

Lab Activity 1 - SHELL

Software Systems Development – Monsoon 2022

Due Date: 05 July 2022, 05:00 PM

Instructions

1. Deadline mentioned during the Lab is strictly immutable. **No extensions will be given.**
2. Any **naming convention** mentioned in the lab activity **must be followed strictly** or marks may be deducted for the same.
3. Any **plagiarized content will fetch zero** marks for the current lab and will be followed by strict action against the students involved. However, discussion of ideas is allowed.

Activity

1. Write a bash script that takes path of a text file containing some alphanumeric text as input and filters out its content to print only those words that start with 'a' (case insensitive) and **do not end** with 'txt' (case insensitive). **(10 Marks)**
 - **Input Constraints** – The path will be a valid file path (it can be absolute or relative) and the file will be a text file. The file will contain only alphanumeric characters.
 - **Output Constraints** – Print each word satisfying criteria on a new line
2. Write a bash script that takes a directory path as input and prints list of **all** files that the current user has **permission to execute**, and member of other group **does not have permission** to read. **(10 Marks)**
 - **Input Constraints** – The path will be a valid directory path (can be absolute or relative).
 - **Output Constraints** – Print only the file name (without preceding path). For example, if the file is /home/user/file.txt then print only file.txt.

Submission Guidelines

1. Create a folder with your **roll number as its name** and containing the following files corresponding to the questions:
 - a. q1.sh
 - b. q2.sh
 - c. q3.sh
 - d. q4.sh (optional)
 - e. README.md

Compress the folder as a zip file (name should be **<roll_number>.zip**) and then upload it on the Moodle before deadline.

2. **Q3 is optional** for Lab grading but it is recommended that you try it out.
3. **README.md** should contain steps for execution of your script and any extra information that you want the evaluator to know before running your script, such as dependencies on some external tools or libraries.