

CSP203: Software Tools & Technologies Lab

Lab-5: Practice Problems (Shell scripting)

Date: 23-August-2024

Instructions:

1. You must solve the below problems only on the Linux terminal to make yourself familiar with linux commands and start getting good practice.
2. Complete the lab hour and submit it through canvas.
3. Prepare all your solution files in a zip file and name it as <ROLLNO.zip> and submit on canvas.

Problems:

1. Assume that you have a directory containing several .csv files. Write a shell script that takes a string as a command line argument and computes the sum of all occurrences of the given word in all the .csv files. You should use as many linux commands as possible.
2. Assume that you have three files CSP100.txt, CSP101.txt, CSP102.txt. Each file name denotes course name. Each file contains several lines in the below format
RollNo, Grade
RollNo has 8 digits, where each digit can be [0-9]
Grade: Can be any of A, B, C, D, E, F

Write a shell script for each of the following

1. List all the roll numbers who obtained an A grade in CSP102 but a B grade in CSP101
2. That list course name which has maximum number of F grades
3. Print the roll numbers of the students who have obtained E grade in any course. Replace all E grades with a C grade for the course, which has maximum E grades in it.
[Hint: Use **sed** command inside the shell script]
3. Write a shell script that takes the name of a folder as command line argument, and delete all files of size 0.
4. Write a shell script that takes string1, string2, and a directory name as three command line arguments, and replaces all the occurrences of string1 to string2 in the first 10 lines of all .txt files in the given directory.
5. Write a shell script that changes all the filenames ending in .txt to .dat in the current directory.