CIT 133 Beginning C++
Assignment #6 – Total Points = 100 Fall 2018

Assigned Date: 10/8 Date Due: 10/18

DO NOT share your answers with anyone. DO NOT collaborate on completing work with anyone. DO NOT use the Internet to search for solution to assignments. DO NOT pay anyone to write your code. Failure to meet this requirement leads to a violation of the academic integrity principles.

Grading Criteria File: See the grading criteria file under Modules/resources and Files.

Objective: Demonstrate your understanding of C++ repetition structure and file input/output. This assignment is based on the material covered in **chapter 5** of your textbook.

Assignment: Write a C++ program to process purchases made by users. The data is input from a file whose name is entered by the user. **The output will go to a file whose name is entered by the user.**

Process: The input file is formatted for each line where the first entry is the product name, the second entry is the quantity purchased, and the third entry is the cost per unit. The following is an example of the data in the file. Use a text editor to create your data file and submit the input data file with your submission.
chair 5 28.50
sofa 3 383.28
table 1 100.00

Additional criteria:

a. DO NOT use arrays for this program, even if you know how to use arrays.
b. Need to read the file for as many lines of data available in the file.
c. Must check for the existence of the input file. If the input file does not exist, issue an error message and do not provide any output.
d. Tax rate is 8% defined as a named constant.
e. The output should be similar to the provided sample run.

Use the file format: **firstNameLastNamecit133_hw6.cpp** for your source file name. Submit your file to the assignment dropbox in Canvas. Submit your input data file. Make sure to fully test your program. The given sample run is not a full test of your program. **Your processing must be VERY similar to the sample run**.

SAMPLE RUN:

Enter the name of the input file: purchases.txt
(Error if the file does not exist)
Enter the name of the output file: receipt.txt
The following data will be written to the output file

```
Item                              Price
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chair -- 5 @ $28.50:    $142.50
sofa -- 3 @ $383.28:    $1149.84
table -- 1 @ $92.00:    $92.00
-----------------------------------
Subtotal:                         $1384.34
Tax:                              $110.75
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Total:                            $1495.09
Number of items: 3
```