

# CST8110 - Introduction to Programming

## Lab Exercise #2 – Java I/O

**DUE: This lab should be completed and demonstrated to your lab professor no later than the end of week 3.**

### 1. *Install the Java version 8 JDK, if you didn't do it yet.*

- Review the document “Installing Java SE 8 and Eclipse” and follow the directions to install Java JDK and Eclipse 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 a number and then should display the next number
  - 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 neighbour 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 the three numbers after the entered number. Enter the number:  
12

The first three numbers after 12.0 are:  
13.0  
14.0  
15.0

Another Sample output:

This program will produce a printout of the three numbers after the entered number. Enter the number:  
20.5

The first three numbers after 20.5 are:  
21.5  
22.5  
23.5

Yet Another Sample output:

This program will produce a printout of the three numbers after the entered number. Enter the number:  
-2

The first three numbers after -2.0 are:  
-1.0  
0.0  
1.0

## ***YOU WILL KNOW YOU HAVE COMPLETED THIS LAB WHEN YOU HAVE:***

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