

SOFE 3200U Systems Programming Fall 2018

Assignment-1: Shell Programming

Problems:

1) Write a shell script to find out the number of occurrences of a substring in the main string.

Sample input = abccddccacc Enter substring=cc Sample Output: Number of occurrences =3

- 2) Write a shell script which can write the current time into some file (sampling.txt) continuously after 5 seconds (CPU cycles) until user interrupts.
- 3) Write a shell script of the following: "A Multiple Choice Question that contains 5 questions and each question carries 2 options. Choice will be given by the students. A record file is created each time the script runs to store the answers along with the total marks obtained. The record filename that has date and timing information as well as the student name.
- 4) Write a shell script which reads ATaleofTwoCities.txt and AliceInWonderland.txt
 - a. Count the number of lines across the two text files.
 - b. Count the number of times the word "London" and "Paris" appeared in ATaleofTwoCities.txt
 - c. Count the number of vowels present in both files. Count how many times the word "the" appears in two files and replace it with "ABC".
 - d. Print all the different types of characters used in the two files.

Deliverables:

All of the following items should be packaged in a zip folder.

- Working code (80% marks)
- A documentation explaining the code (20% marks)

Notes: Assignments have to be completed individually. So, please avoid any sort of plagiarism. Please submit your assignment deliverables to Blackboard.

Deadline: October 15, 2018

Contact TA: Nayreet Islam (<u>nayreet.islam@uoit.ca</u>), Office hours: Wednesday 12.30 – 1.30pm at SIRC 3340.