University of Engineering and Technology, Lahore Operating Systems

Semester: 6th Session: 2019-2023

Assignment-1 (Individual)

Submission Date: 29-01-22 (Before 12:00 pm)

Note: Understanding the assignment is part of the assignment.

Command Line Arguments

It is possible to pass some values from the command line to your C programs when they are executed. These values are called command line arguments and many times they are important for your program specially when you want to control your program from outside instead of hard coding those values inside the code. The command line arguments are handled using main () function arguments using argc and argv[].

Task 01:

You are required to create a program, which will receive the name of a text file via command line arguments, and it will read that file and print the contents of the file on console. You can assume that the text file to be read is placed in the same folder as your executable program. Program should be able to process multiple file name given to it by command line and read+print its contents.

Task 02:

To simulate grep command using UNIX system call.

ALGORITHM:

- 1. Get filename and search string as command-line argument.
- 2. Open the file in read-only mode using open system call.
- 3. If file does not exist, then stop.
- 4. Let length of the search string be n.
- 5. Read line-by-line until end-of-file
 - a. Check to find out the occurrence of the search string in a line by examining characters.
 - b. If search string exists, then print the line.
- 6. Close the file using close system call.
- 7. Stop.