CSCI N317 Spring 2018 Lab 4

**R Loops and Vectors**

Redo your Lab 2 using R. All requirements stay the same. If you lost points in lab 2, you should fix the problems in lab 4. The following mostly repeats what’s required in lab 2 but modified to suit this lab.

Find a company that sells products related to your field of study. E.g. if you are a Business major, such a company can be a mortgage company that offers different mortgage plans. Select more than five different products as well as their price and quantity sold in 2017. E.g. 2500 clients (quantity) received the 30-year mortgage (product name) at an interest rate of 5% (price) in 2017. You can make up your data as long as your data looks real.

Your program must meet the following requirements.

1. Have comments that
   1. states the author of the program and the date that the program was written or completed (5’)
   2. describes the purpose for each code block (5’)
2. Use vector(s) and loop(s). (20’)
3. Perform the following tasks and generates correct output(s).
   1. Prepare data that is relevant to the tasks. (10’)
   2. Find the average price of all products. (10')
   3. Find how many products were sold at a price above the average price found in (b). (10')
   4. Find the total income from transactions whose price is above the average price found in (b). (10')
   5. Find the total income from each product. (10’)
   6. Find the total income generated from all sales. (10’)
4. Program saved in a script (.R) file and the file name format is *lastname*\_lab4\_.R (10’)

Submit your script file on Canvas.