

CST8110 – Introduction to Programming

Lab Exercise #2 – Java I/O

DUE: This lab must be completed and demonstrated to your lab professor no later than during week 3.

1. Install the Java version 8 JDK .

- Review the document “Installing Java SE 8 and Eclipse” and follow the directions to install Java JDK on your laptop.
- Read the Eclipse Quick Start Guide for instructions on using Eclipse

2. Practice using Eclipse and the Java RTE

- Download JavaMain.java which is attached to this lab in Blackboard. Note that it is a .zip file – you will need to double-click on the .zip file and "extract" the file to get to the .java file. Note – you can edit the code via Notepad (Start/Accessories/Notepad) or Textpad (Start/Textpad) and save it – for example – on your C: drive as **JavaMain.java** in directory **CST8110Labs**.
- Note – you might not feel like you understand all of the statements in this program. We will learn how they all work over the next month.
- Follow the instructions in the Eclipse Quick Start Guide (and that was demonstrated in lecture class) to load this JavaMain.java and run it.
 - The program should prompt you to enter 10 numbers and then should display the sum and average of the numbers you entered.
 - Specifically:
 - Create a new project called Lab2(**New/Project**)
 - In the project, create a new Class (**New/Class**) called JavaMain.java (note that this name is case-sensitive!)
 - Run the program (this will compile and run the program)
- **Ask your neighbor, or lab professor if you are having any problems.**

3. Modify JavaMain.java

- You need to modify JavaMain.java so that it produces the following output in the **EXACT** format illustrated (including blank lines and new lines).
- This means you will be changing the statements between the { } using only input statements (Scanner statements), output (print or println statements) and arithmetic statements.
- Red values indicated number entered by the user. Blue values are displayed by your program.
- When you have the program working as displayed below, demonstrate it to your lab professor.

Sample output:

This program will produce a printout of three multiples of a number. Enter the number: 12

The first three multiples of 12 are:

12
24
36

Another Sample output:

This program will produce a printout of three multiples of a number. Enter the number: 20

The first three multiples of 20 are:

20
40
60

Another Sample output:

This program will produce a printout of three multiples of a number. Enter the number: -5

The first three multiples of -5 are:

-5
-10
-15

YOU WILL KNOW YOU ARE DONE THIS LAB WHEN YOU HAVE:

- Have Installed Java
- Ran JavaMain.java successfully through Eclipse
- Made changes to JavaMain.java as indicated, and
- Demonstrated your modified JavaMain.java to your lab professor.