

UNIX / LINUX BASIC COMMANDS

General commands:

Date, Cal, Man, Xclock, Ls, Exit, Poweroff, Reboot

Directory commands:

mkdir, rmdir, cd, pwd

File manipulation Editors commands:

Touch, cat, vi, gedit, cp, mv, rm.

User access & Identification commands:

Groupadd, Useradd, Passwd, Userdel, Groupdel, Chown, Chgrp, Su

File /Directory permissions commands:

Chmod, Umask

Process management commands:

Ps, Grep, Kill

Filter commands:

More, Less, Sort, Wc, Head, Tail, Find

Memory commands:

Du, Df

Network commands:

Ifconfig, Ping, Who

UNIX / LINUX COMMAND**Information Commands:****Date, Cal, Man, Xclock, Ls, Exit, Poweroff, Reboot****Date :-** Display date

date

Cal:- Display Calendar

cal

Xclock:- Display Clock

xclock

Clear: - to clear the screen

clear

Ls:- List of items# **ls** <optional> <file / dir / path>**Optional:**

-a --all (Hidden files)

-d --directory

-l --use a long listing format

-r --reverse

-R --recursive

-s --size

-t sort by modification time

ls * (* - All)# **ls** ?(? - one character)**Man(Help):-**syntax :- # **man** <command>eg:- # **man** ls**Exit:-**exit window or logout# **exit****Poweroff:-** Shutdown system#**poweroff****Reboot :-** Restart system#**reboot**

Directory commands:**mkdir, rmdir, cd, pwd****Mkdir**:- create new Directory

Syntax:-

```
# mkdir <dir>
# mkdir -p <dir1 path> <dir2 path>...
```

Eg:-

```
# mkdir /ram
# mkdir -p /ram/ram/ /ram/raj/ /ram/laxman/
```

Rmdir:- Remove Empty Directory

Syntax:-

```
# rmdir <dir>
```

Eg:-

```
# rmdir /ram/laxman/
```

Cd:- Change Directory

Syntax:-

```
# cd <dir path>
# cd ..
# cd <dir name>
```

Eg:-

```
# cd /ram/raj/
# cd ..
# cd raj
```

Pwd:- Present Working Directory

Syntax:-

```
# pwd
```

File manipulation commands:**Touch, cat, cp, mv, rm****Touch**:- Its create empty files

Syntax:-

```
# touch <f1> <f2> <f3>...
# touch <filename> {1..100}
```

Eg:-

```
# touch f1 f2 f3
# touch x{1..100}
```

Cat:- create new file, appending(added information into existed file) and copy

Syntax:-

```
# cat <f1> <f2> <f3>.....
# cat > filename
# cat >> filename
```

```
# cat f filename > filename
# cat filename >> filename
```

Eg:-

```
# cat f1 f2 f3
# cat > f1
# cat >> f1
# cat f1 > f2
# cat f1 f2 >> f3
```

Vi:- virtual editor

Syntax:-

```
# vi <filename>

esc + : wq!      (save and quit)
esc + : q!       (without save and quit)
esc + : x!       (save)
esc + i          (insert mode )
esc + yy         (line copy)
esc + <num> + yy  ( number of line copy)
esc + dd         (delete line)
esc + <num> + dd  (number of delete line)
esc + p          (paste)
esc + D          (delete end of the line from )
esc + o          (new line)
esc + r          (one character replace )
esc + R          (replace mode )
esc + : %s/<old word>/<new word>
```

Eg:-

```
# vi test.txt
```

Gedit :- Graphical Editor

syntax :-

```
# gedit <file name>
```

eg:-

```
# gedit test.txt
```

Cp(copy):- coping of file to file, file to directory, directory to directory

Syntax:-

```
# cp <old file name> <create file name>
# cp <filename> <dir>
# cp -r <dir> <dir>
```

Eg:-

```
# cp f3 z1
# cp z1 /ram/
```

```
# cp -r /ram/ /ram/raj/
```

Mv(move) :- Moving of file to file, file to directory, directory to directory and also rename File or Directory

Syntax:-

```
# mv <old file name> <new file name>
# mv <old dir name> <new dir name>
# mv <file> <dir>
# mv <exsit dir name> <to dir path>
```

Eg:-

```
# mv f1 xyz
# mv /ram/ /ramu/
# mv xyz /ramu/
# mv /ramu/raj/ /ramu/ram/
```

Rm(remove) :- Removing of file, directory

Syntax:-

```
# rm <f1> <f2> <f3>...
# rm -i <f1> <f2> <f3>...
# rm -if <f1> <f2> <f3>...
# rm -rf <f1> <dir1> <f2> <f3> ...
# rm <filename>{1..100}
```

Eg:-

```
# rm f1 f2
# rm -i f3...
# rm -if x1 x2 x3
# rm -rf x4 /ramu/ram/ x5 x6
# rm x{1..100}
```

User access & Identification commands:

Groupadd, Useradd, Passwd, Chown, Chgrp, Su, Userdel, Groupdel

Groupadd:- create new group

syntax:-

```
#groupadd <group name>
```

Eg:-

```
#groupadd dba
```

How find out group created or not

```
# cat /etc/group | grep dba
```

Useradd:- create new user

syntax:-

```
# useradd <user name>
```

eg:-

```
# useradd user1
```

How find out user created or not

```
# cat /etc/group | grep user1  
(or)
```

```
# id user1
```

Passwd :- Change and set password from existed user

syntax:- **#passwd** <users name>

eg:- **#passwd** user1

Chown :- Change the ownership to File or Directory

syntax: - **#chown** <user name> <file/dir name>

eg:- **#chown** user1 test.txt

Chgrp:- Change the group ship to File or Directory

syntax: - **# chgrp** <group name> <file/dir name>

eg:- **# chgrp** dba test.txt

Su :- Switching User

syntax:- **#su** - <user name>(' ' means login)

eg:- **# su** - user1

\$ exit

Userdel :- Delete existed user

syntax:- **#userdel** <user name>

eg:- **#userdel** user1

Groupdel:-Delete existed group

syntax:- **#groupdel** <group name>

Eg:- **#groupdel** dba

File /Directory permissions commands:**Chmod, Umask**

Chmod :- Change the file permissions Read, Write, Execute in user, group, other levels

sysntax:-

```
#chmod 755 <file (or) dir name>
```

```
#chmod -R 755 <file/dir>
```

```
#chmod u=rwx, g=rwx,o=rwx <file/dir>
```

```
#chmod u=rw,g=rw,o=rw <file/dir>
```

eg:-

```
#chmod 755 test.txt
```

```
#chmod -R 755 <file/dir>
```

```
#chmod u=rwx, g=rwx,o=rwx test.txt
```

```
#chmod u=rw,g= r,o= r test.txt
```

Note:-

	Read=4	Write=2	Execute=1
Where	u=user,	g=group,	o=others
(-R means With contains)			

Umask:- Set the default permission (system default permission 022)
#umask 022

NOTE:- $777 - 022 = 755$

Process management commands:

Ps, Grep, Kill

Ps:- Report a snapshot of the current processes.
ps -ef

Grep:- print lines matching a pattern
grep <search key>

Kill :- kill the session process
kill -9 <process_id>

Filter commands:

More, Less, Sort, Wc, Head, Tail, Find

More:-file perusal filter for current viewing

syntax :- # more <filename>
eg:- # more test

Less :-opposite of more
syntax :- # less <filename>
eg:- # less test

Sort :-sort lines of text files
syntax :- #sort <filename>
eg :- #sort test

Wc :-print the number of lines, words, and bytes in files
syntax :- #wc <optional> <filename>
eg :- #wc test
#wc -c test (-c --total number of characters)
#wc -l test (-l --total number of lines)
#wc -w test (-w --total number of words)

Head:- output the first part of files
syntax :- #head <filename>
#head -<lines> <filename>
eg:- #head test
#head -20 test

Tail :-output the last part of files

syntax :- **#tail** <filename>
 #tail -<lines> <filename>
eg:- **#tail** test
 #tail -20 test

Find :-search for files in a directory hierarchy
syntax :- **#find** <path> -name <filename>
eg:- **#find** /root -name test

Memory commands:

Df, Du

Df- report file system disk space usage
 # df
 # df -h
 # df -Th

Du:- estimate file space usage
syntax :- **# du** -sh <file dir>
eg:- **# du** -sh test /bin

Network commands:

Ifconfig, Ping, Who

Ifconfig:-configure a network interface
 # ifconfig eth0

Ping :- check whether the Connect to network hosts
 #ping <IP Address/host name>

Who - show who is logged on
 #who
 #who am i

Communication commands:**Mail, Mailx, Write, Talk, Wall, Mesg**

Mail - send and receive mail

#mail

Mailx- mailx - process messages

#mailx <user name>

Write - send a message to another user

#write (online)

Talk - talk to another user

#talk (online)

Wall - - send a message to everybody's terminal.

#wall (online)

Mesg - control write access to your terminal

#mesg

Link File Commands:

Relation between two files in unix they are 2 type link file

1) Hard Like Files

2) Soft Like Files

Ln:- make links between files

ln <f1> <f2>

ln f1 f2