CSC 220 – Lab 7

Objective:
Exercise arrays, conditionals and loops in Java.

Java programs:

Design and implement an application called `Mean.java` that computes and prints the mean of two lists of integers coming from the same list that has n numbers: $x_0, x_1, \ldots, x_{n-1}$. The first list L_1 contains $x_0, x_2, \ldots,$ through x_{n-1} if n is odd or through x_{n-2} if n is even. The second list L_2 contains $x_1, x_3, \ldots,$ through x_{n-1} if n is even or through x_{n-2} if n is odd. Ask the user to input n and read the value of n. Then ask the user to input n integers and save them in an array. Print out L_1 and compute the mean as a floating point value for L_1. Then print out L_2 and compute the mean as a floating point value for L_2, using the following formula:

$$mean = \frac{\sum_{i=1}^{n} x_i}{n}$$

Note:

Make sure you indent and comment your code based on the examples in the textbook. Don't forget to include your name, the course number, title of the assignment, and today's date.

Compiling and running Java programs (reminder):

1. Compile your program using the command `javac filename`
   For example: `java myProgram.java`
   If you receive errors during the compilation phase, re-edit the source code file and attempt to correct them.

2. Once a file successfully compiles, execute it using the `java` program.
   For example: `java MyProgram`

What to turn in:

JAR your `*.java` files into a file called `Lab7.jar`. When you're done, submit the file to Canvas by the deadline. No extensions.