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

Assignment 2

Due Tuesday, September 24, 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_02`. Create a folder called `my_answers` that will contain all of your work for this assignment. Within this folder, code your solutions in `.R` with the filename as specified. When you are finished, use `git` to `add`, `commit` and `push` your code to your private mirror 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 a function library of the functions for the pseudocode examples from the document titled *Pseudo Code Practice Problems* discussed in class. Create one R script `my_functions.R` that will *return* the result for any calls to your functions. Use the script `my_functions_example.R` as a starting point, which will be evaluated by running a script like `my_function_test.R`. Use your coded and tested examples from Assignment 1 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 returns their product. You could start out with `multiply_two <- function(num_1, num_2) { ... }`.

Example 2 Write an R function that returns a character string 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, returns the word blue. If the number is between 10 and 20, returns the word red. If the number is between 20 and 30, returns the word green. If it is any other number, returns a messaege stating that it is not a correct color option.

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

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

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

    e) Return a list of the minimum, average and maximum values.