

```
#exit [To exit from terminal]
$put clear [to clear the screen]
$cal 7(month) 2022(year)
$who
$ps
```

Files and directories stored in the current directory
root@ubuntu:~# ls

Which are files and which are directories. For ordinary files, no character is appended. For special files, a character such as !, @, or # is appended to the filename
root@ubuntu:~# ls -F

```
root@ubuntu:~# ls -l
jisu@jisu-Vostro-3250:~$ ls -A dir1
dir11 dir3 dir4
```

```
ls -i shows the inode number
ls -ld dir1 dir2 [-d for directory attributes]
$ls
$ls chap*
$ls -l chap*
ls chap?
ls chap??
ls .???* match all hidden files with atleast 3 characters after dot
ls emp*lst
ls -a -l -t can be combined into ls -alt
ls -lat chap01 chap02
```

```
jisu@jisu-Vostro-3250:~$
```

The first character signifies the type of the file

d for directory

l for symbolic link

- for normal file

```
lrwxrwxrwx 1 root root 19 May 16 2018 - -> /etc/cron.d/sysstat
```

```
drwxr-xr-x 5 root root 4096 Nov 4 2021 Desktop
```

```
drwxr-xr-x 2 root root 4096 Nov 4 2021 Documents
```

```
drwxr-xr-x 2 root root 4096 Jun 14 2021 Downloads
```

```
-rw-r--r-- 1 root root 0 Jun 24 2020 file2
```

```
drwxr-xr-x 3 root root 4096 May 1 2018 flaskproj
```

```
-rw-r--r-- 1 root root 12 Apr 28 2018 index.html
```

```
-rw-r--r-- 1 root root 178 Sep 26 2019 meterkm.c
```

```
drwxr-xr-x 2 root root 4096 May 27 2021 Music
```

```
drwxrwxrwx 3 root root 4096 May 1 2018 newproj
```

```

drwxr-xr-x 6 root root 4096 Oct 27 2019 ns-allinone-3.27
-rw-r--r-- 1 root root 1601 Oct 29 2019 Output3.txt
drwxr-xr-x 2 root root 4096 Jun 14 2021 Pictures
drwxr-xr-x 2 root root 4096 Jul 2 2017 Public
-rwxrwxrwx 1 root root 464 May 16 2018 sar1.txt
-rw-r--r-- 1 root root 1042 May 17 2018 sarData16.txt
-rw-r--r-- 1 root root 20441 May 16 2018 sar.data.txt
-rw-r--r-- 1 root root 20441 May 16 2018 sar.wnginx.txt
-rw-r--r-- 1 root root 12 Jun 24 2020 sourceF.txt
drwxr-xr-x 2 root root 4096 Jul 2 2017 Templates
drwxr-xr-x 3 root root 4096 May 1 2018 venvs
drwxr-xr-x 2 root root 4096 Jul 2 2017 Videos
-rw-r--r-- 1 root root 4702 May 16 2018 www5430.txt
root@ubuntu:~#

```

Permission:

User (_ _ _) Group (_ _ _) other /all (_ _ _)
 Read(r) 4 Write(w) 2 execute(x) (1)

$rw: 4+2+1=7$

$rw: 4+2=6$

$wx:(2+1)=3$

$rx:(4+1)=5$



Create a file and change its permission

```

history > myfile1.txt
root@ubuntu:~# ls -l myfile1.txt
-rw-r--r-- 1 root root 30001 Aug 2 21:18 myfile1.txt
root@ubuntu:~# chmod 777 myfile1.txt
root@ubuntu:~# ls -l myfile1.txt
-rwxrwxrwx 1 root root 30001 Aug 2 21:18 myfile1.txt
root@ubuntu:~#

```

```

root@ubuntu:~# chmod u-r myfile1.txt
root@ubuntu:~# ls -l myfile1.txt
--wxrwxrwx 1 root root 30001 Aug 2 21:18 myfile1.txt
root@ubuntu:~#

```

```

root@ubuntu:~# chmod ug+r myfile1.txt
root@ubuntu:~# ls -l myfile1.txt
-rwxrwxrwx 1 root root 30001 Aug 2 21:18 myfile1.txt
root@ubuntu:~#

```

/////Change permission///

chmod a+x file1.txt

a means ugo

chmod -R a+x dir1 [all documents under directory must be given permission]

chmod -R a+x . [on all hidden files]

chmod -R a+x * [not on all hidden files]

chown tuhin file1 [login as root]

/////////////////See the contents of a file

Just 10 lines from beginning

root@ubuntu:~# head myfile1.txt www5430.txt

==> myfile1.txt <==

1000 ls

1001 ./waf --run third --visualize

1002 ./waf --run wifi-simple-adhoc10 --visualize

1003 ./waf --run third --command-template="nCsm a 2 "

1004 ./waf --run third --command-template="%s ncsma 2 "

1005 \$./waf --run '<ns3-program> --arg1=value1 --arg2=value2 ...'

1006 \$./waf --run 'third --ncsma=2 --nwifi=1'

1007 ./waf --run 'third --ncsma=2 --nwifi=1'

1008 ./waf --run 'third --nCsm a=3 --nWifi=1'

1009 \$./waf --run test-runner --command-template="%s --help"

==> www5430.txt <==

Print Along with line number

cat -n hosts

//////////Calculator//////////

Bc

200+300

Ctrl+d

//////////About Your OS

uname -a

////////////////////////////////////

Word count

root@ubuntu:~# wc myfile1.txt

1000 3209 30001 myfile1.txt

lines words char

```
root@ubuntu:~# wc myfile1.txt
1000 3209 30001 myfile1.txt
root@ubuntu:~# wc -l myfile1.txt
1000 myfile1.txt
root@ubuntu:~# wc -m myfile1.txt
30001 myfile1.txt
root@ubuntu:~# wc -w myfile1.txt
3209 myfile1.txt
root@ubuntu:~#
```

```
wc note1.txt
wc note1.txt ; ls -l > file1.txt
what is cp [or we can use man cp]
```

//////////About Files

```
mkdir dir1
mkdir dir1 dir2 dir3
mkdir dir1 dir1/dir11 dir11/dir111 Create directory tree
mkdir -p dir1/dir2/dir3
```

//////////

Create Directory

```
root@ubuntu:~# mkdir mydir1
root@ubuntu:~# cd mydir1/
root@ubuntu:~/mydir1# echo "Today is Saturday" > file1
root@ubuntu:~/mydir1# ls -l
total 4
-rw-r--r-- 1 root root 18 Aug 2 21:31 file1
root@ubuntu:~/mydir1#
root@ubuntu:~/mydir1# touch file2
root@ubuntu:~/mydir1# cat file1
Today is Saturday
root@ubuntu:~/mydir1# cat file2
root@ubuntu:~/mydir1#
```

```
root@ubuntu:~/mydir1# cp file1 file2
root@ubuntu:~/mydir1# cat file2
Today is Saturday
root@ubuntu:~/mydir1#
```

/////Copying inside a directory/////

```
root@ubuntu:~/mydir1# mkdir mydir2
root@ubuntu:~/mydir1# cp file1 mydir2/
```

```
root@ubuntu:~/mydir1# cd mydir2/
root@ubuntu:~/mydir1/mydir2# ls
file1
root@ubuntu:~/mydir1/mydir2# cat file1
Today is Saturday
root@ubuntu:~/mydir1/mydir2#
```

```
root@ubuntu:~/mydir1/mydir2# cd ..
root@ubuntu:~/mydir1#
root@ubuntu:~/mydir1/mydir2# cd ..
root@ubuntu:~/mydir1# cd /
root@ubuntu:/#
mkdir -p /tmp/ch04/test1 multilevel directories creation
```

```
////////Prompt/////
root@ubuntu:~# cp -i file2 my
mydir1/ myfile1.txt
root@ubuntu:~# cp -i file2 mydir1/
cp: overwrite 'mydir1/file2'? y
root@ubuntu:~#
cp -r dir1 dir2
////////Rename with mv////////
```

```
root@ubuntu:~# cd mydir1/
root@ubuntu:~/mydir1# ls
file1 file2 mydir2
```

```
root@ubuntu:~/mydir1# mv file1 file_new1
root@ubuntu:~/mydir1# ls
file2 file_new1 mydir2
root@ubuntu:~/mydir1#
```

```
root@ubuntu:~/mydir1#
Move directory not rename
jisu@jisu-Vostro-3250:~$ mkdir dir3
jisu@jisu-Vostro-3250:~$ cp -r dir3 dir1
jisu@jisu-Vostro-3250:~$ cd dir1
jisu@jisu-Vostro-3250:~/dir1$ ls
dir11 dir3
jisu@jisu-Vostro-3250:~/dir1$ cd ..
jisu@jisu-Vostro-3250:~$ mkdir dir4
jisu@jisu-Vostro-3250:~$ mv dir3 dir4 dir1
jisu@jisu-Vostro-3250:~$ ls
```

//////////Delete Directory

rm chap01 chap02

rm "chap*" removes only chap*

rm chap* removes chap0 1 2...

jisu@jisu-Vostro-3250:~\$ mkdir dir7

jisu@jisu-Vostro-3250:~\$ rm -r dir7

jisu@jisu-Vostro-3250:~\$ mkdir dir4

jisu@jisu-Vostro-3250:~\$ rmdir dir4

jisu@jisu-Vostro-3250:~/Desktop/folder1\$ mkdir folder2

jisu@jisu-Vostro-3250:~/Desktop/folder1\$ cd folder2/

jisu@jisu-Vostro-3250:~/Desktop/folder1/folder2\$ cd ..

jisu@jisu-Vostro-3250:~/Desktop/folder1\$ cd ..

jisu@jisu-Vostro-3250:~/Desktop\$ cd folder_dest

bash: cd: folder_dest: No such file or directory

jisu@jisu-Vostro-3250:~/Desktop\$ mkdir folder_3

jisu@jisu-Vostro-3250:~/Desktop\$ touch folder_3/file4.txt

jisu@jisu-Vostro-3250:~/Desktop\$ echo "Hello world" >> folder

folder1/ folder_3/

jisu@jisu-Vostro-3250:~/Desktop\$ echo "Hello world" >> folder_3/file4.txt

jisu@jisu-Vostro-3250:~/Desktop\$ mv folder_3/file4.txt folder

folder1/ folder_3/

jisu@jisu-Vostro-3250:~/Desktop\$ mv folder_3/file4.txt folder1/

jisu@jisu-Vostro-3250:~/Desktop\$

rmdir dir1

rm -R dir1

cd dir1

pwd

absolute pathname : starts with /home/Desktop/dir1

relative pathname just the current directory dir

Executable file /bin/date

cd .. goes to parent

cd ../.. goes to grandparent

cd / goes to root

cp ../dir1/file1 . [copy the file1 to current dir .]

//////////

//////////vi things

:x

:w

:wq

:q

:q! don't save

x deletes text

dd deletes line

6dd 5lines below+Current line