GEB 6895: Business Intelligence
Department of Economics
College of Business Administration
University of Central Florida
Fall 2019

Assignment 1

Due Tuesday, September 10, 2019 at 11:59 PM
in *your* fork of the GEB6895F19 GitHub repo.

Instructions:

Complete this assignment within the space on your fork of the GEB6895F19 GitHub repo in the folder `assignment_01`. Create a folder called `my_answers` that will contain all of your work for this assignment. Within this folder, code your solutions in `.R` files labeled by question, such as `example_01.R` for Example 1, etc. When you are finished, use `git` to `add`, `commit` and `push` your code to your fork of the GEB6895F19 repo. You are free to discuss your approach to each question with your classmates but you must `git push` in your own work.

Question 1:

In this exercise, you will produce working versions of the pseudocode examples from the document titled *Pseudo Code Practice Problems* discussed in class. Create R programs that `print()` out the result for a few sets of inputs to test your functions. Feel free to use the suggested pseudocode solutions in the document as a starting point. The exercises are restated below with some clarification for your convenience.

Example 1 Write an R function that reads two numbers, multiplies them together and prints out their product. You could start out with `multiply_two <- function(num_1, num_2) { ... }`.

Example 2 Write an R function that tells a user that the number they entered is not a 5 or a 6. You can read input from the keyboard with `num_in <- readline(prompt="Enter a number: ")`.

Example 3 Write an R function that performs the following: Ask a user to enter a number. If the number is between 0 and 10, write the word blue. If the number is between 10 and 20, write the word red. If the number is between 20 and 30, write the word green. If it is any other number, write that it is not a correct color option.

Example 4 Write an R function to print all multiples of 5 between 1 and `n` (possibly including `n`).

Example 5 Write an R function that will count all the even numbers up to a user defined stopping point.

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Example 6 Write an R function that will perform the following.

a) Read in 5 separate numbers.

b) Calculate the average of the five numbers.

c) Find the smallest (minimum) and largest (maximum) of the five entered numbers.

d) Write out the results found from steps b and c with a message describing the results, i.e. `maximum is ....`