

### **Assignment -1 (Basic Unix)**

- 1) Suppose you want to send a message to all users working on various terminals of the system. For that how will you get the information regarding all such users? Display the list of these usernames along with the column headers.
- 2) If you are stuck with a problem of knowing the version no. of your operating system required for downloading software, how will you know of it to progress further?
- 3) Assume you had set some reminders for the coming days in your engagement schedule. Today being Friday, display the list of these reminders for the coming 4 days.
- 4) In a graphical layout for some application, a string is needed to be displayed at required coordinates in the screen specified in terms of row no. and col. no. Given a string, row no. and col. no. display it in the screen appropriately.
- 5) Consider a program of sorting any list of numbers. For knowing the time complexity of this program you need to know the cpu processing time taken in carrying out the task. How can you find the cpu processing time taken in carrying out the sorting task ? (take any simple sorting program)
- 6) Suppose you worked upon with important data some time back in the current login session. Get all the commands executed and their outputs since last login at current terminal in a file say 'logfile'.
- 7) You need to search for a file or directory in the current directory. How will you get a compact multicolumn listing of files and directories (which are in the current directory)?
- 8) Create a new file. Include some non printing ASCII characters (e.g. carriage return, line feed etc). Now display this file along with these characters for enhanced readability.
- 9) Let there be 3 files 'abc1','abc2','abc3'.You need to merge their contents to another file 'abc' for getting the complete file. How will you achieve this (using metacharacter) with a warning if destination is being overwritten.

- 10) You want to back up your directory where you keep files for CS 240. The directory has files and sub-directories with files. How will you copy your directory (for CS 240) to another directory say Backup, in one go (one command)?
- 11) The situation can be of the kind where you need to make multiple deletions consecutively. How will you make sure before every such deletion that no relevant file is deleted unintentionally, i.e., you need to be prompt after each delete command, to recheck if you surely want to delete the file.
- 12) Format your current directory by deleting all the files and subdirectories in it, in one go.
- 13) Let a file is moved to another file. Ensure that user is asked for confirmation before every such move. Also print the name of the file as it is being moved to avoid the dilemma.
- 14) Create 4 files with some content. Let the count of total no. of words in the 4 files altogether is needed to crosscheck against specified limit. How will you achieve so?
- 15) Split a file named 'over' (having 45 lines) of a particular topic into smaller files (having 15 lines each) of subtopics, with their names starting from 'sub' for enhanced readability.
- 16) Let there be two files f1 and f2 to be checked for redundancy. Output the location of first mismatch if two files are compared byte by byte.