

Author : Subham Pal (Siriuslight)

#### BASIC FILE/FOLDER COMMANDS

---

1. `cd` : Change directory  
Syntax : `cd <directoryurl>`
2. `ls` : list files and directories  
Syntax : `ls <options>`  
Options :
  - a : include hidden files(starting with dot).
  - l : detailed long list
  - i : print inode of each file
  - h : size in human readable
  - r : reverse sorting order
  - t : sort by modification time(newest first)
  - S : sort by file size(largest first)
3. `mv` : move a directory/file(can also used to rename)  
Syntax : `mv <initial location> <final location>`
4. `rm` : remove a file  
Syntax : `rm <options> <filename>`  
Options :
  - r : recursive remove
  - f : forceful
  - i : prompt before removal
  - v : verbose(show every action performed)
5. `mkdir` : create a new directory  
Syntax : `mkdir <options> <directoryname>`  
Options :
  - m : with permission
6. `rmdir` : remove a directory  
Syntax : `rmdir <directoryname>`
7. `touch` : create a new file and modify access and modification time  
Syntax : `touch <options> <filename>`  
Options :
  - a : change access time
  - m : change modification
8. `stat` : gives file/folder details  
Syntax : `stat <file/folder name>`
9. `alias` : list all alias
10. `cat` : concat/view data in a file  
Syntax : `cat > filename` (create a new file)  
`cat file1 >> file2` (append file1 data to file2)  
`cat filename` (view file contents)
11. `chmod` : change file permissions  
Syntax : `chmod <octal1> <octal2> <octal3> <filename>`  
`chmod <permission> filename`

#### USER/GROUP PERMISSIONS MANAGEMENT

---

12. `useradd` : create a new user  
Syntax : `useradd <options> <username>`  
Options :
  - b : set DEFAULT base directory
  - d : set base directory
  - g : set primary group
  - G : set secondary groups
  - s : set default shell
  - u : set userID
  - p : set password
  - e : set expiry date for user[YYYY-MM-DD]
13. `usermod` : modify user  
Syntax : `usermod <options> <username>`  
Options :
  - d : change base directory
  - g : change primary group
  - G : change list supplementary groups(separated by comma wi

thout spaces)

-s : change default shell  
 -u : change userID  
 -e : change expiry date for user[YYYY-MM-DD]

14. groupadd : create a new group  
 Syntax : groupadd <options> <group name>  
 Options : -g : set groupID  
           -p : set password
15. groupmod : modify group  
 Syntax : groupmod <options> <groupname>  
 Options : -g : modify groupID  
           -p : modify password
16. groups : prints all the groups the user belongs to  
 Syntax : groups <username>
17. id : show user details  
 Syntax : id <username>
18. ps : shows snapshot of processes  
 Syntax : ps <options>  
 Options : -e : list all processes  
           -p : snapshot of specific process by its PID.  
           -u : snapshot of processes created by a userID.  
           -l : long detailed format
19. kill : send a signal to a process  
 Syntax : kill <options> <PID>
20. nice : start a process with custom nice value  
 Syntax : nice -n <nice value> <process>
21. renice : modify the nice value of a running process  
 Syntax : renice -n <nice value> <option> <value>  
 Options : -g : value as groupID  
           -u : value as userID  
           -p : value as processID(default if no option is given)
22. pstree : show process tree  
 Syntax : pstree <option>  
 Options : -p : show PID as well
23. crontab : create, view and modify crontab files used for scheduling recurring tasks  
 Syntax : crontab <option>  
 Options : -l : view crontab file  
           -e : edit crontab file  
           -r : remove crontab file  
           -u : mention user name of crontab file owner  
  
 Syntax of each crontab entry.  
 <min> <hour> <day> <month> <year> command  
 Each out of five can be replaced by <\*> for every.
24. setfacl : set file access control list  
 Syntax : setfacl <option>  
 Options : -R : recursively apply to sub files and folder  
           -x : remove the facl of given entity
25. getfacl : prints all facl entries of the file.  
 Syntax : getfacl <filename>
26. Turn on/off firewall  
 Command : sudo systemctl stop/start/status firewalld
27. ifup : bring a network interface up.
28. ifdown : bring a network interface down.

- 29. mkfs : create file system on a device(also used for formiatting)  
Syntax : mkfs -t <filesystem> <device>
- 30. fsck : checks filesystem on a device for errors.  
Syntax : fsck <device>
- 31. df : shows file system disk space usage by a file  
Syntax : df <filename>  
If no filename is given disk usage of all mounted filesystem.
- 32. fuser : list the processes using a particular file.  
Syntax : fuser <option> <filename/foldername>  
Options: -k : kill all processes using the file.
- 33. telinit : change the run level(0-5) of system

TODO : gpasswd, umask, suid, guid, sticky-bit, groups, wget