

①

Linux

uname

print kernel name

uname

options

(-r, -V, -m, -o, -a)
release → version → OS → all

man

manual for any command

e.g man uname

hostname

print host name

whoami

Which user currently I am,
as each machine can
have many users.

sudo

command

Run command as a
root user.

sudo -i

login as root user.

tty

print filename from which
terminal is connected for input.

users

currently logged in users

adduser

username

add new user.

(2)

clear clear screen

id option user and group ids of user
(-u, -g, -G)

user id primary group id secondary group ids

groups show user groups.

su username switch the user.

exit exit current user.

this command
adds group
sudo to a
user.

sudo usermod -g -G username
modify the user append secondary group indication

sudo addgroup groupname create a group

change primary group of user usermod -g groupname username
primary group indication

delgroup groupname Delete group

deluser Delete user

less use -

frequent use -

-e denote special c use in e for

ctrl + d to exit

E.g
 $\frac{1}{3} =$
scale =
 $\frac{1}{3} =$

(3)

less use → useradd, userdel, groupadd, groupdel
are the friendly versions of
frequent use → adduser, deluser, addgroup, delgroup

sudo passwd username change the password

date Get and set date

cal For calender

echo Output in terminal

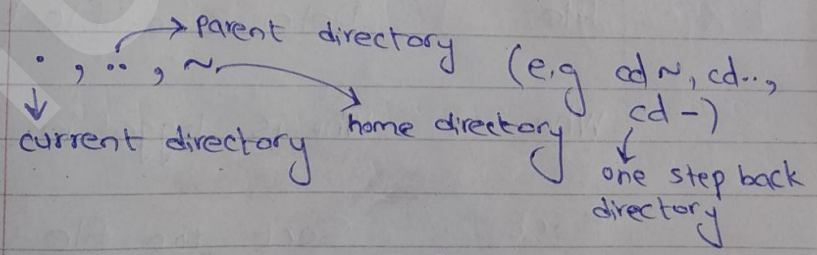
-e denote special character use in echo, like \t for tab.

e.g echo "Mudassir"
e.g2 echo -e "Danish\tFarooq"

pwd Print working directory

cd Catch directory

touch Create file



ctrl+D
to exit

bc

Basic calculator

E.g
 $\frac{1}{3} = 0$
scale = 2
 $\frac{1}{3} = 0.33$

scale = 2

How many digits require after point(.)

(4)

go to the folder, press
ctrl+h to
see hidden files

touch .filename.txt
↑
hidden file

head filename.txt Show top 10 lines
head -15 filename.txt

-F → follow
use for
live monitoring

tail filename.txt Last 10 lines
tail -F filename.txt

more , less (use for read file)
↓ ↓
can't scroll up can do up and down

Word count

wc filename (show line, words, characters)

cut -f 2 -d '.' filename
↓ field use delimiter instead of default TAB.
print selected part of file

File

Determine file type

Who

Who is logged in

Sort

Sort the file
e.g sort filename

-u option
for unique
fields only.

e.g
sort -o file1 file2 file3
↓
output the result in file 1

ctrl+d
end of line
command
ctrl+c
cancel

-a for
including
hidden

-x
for
rem

5

ctrl+d
end of line
command

ctrl+c
cancel

cat

Concatenate file and
print on standard output

Some e.g

cat > file.txt

→ redirecting the output

cat file.txt

cat < file.txt

→ redirecting file info to standard input

> denote standard output (terminal)

< denote standard input (mouse, keyboard)

cat >> file.txt

→ appending with previous data.

cat file1.txt file2.txt

pipe (|)

Output of one command
becomes input for another
for e.g ls | sort

-a for all
including
hidden files

ls -lh

human readable

long listing

List items in folder

mkdir -p PFolder/childFolder Make directory

→ create parent folder
if not already there

rmdir

Remove directory

-r option
for recursive
remove

rm

Remove file or directory

(6)

or directories

Ln Make link b/w files (Just like shortcut in Window)

e.g Ln -s ~/tmp/ ~/my-temp-dir

soft link (We cannot create hard link for directories in Linux.)

Eg of hard link for file

Ln test.txt ~/myfolder/file.txt

cp Copy file and folders
cp source destination

mv Move files/folders

It can also be used to rename the file.

E.g mv files/1 myfiles
Rename files to myfiles

4 r (read) chmod

2 w (write) Eg

1 X (execute) chmod

Change file modes

766 file1.txt
user group others

Sticky bit (if we add 1 before 766 above, then no other users of same group can remove the file)

chmod 1766 file.txt

setuid(4)
setgid(2)
sticky(1)

777
022

755
644

change
uname
gname

(7)

setuid(4)

setgid

Use to set the fixed groups for files

setgid(2)

Eg:

sticky(1)

chmod 2777

Foldername/

All files in this folder now have a same group, from where the chmod command was executed.

setuid

Use to give the main user's access to other users.

Eg:

chmod 4777 filename

which

Use to locate a command

Eg which ls OR which passwd

umask

Use to set default file permissions

777

022

umask 022

755 for folder

mkdir f1

644 for files

mkdir f1.txt (by default, file has no execute permissions)

chown username filename

Use to change the user of file

chgrp groupname file

Use to change the group of file.

chown username:groupname filename

change username and groupname at once.

(8)

mount Read or access CDs,
E.g hard disk's data
mount Ubuntuimg.iso myfolder/

mountpoint myfolder Is this folder
 a mounted one
 or not.

Umount Unmount filesystem

du -h Show disk usage of
 files and folders
 ↙ ↘
 human current
 readable folder

df -h Shows amount of
 Disk space and available
 space of each filesystem.

lsblk List block devices

fdisk -l Use to manipulate
 ↙ List disk partition tables.

gzip file.txt Compress file

gunzip file.txt.gz Decompress file

(9)

bzip2

More compressable
than gzip
Uncompress

bunzip2

zip -r Newfolder.zip oldfolder

recursively → new folder's name
zip folder's name

Zip is use to compress
the folders

unzip Newfolder.zip, Unzip the
folder

tar zcvf file.tar.gz filename
↓ ↓ ↓
zip create verbose (for
an archive compress)

tar zxvf file.tar.gz
↓
extract (for
decompress)