CIS200 Programming Fundamentals
Lab 01 (v.su.2021)

Points: 20

Goal: Learn to editing, compiling and running a Java program from the Command Prompt, Variables, Operations, Output, User Input.

Instructions: For this lab, you will use a basic text editor and the command line to enter, compile and run a Java program. Next week, we will be using a IDE (Eclipse) to enter, compile and run a Java program.

> ***Important****: Save all your work to your student network drive today (NOT the desktop or local C: drive). At the completion of lab, put all source files into a single folder, zip (i.e. compress) the folder and upload it to Canvas*

Part 1: (10 points)

- Open Lab1_Code.pdf from Canvas…at this point in the course, you probably won't understand very much of the code. That's ok!
- Start a new file named Lab1.java
- Type in the code as shown, including the inline comments. Add the needed lines, as requested. (Please do NOT use cut & paste… purposely not given much to type)
- Try to Compile – did it compile? What's wrong? Fix all the errors until the program compiles, you may need to work with your Instructor/GTA.
- Run the program and use the following as input: 12.34 as the price and 2 as the quantity. You should get $24.68 as your total. Run again with 12 and 2 – notice the difference in output for the simple println vs. printf and String.format lines.

Part 2: (5 points)

Modify the program to…

- Ask the user to enter in a tax rate as a decimal value (i.e. 7% = 0.07)
- Calculate and display the tax amount and the total with tax.

Part 3: (5 points)

- Add an additional line(s) to format the tax amount and the total to always display 2 decimal places using String.format (see p.175 in your Java textbook)
- After all parts are working correctly, upload your code to Canvas. If your solution includes more than one file, create a Zip file by compressing all the solution files.
- Verify that the file has been properly submitted.
- It is recommended that you attach your file(s) to an email and send it to yourself. All labs are a good point of reference for projects and exams. This also serves as a possible verification of completing the lab if a discrepancy arises.