be stored in your array!) Call a helper method (passing it the data it needs), which will calculate and print out the array, the minimum value in the array, and the number of times the minimum value appears in the array, all appropriately labeled.

After processing a choice, the menu should be repeated until **0** is chosen. Your program should be written for a conceptually-challenged user (your program should not bomb, regardless of what number the user enters for a menu choice). You may assume that I will only enter integers as menu choices.

You **must** write methods for each of the above menu choices. You may **not** force main() to do all of the work!

Make sure your output is properly labeled and formatted. Remember to fully document your code! Remember to use different (but still descriptive) variable names for formal and actual parameters!!!!

In addition, you should come up with test data to fully test your program.
Submit your printed test data set with your hard copy of the program.