

ME 701 – Development of Computer Applications In Mechanical Engineering

Homework 2 – Due 9/13/2017

Problem 1 – More in the Command Line

1. Create two files, `a.txt` and `b.txt`, that have your first and last names, respectively. Use the `cat` command to turn them into a single file `c.txt`. Do this all within the command line and show me the lines you used to accomplish these tasks.
2. Suppose, for some reason, you want to execute `a.txt` as a program. Show me how you'd set its permissions.

Problem 2 – Simple Shell Scripting

1. Write a bash script that converts a temperature from degrees Fahrenheit to degrees Celcius. (Hint: one way is to use `let`, but be careful about what sorts of numbers that lets you use.)
2. Write a bash script that provides a count of the number of files and subdirectories in the current directory. (Hint: use `grep`.)
3. Write a bash script that takes as input the name of a file. The script should move the given file, if it exists, to a directory named `trash` that is located within your home directory. If the `trash` directory does not exist, the script should create it. If the given file does not exist, an appropriate error message should be printed.

Problem 3 – Git and Version Control

1. Get a (free) account at GitHub and create a repository for your shell scripts. Provide me a link to this repository so I can see it.
2. Modify the temperature conversion script to output the temperature in Kelvin, too, and use `git` (and GitHub, etc.) to track this change.