

ECO 5445: Introduction to Business Analytics

Department of Economics
College of Business Administration
University of Central Florida
Fall 2019

Assignment 1

Due Tuesday, September 17, 2019 at 2:59 PM
in *your* fork of the ECO5445F19 GitHub repo.

Instructions:

Complete this assignment within the space on your fork of the ECO5445F19 GitHub repo in the folder `assignment_01`. Create a folder called `my_answers` that will contain all of your work for this assignment. When you are finished, use `git` to `add`, `commit` and `push` your code to your fork of the ECO5445F19 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 create a shell script to automate some of your workflow. You will start by getting familiar with an example from the course textbook. Save any work on this question in a folder called `question_01` under your folder `my_answers`.

- a) First start by building on an existing example in your textbook by Paarsch and Golyaev. Use a version of the shell script on page 45 and call it from your own shell script to modify a document. The document `CanadianEnglish.txt` is a paragraph describing the differences between Canadian and American English from the point of view of a Canadian writer. Your task is to write a shell script `translate.sh` that translates the document into its counterpart `AmericanEnglish.txt` that is written from the point of view of an American writer. Save all your shell scripts and the output file in the folder titled `question_01`.
- b) Create a shell script `git_start.sh` to setup your workspace for each class. This script will create a folder in a new location of your choosing, then move into that location, clone a GitHub repository and navigate to a subfolder of your choosing within the newly cloned repo, in which you would like to work. This script should take in arguments that specify the new folder, the name of the repo and the subfolder of the repo.

Question 2:

In this exercise, you will create a shell script `hello_world_loop.sh` that runs several versions of a program `hello_world.R`, which is available in the folder `assignment_01`. The loop should perform the following actions, for nodes numbered 1 to 5. Save any work on this question in a folder called `question_02` under your folder `my_answers`.

- a) Create a copy of the `hello_world.R` program called `hello_world_run.R` which modifies the `node_num <- 0` line to the current node number.
- b) Run this new R script in batch mode and have the printed output go to the text file `node_i.out`, for nodes `i` numbered 1 to 5.
- c) Use the `ls` command to verify that the results are as required.