Dept. of CSE, IIITDM Kancheepuram
CS3003 – Operating Systems Practice
July 28, 2023

Lab Assignment – 1

In this lab, you will practice various Linux commands.

(1) Listing contents in a directory - [ls, ls -l, ll]

ls: This command is used to list all the files and directory in the current directory.

ls -l or ll: This command is also used to list all the files and directories. Here you will get more details about the files and directories present in the current directory. You will see the permission set, creation date, file / directory size etc.

(2) Reading files in Linux - [cat, more, less]

cat: This command is used to display the contents of a file. You can read the file contents using the cat command.

more:

less:

(3) Manipulating files - [cp, mv, rm, mkdir]

cp: This command is used to copy files/directory.

cp –R: This command is used to copy directories recursively (copy all the files and folders inside the directory).

mv: This command is used to move the file or directory.

rm: This command is used to remove or delete files and directories.

mkdir: This command is used to create a new directory This will create a new directory - directory3.

(4) Please practice the following commands: (Also Practice Few more Commands)

tar, grep, find, ssh, diff, sort, pwd, gzip, ps, free, kill

(5) chmod (Changing Permissions)
chmod syntax : chmod [who] op-code permissions filename

The **who** argument tells chmod the user class and may be any of the following: u User, g Group, o Other, a All
op-code argument represents the operation to be performed by chmod :

+ add specified permissions
- removes indicated permissions
= assigns the indicated permissions

Examples :
chmod o+r-wx mydata.c (add read permission, remove write & execute for others on file mydata.c)
chmod go+wx file1.txt (Add write, execute for group and other)
chmod o-x file1.txt (remove execute permission for other)
chmod u=rwx,g=rw,o=x file1.txt (specific permissions for specified type of users)
chmod 761 file1.txt (rwx(4+2+1=7) for user , rw(4+2=6) for group and execute(1) for other)

(6) (a)Use the time and who commands in sequence (in one line) such that the output of time will display on the screen and the output of who will redirected to a file called myfile. Use the more command to check the contents of myfile.

(b) Explore process management commands like ps, top, glances, kill, pkill, pgrep etc. (Explore Few More also)

Submission Instructions:

- Submit your assignments from Moodle.
- Practice all the Linux commands provided above. Also, write the use of each command in one file. Write your Name and Roll No in each page.
- Attach the screen short of the output of each command after the description of command in the same pdf.
- Save all the above things in to one file and save as RollNo_Lab#.pdf (Example: CS20B2001_Lab1.pdf) and upload.
- Any form of plagiarism/copying from peer or internet sources will lead penalty.