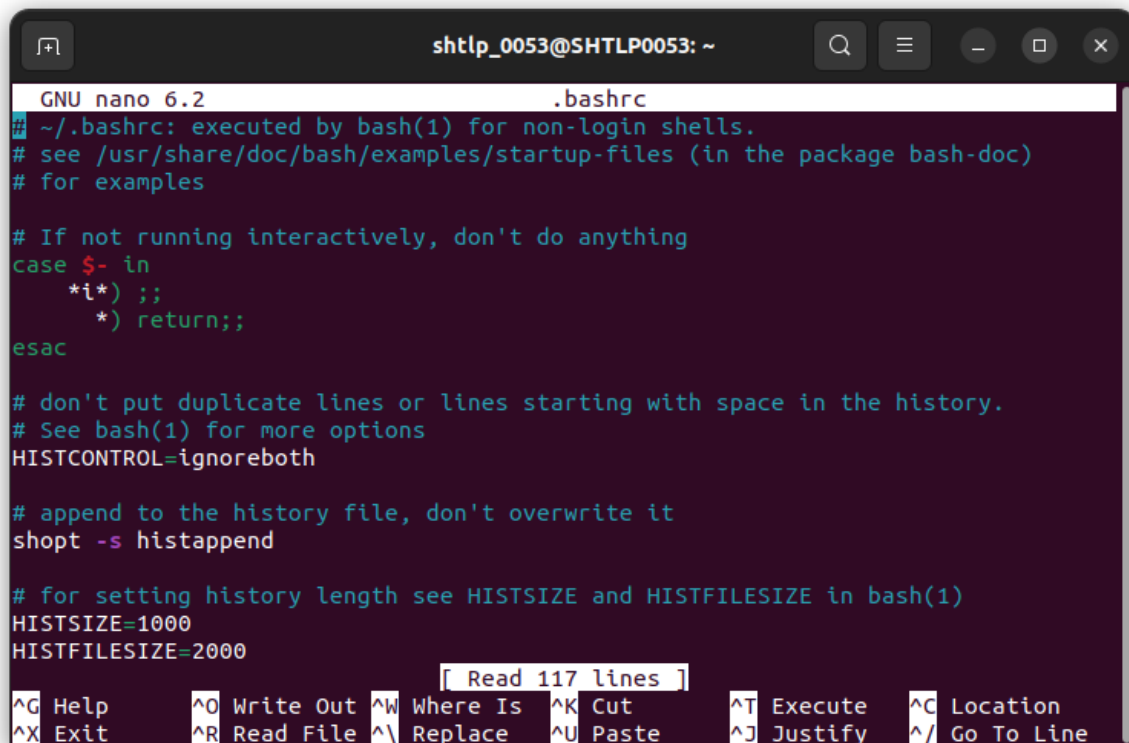


## Linux Command Line 3

1).bashrc file-The **.bashrc** file is a script file that's executed when a user logs in. The file itself contains a series of configurations for the terminal session.



The screenshot shows a terminal window titled 'shtlp\_0053@SHTLP0053: ~'. The editor is GNU nano 6.2, editing the file .bashrc. The content of the file is as follows:

```
#!/.bashrc: executed by bash(1) for non-login shells.
# see /usr/share/doc/bash/examples/startup-files (in the package bash-doc)
# for examples

# If not running interactively, don't do anything
case $- in
    *i*) ;;
    *) return;;
esac

# don't put duplicate lines or lines starting with space in the history.
# See bash(1) for more options
HISTCONTROL=ignoreboth

# append to the history file, don't overwrite it
shopt -s histappend

# for setting history length see HISTSIZE and HISTFILESIZE in bash(1)
HISTSIZE=1000
HISTFILESIZE=2000
```

At the bottom of the window, there is a status bar with the text '[ Read 117 lines ]' and a table of keyboard shortcuts:

<b>^G</b> Help	<b>^O</b> Write Out	<b>^W</b> Where Is	<b>^K</b> Cut	<b>^T</b> Execute	<b>^C</b> Location
<b>^X</b> Exit	<b>^R</b> Read File	<b>^_\</b> Replace	<b>^U</b> Paste	<b>^J</b> Justify	<b>^/_</b> Go To Line

2)du,df,free: used to view free resources and used resources.

3) df -h:

For human readable the disc memory we use h flag

```
shtlp_0053@SHTLP0053: ~  
shtlp_0053@SHTLP0053:~$ pwd  
/home/shtlp_0053  
shtlp_0053@SHTLP0053:~$ df  
Filesystem      1K-blocks      Used Available Use% Mounted on  
tmpfs            1516612        2196   1514416    1% /run  
/dev/nvme0n1p2 490617784 14728324 450893980    4% /  
tmpfs            7583048          0   7583048    0% /dev/shm  
tmpfs             5120           4     5116    1% /run/lock  
/dev/nvme0n1p1  523248        5364   517884    2% /boot/efi  
tmpfs            1516608        208   1516400    1% /run/user/1000  
shtlp_0053@SHTLP0053:~$ df -h  
Filesystem      Size  Used Avail Use% Mounted on  
tmpfs            1.5G  2.2M  1.5G   1% /run  
/dev/nvme0n1p2 468G   15G  431G   4% /  
tmpfs            7.3G    0  7.3G   0% /dev/shm  
tmpfs            5.0M  4.0K  5.0M   1% /run/lock  
/dev/nvme0n1p1 511M  5.3M  506M   2% /boot/efi  
tmpfs            1.5G  216K  1.5G   1% /run/user/1000  
shtlp_0053@SHTLP0053:~$
```

4)du: is used to estimate and display disc space used by files

5)du -h

```
shtlp_0053@SHTLP0053: ~/Documents  
4      ./names/tom  
4      ./names/john  
4      ./names/mark  
4      ./names/bob  
28     ./names  
168    .  
shtlp_0053@SHTLP0053:~/Desktop$ cd ..  
shtlp_0053@SHTLP0053:~$ cd ..  
shtlp_0053@SHTLP0053:/home$ ls  
shtlp_0053  
shtlp_0053@SHTLP0053:/home$ cd shtlp_0053/  
shtlp_0053@SHTLP0053:~$ ls  
ashish      file1.txt      file.txt      myscript.sh.save  Public  
Desktop     file1.txt.save linuxcommandline1.sh  names             snap  
dir         file2          Music         new              Templates  
Downloads   file2.txt      myfirstfile.sh  out1.txt         text.txt  
file1       file3          myfirstfile.txt Pictures          Videos  
file1       file3.txt      myscript.sh     prabha  
shtlp_0053@SHTLP0053:~$ cd Documents  
shtlp_0053@SHTLP0053:~/Documents$ du  
20      .  
shtlp_0053@SHTLP0053:~/Documents$ du -h  
20K     .  
shtlp_0053@SHTLP0053:~/Documents$
```

6)du -sh:

s flag is used for summary

```
shtlp_0053@SHTLP0053: ~/Documents
4      ./names/mark
4      ./names/bob
28     ./names
168    .
shtlp_0053@SHTLP0053:~/Desktop$ cd ..
shtlp_0053@SHTLP0053:~$ cd ..
shtlp_0053@SHTLP0053:/home$ ls
shtlp_0053
shtlp_0053@SHTLP0053:/home$ cd shtlp_0053/
shtlp_0053@SHTLP0053:~$ ls
ashish      file1.txt      file.txt      myscript.sh.save  Public
Desktop     file1.txt.save linuxcommandline1.sh  names             snap
dir          file2          Music          new               Templates
Documents   file2.txt      myfirstfile.sh  out1.txt          text.txt
Downloads   file3          myfirstfile.txt  Pictures          Videos
file1       file3.txt      myscript.sh     prabha

shtlp_0053@SHTLP0053:~$ cd Documents
shtlp_0053@SHTLP0053:~/Documents$ du
20      .
shtlp_0053@SHTLP0053:~/Documents$ du -h
20K     .
shtlp_0053@SHTLP0053:~/Documents$ du -sh
20K     .
shtlp_0053@SHTLP0053:~/Documents$
```

7)sudo du -sh: we can also use du command with sudo

8)free-is used to show total amount of free and used memory in the system

```
shtlp_0053@SHTLP0053: ~
shtlp_0053@SHTLP0053:~$ free
              total        used        free      shared  buff/cache   available
Mem:          15166096       3576180       9138388        164784        2451528       11127976
Swap:           2097148           0        2097148

shtlp_0053@SHTLP0053:~$
```

9)free -tera:tera is used for tera byte

```
shtlp_0053@SHTLP0053: ~  
shtlp_0053@SHTLP0053:~$ free -m  
              total        used          free      shared  buff/cache   available  
Mem:          14810         3449          8967         159        2394       10911  
Swap:           2047           0          2047  
shtlp_0053@SHTLP0053:~$ free -g  
              total        used          free      shared  buff/cache   available  
Mem:             14           3           8           0           2          10  
Swap:             1           0           1  
shtlp_0053@SHTLP0053:~$ free -tera  
free: invalid option -- 'e'  
  
Usage:  
  free [options]  
  
Options:  
  -b, --bytes          show output in bytes  
  --kilo               show output in kilobytes  
  --mega               show output in megabytes  
  --giga               show output in gigabytes  
  --tera               show output in terabytes  
  --peta               show output in petabytes  
  -k, --kibi           show output in kibibytes  
  -m, --mebi           show output in mebibytes  
  -g, --gibi           show output in gibibytes
```

10) du -sh folder name: you can even give the folder name to du, df and free command

11) watch -n 1 free -m:

We use n flag to increase the frequency.

```
shtlp_0053@SHTLP0053: ~  
shtlp_0053@SHTLP0053:~$ watch -n 1 free -m
```

```
shtlp_0053@SHTLP0053: ~  
Every 1.0s: free -m SHTLP0053: Sat Jun 24 10:31:46 2023  
Mem:          total      used      free      shared  buff/cache   available  
Swap:          2047         0      2047          167       2406      10745
```

12) head - this command is used to show starting 10 lines

13) tail- this command is used to show last 10 lines

```
shtlp_0053@SHTLP0053: ~  
head: error reading 'Downloads': Is a directory  
shtlp_0053@SHTLP0053:~$ head out1.txt  
total 36  
drwxr-xr-x 4 shtlp_0053 shtlp_0053 4096 Jun 22 12:45 Desktop  
drwxr-xr-x 2 shtlp_0053 shtlp_0053 4096 Jun 21 16:51 Documents  
drwxr-xr-x 2 shtlp_0053 shtlp_0053 4096 Jun 21 22:28 Downloads  
drwxr-xr-x 2 shtlp_0053 shtlp_0053 4096 Jun 12 18:49 Music  
drwxr-xr-x 3 shtlp_0053 shtlp_0053 4096 Jun 21 15:04 Pictures  
drwxr-xr-x 2 shtlp_0053 shtlp_0053 4096 Jun 12 18:49 Public  
drwx----- 6 shtlp_0053 shtlp_0053 4096 Jun 21 12:04 snap  
drwxr-xr-x 2 shtlp_0053 shtlp_0053 4096 Jun 12 18:49 Templates  
drwxr-xr-x 3 shtlp_0053 shtlp_0053 4096 Jun 21 23:37 Videos  
shtlp_0053@SHTLP0053:~$ tail out1.txt  
drwxr-xr-x 4 shtlp_0053 shtlp_0053 4096 Jun 22 12:45 Desktop  
drwxr-xr-x 2 shtlp_0053 shtlp_0053 4096 Jun 21 16:51 Documents  
drwxr-xr-x 2 shtlp_0053 shtlp_0053 4096 Jun 21 22:28 Downloads  
drwxr-xr-x 2 shtlp_0053 shtlp_0053 4096 Jun 12 18:49 Music  
drwxr-xr-x 3 shtlp_0053 shtlp_0053 4096 Jun 21 15:04 Pictures  
drwxr-xr-x 2 shtlp_0053 shtlp_0053 4096 Jun 12 18:49 Public  
drwx----- 6 shtlp_0053 shtlp_0053 4096 Jun 21 12:04 snap  
drwxr-xr-x 2 shtlp_0053 shtlp_0053 4096 Jun 12 18:49 Templates  
drwxr-xr-x 3 shtlp_0053 shtlp_0053 4096 Jun 21 23:37 Videos  
-rw-rw-r-- 1 shtlp_0053 shtlp_0053 0 Jun 22 14:01 out.txt  
shtlp_0053@SHTLP0053:~$
```

14) head -n3 nameoffile:

I want to read only starting three line

```
shtlp_0053@SHTLP0053: ~  
drwxr-xr-x 3 shtlp_0053 shtlp_0053 4096 Jun 21 15:04 Pictures  
drwxr-xr-x 2 shtlp_0053 shtlp_0053 4096 Jun 12 18:49 Public  
drwx----- 6 shtlp_0053 shtlp_0053 4096 Jun 21 12:04 snap  
drwxr-xr-x 2 shtlp_0053 shtlp_0053 4096 Jun 12 18:49 Templates  
drwxr-xr-x 3 shtlp_0053 shtlp_0053 4096 Jun 21 23:37 Videos  
shtlp_0053@SHTLP0053:~$ tail out1.txt  
drwxr-xr-x 4 shtlp_0053 shtlp_0053 4096 Jun 22 12:45 Desktop  
drwxr-xr-x 2 shtlp_0053 shtlp_0053 4096 Jun 21 16:51 Documents  
drwxr-xr-x 2 shtlp_0053 shtlp_0053 4096 Jun 21 22:28 Downloads  
drwxr-xr-x 2 shtlp_0053 shtlp_0053 4096 Jun 12 18:49 Music  
drwxr-xr-x 3 shtlp_0053 shtlp_0053 4096 Jun 21 15:04 Pictures  
drwxr-xr-x 2 shtlp_0053 shtlp_0053 4096 Jun 12 18:49 Public  
drwx----- 6 shtlp_0053 shtlp_0053 4096 Jun 21 12:04 snap  
drwxr-xr-x 2 shtlp_0053 shtlp_0053 4096 Jun 12 18:49 Templates  
drwxr-xr-x 3 shtlp_0053 shtlp_0053 4096 Jun 21 23:37 Videos  
-rw-rw-r-- 1 shtlp_0053 shtlp_0053 0 Jun 22 14:01 out.txt  
shtlp_0053@SHTLP0053:~$ head -m3 out1.txt  
head: invalid option -- 'm'  
Try 'head --help' for more information.  
shtlp_0053@SHTLP0053:~$ head -n3 out1.txt  
total 36  
drwxr-xr-x 4 shtlp_0053 shtlp_0053 4096 Jun 22 12:45 Desktop  
drwxr-xr-x 2 shtlp_0053 shtlp_0053 4096 Jun 21 16:51 Documents  
shtlp_0053@SHTLP0053:~$
```

15) head file1 file2

```
shtlp_0053@SHTLP0053: ~  
shtlp_0053@SHTLP0053:~$ ls  
ashish      file1.txt      file.txt      myscript.sh.save  Public  
Desktop     file1.txt.save linuxcommandline1.sh names             snap  
dir         file2          Music         new              Templates  
Documents   file2.txt      myfirstfile.sh out1.txt          text.txt  
Downloads   file3          myfirstfile.txt Pictures           Videos  
file1       file3.txt      myscript.sh   prabha  
shtlp_0053@SHTLP0053:~$ head file1.txt file2  
==> file1.txt <==  
line1 list1  
line2 kist 2  
  
==> file2 <==  
list2 line2  
list4 line4  
shtlp_0053@SHTLP0053:~$
```

16) find - to used to search a file in data hierarchy  
Find directory -name filename

```
shtlp_0053@SHTLP0053: ~  
shtlp_0053@SHTLP0053:~$ ls  
ashish      file1.txt      file.txt      myscript.sh.save  Public  
Desktop     file1.txt.save linuxcommandline1.sh names             snap  
dir         file2          Music         new              Templates  
Documents   file2.txt      myfirstfile.sh out1.txt          text.txt  
Downloads   file3          myfirstfile.txt Pictures           Videos  
file1       file3.txt      myscript.sh   prabha  
shtlp_0053@SHTLP0053:~$ pwd  
/home/shtlp_0053  
shtlp_0053@SHTLP0053:~$ ls  
ashish      file1.txt      file.txt      myscript.sh.save  Public  
Desktop     file1.txt.save linuxcommandline1.sh names             snap  
dir         file2          Music         new              Templates  
Documents   file2.txt      myfirstfile.sh out1.txt          text.txt  
Downloads   file3          myfirstfile.txt Pictures           Videos  
file1       file3.txt      myscript.sh   prabha  
shtlp_0053@SHTLP0053:~$ find /home/shtlp_0053 -name myscript.sh  
/home/shtlp_0053/myscript.sh  
find: '/home/shtlp_0053/Desktop/image': Permission denied  
shtlp_0053@SHTLP0053:~$ sudo find /home/shtlp_0053 -name myscript.sh  
[sudo] password for shtlp_0053:  
/home/shtlp_0053/myscript.sh  
shtlp_0053@SHTLP0053:~$
```

17) wc file: no of words and character in the file

```
shtlp_0053@SHTLP0053: ~  
shtlp_0053@SHTLP0053:~$ wc file1  
1  4 23 file1  
shtlp_0053@SHTLP0053:~$
```

18)-cal: is used to show calender

```
shtlp_0053@SHTLP0053: ~  
The following NEW packages will be installed:  
  ncal  
0 upgraded, 1 newly installed, 0 to remove and 395 not upgraded.  
Need to get 20.2 kB of archives.  
After this operation, 69.6 kB of additional disk space will be used.  
Get:1 http://in.archive.ubuntu.com/ubuntu jammy/universe amd64 ncal amd64 12.1.7  
+nmu3ubuntu2 [20.2 kB]  
Fetched 20.2 kB in 1s (19.5 kB/s)  
Selecting previously unselected package ncal.  
(Reading database ... 162421 files and directories currently installed.)  
Preparing to unpack .../ncal_12.1.7+nmu3ubuntu2_amd64.deb ...  
Unpacking ncal (12.1.7+nmu3ubuntu2) ...  
Setting up ncal (12.1.7+nmu3ubuntu2) ...  
Processing triggers for man-db (2.10.2-1) ...  
shtlp_0053@SHTLP0053:~$ cal  
    June 2023  
Su Mo Tu We Th Fr Sa  
          1  2  3  
 4  5  6  7  8  9 10  
11 12 13 14 15 16 17  
18 19 20 21 22 23 24  
25 26 27 28 29 30  
  
shtlp_0053@SHTLP0053:~$
```



```

shtlp_0053@SHTLP0053: ~
shtlp_0053@SHTLP0053:~$ ncal
    June 2023
Su    4 11 18 25
Mo     5 12 19 26
Tu     6 13 20 27
We     7 14 21 28
Th    1  8 15 22 29
Fr    2  9 16 23 30
Sa    3 10 17 24
shtlp_0053@SHTLP0053:~$ cal 2018
    2018
    January          February          March
Su Mo Tu We Th Fr Sa Su Mo Tu We Th Fr Sa Su Mo Tu We Th Fr Sa
   1  2  3  4  5  6    4  5  6  7  8  9 10    4  5  6  7  8  9 10
  7  8  9 10 11 12 13 11 12 13 14 15 16 17 11 12 13 14 15 16 17
14 15 16 17 18 19 20 18 19 20 21 22 23 24 18 19 20 21 22 23 24
21 22 23 24 25 26 27 25 26 27 28          25 26 27 28 29 30 31
28 29 30 31

    April            May              June
Su Mo Tu We Th Fr Sa Su Mo Tu We Th Fr Sa Su Mo Tu We Th Fr Sa
   1  2  3  4  5  6    1  2  3  4  5    3  4  5  6  7  8  9
   8  9 10 11 12 13 14    6  7  8  9 10 11 12    8  9

```

```

    8  9 10 11 12 13 14    6  7  8  9 10 11 12    3  4  5  6  7  8  9
15 16 17 18 19 20 21    13 14 15 16 17 18 19    10 11 12 13 14 15 16
22 23 24 25 26 27 28    20 21 22 23 24 25 26    17 18 19 20 21 22 23
29 30          27 28 29 30 31    24 25 26 27 28 29 30

    July            August            September
Su Mo Tu We Th Fr Sa Su Mo Tu We Th Fr Sa Su Mo Tu We Th Fr Sa
   1  2  3  4  5  6  7    1  2  3  4    2  3  4  5  6  7  8
   8  9 10 11 12 13 14    5  6  7  8  9 10 11    9 10 11 12 13 14 15
15 16 17 18 19 20 21    12 13 14 15 16 17 18    16 17 18 19 20 21 22
22 23 24 25 26 27 28    19 20 21 22 23 24 25    23 24 25 26 27 28 29
29 30 31          26 27 28 29 30 31    30

    October          November          December
Su Mo Tu We Th Fr Sa Su Mo Tu We Th Fr Sa Su Mo Tu We Th Fr Sa
   1  2  3  4  5  6    1  2  3    2  3  4  5  6  7  8
   7  8  9 10 11 12 13    4  5  6  7  8  9 10    9 10 11 12 13 14 15
14 15 16 17 18 19 20    11 12 13 14 15 16 17    16 17 18 19 20 21 22
21 22 23 24 25 26 27    18 19 20 21 22 23 24    23 24 25 26 27 28 29
28 29 30 31          25 26 27 28 29 30    30 31
shtlp_0053@SHTLP0053:~$

```

19)date : display date and time

```
shtlp_0053@SHTLP0053: ~  
shtlp_0053@SHTLP0053:~$ date -s  
date: option requires an argument -- 's'  
Try 'date --help' for more information.  
shtlp_0053@SHTLP0053:~$ date  
Saturday 24 June 2023 11:38:26 AM IST  
shtlp_0053@SHTLP0053:~$
```

20)command1 ; command2: how to run multiple terminal command

```
shtlp_0053@SHTLP0053: ~  
shtlp_0053@SHTLP0053:~$ ls ; pwd  
ashish      file1.txt      file.txt      myscript.sh.save  Public  
Desktop     file1.txt.save linuxcommandline1.sh names             snap  
dir          file2          Music         new              Templates  
Documents   file2.txt      myfirstfile.sh out1.txt          text.txt  
Downloads   file3          myfirstfile.txt Pictures           Videos  
file1       file3.txt      myscript.sh   prabha  
/home/shtlp_0053  
shtlp_0053@SHTLP0053:~$
```

```
shtlp_0053@SHTLP0053: ~  
shtlp_0053@SHTLP0053:~$ date ; cal ;pwd  
Saturday 24 June 2023 11:41:53 AM IST  
June 2023  
Su Mo Tu We Th Fr Sa  
          1  2  3  
 4  5  6  7  8  9 10  
11 12 13 14 15 16 17  
18 19 20 21 22 23 24  
25 26 27 28 29 30  
  
/home/shtlp_0053  
shtlp_0053@SHTLP0053:~$
```

21)command1 && command2: how to run multiple terminal command

```
shtlp_0053@SHTLP0053: ~  
shtlp_0053@SHTLP0053:~$ ls && pwd  
ashish      file1.txt      file.txt      myscript.sh.save  Public  
Desktop     file1.txt.save linuxcommandline1.sh names             snap  
dir         file2         Music         new              Templates  
Documents   file2.txt     myfirstfile.sh out1.txt          text.txt  
Downloads   file3         myfirstfile.txt Pictures           Videos  
file1       file3.txt     myscript.sh   prabha  
/home/shtlp_0053  
shtlp_0053@SHTLP0053:~$
```

22)ls || pwd : if first command go successful then it does not go to another command

```
shtlp_0053@SHTLP0053: ~  
shtlp_0053@SHTLP0053:~$ ls || pwd  
ashish      file1.txt      file.txt      myscript.sh.save  Public  
Desktop     file1.txt.save linuxcommandline1.sh names            snap  
dir         file2          Music         new              Templates  
Documents   file2.txt      myfirstfile.sh out1.txt          text.txt  
Downloads   file3          myfirstfile.txt Pictures           Videos  
file1       file3.txt      myscript.sh   prabha  
shtlp_0053@SHTLP0053:~$
```

23) apt-get:to install software

```
shtlp_0053@SHTLP0053: ~  
shtlp_0053@SHTLP0053:~$ sudo apt-get update  
[sudo] password for shtlp_0053:  
Hit:1 http://packages.microsoft.com/repos/code stable InRelease  
Hit:2 https://dl.google.com/linux/chrome/deb stable InRelease  
Hit:3 http://in.archive.ubuntu.com/ubuntu jammy InRelease  
Get:4 http://security.ubuntu.com/ubuntu jammy-security InRelease [110 kB]  
Get:5 http://in.archive.ubuntu.com/ubuntu jammy-updates InRelease [119 kB]  
Get:6 http://security.ubuntu.com/ubuntu jammy-security/main amd64 DEP-11 Metadata [41.6 kB]  
Get:7 http://security.ubuntu.com/ubuntu jammy-security/universe amd64 DEP-11 Metadata [22.0 kB]  
Get:8 http://in.archive.ubuntu.com/ubuntu jammy-backports InRelease [108 kB]  
Get:9 http://in.archive.ubuntu.com/ubuntu jammy-updates/main amd64 DEP-11 Metadata [99.7 kB]  
Get:10 http://in.archive.ubuntu.com/ubuntu jammy-updates/universe amd64 DEP-11 Metadata [274 kB]  
Get:11 http://in.archive.ubuntu.com/ubuntu jammy-updates/multiverse amd64 DEP-11 Metadata [940 B]  
Get:12 http://in.archive.ubuntu.com/ubuntu jammy-backports/main amd64 DEP-11 Metadata [7,996 B]  
Get:13 http://in.archive.ubuntu.com/ubuntu jammy-backports/universe amd64 DEP-11 Metadata [15.3 kB]  
Fetched 798 kB in 6s (137 kB/s)  
Reading package lists... Done
```

```
shtlp_0053@SHTLP0053: ~  
[sudo] password for shtlp_0053:  
Hit:1 http://packages.microsoft.com/repos/code stable InRelease  
Hit:2 https://dl.google.com/linux/chrome/deb stable InRelease  
Hit:3 http://in.archive.ubuntu.com/ubuntu jammy InRelease  
Get:4 http://security.ubuntu.com/ubuntu jammy-security InRelease [110 kB]  
Get:5 http://in.archive.ubuntu.com/ubuntu jammy-updates InRelease [119 kB]  
Get:6 http://security.ubuntu.com/ubuntu jammy-security/main amd64 DEP-11 Metadata [41.6 kB]  
Get:7 http://security.ubuntu.com/ubuntu jammy-security/universe amd64 DEP-11 Metadata [22.0 kB]  
Get:8 http://in.archive.ubuntu.com/ubuntu jammy-backports InRelease [108 kB]  
Get:9 http://in.archive.ubuntu.com/ubuntu jammy-updates/main amd64 DEP-11 Metadata [99.7 kB]  
Get:10 http://in.archive.ubuntu.com/ubuntu jammy-updates/universe amd64 DEP-11 Metadata [274 kB]  
Get:11 http://in.archive.ubuntu.com/ubuntu jammy-updates/multiverse amd64 DEP-11 Metadata [940 B]  
Get:12 http://in.archive.ubuntu.com/ubuntu jammy-backports/main amd64 DEP-11 Metadata [7,996 B]  
Get:13 http://in.archive.ubuntu.com/ubuntu jammy-backports/universe amd64 DEP-11 Metadata [15.3 kB]  
Fetched 798 kB in 6s (137 kB/s)  
Reading package lists... Done  
shtlp_0053@SHTLP0053:~$
```

- 24) sudo apt-get install softwarename- used to install software
- 25) sudo apt-get remove softwarename: this is used to remove software from your device
- 26) ifconfig : info about network interfaces

```
shtlp_0053@SHTLP0053: ~  
shtlp_0053@SHTLP0053:~$ ifconfig  
enp2s0: flags=4099<UP,BROADCAST,MULTICAST> mtu 1500  
    ether 6c:24:08:07:76:92 txqueuelen 1000  (Ethernet)  
    RX packets 0  bytes 0 (0.0 B)  
    RX errors 0  dropped 0  overruns 0  frame 0  
    TX packets 0  bytes 0 (0.0 B)  
    TX errors 0  dropped 0 overruns 0  carrier 0  collisions 0  
  
lo: flags=73<UP,LOOPBACK,RUNNING> mtu 65536  
    inet 127.0.0.1 netmask 255.0.0.0  
    inet6 ::1 prefixlen 128 scopeid 0x10<host>  
    loop txqueuelen 1000  (Local Loopback)  
    RX packets 35582  bytes 3551721 (3.5 MB)  
    RX errors 0  dropped 0  overruns 0  frame 0  
    TX packets 35582  bytes 3551721 (3.5 MB)  
    TX errors 0  dropped 0 overruns 0  carrier 0  collisions 0  
  
wlp3s0: flags=4163<UP,BROADCAST,RUNNING,MULTICAST> mtu 1500  
    inet 192.168.79.9 netmask 255.255.255.0 broadcast 192.168.79.255  
    inet6 fe80::c1c4:f33e:95b:8a88 prefixlen 64 scopeid 0x20<link>  
    inet6 2409:40d0:20:d0f9:18ff:5aea:8859:e72 prefixlen 64 scopeid 0x0<gl  
obal>  
    inet6 2409:40d0:20:d0f9:6465:810c:1a5a:1f51 prefixlen 64 scopeid 0x0<g  
lobal>
```

27) tar: used to compress and extract files

tar -cvf file.tar file: to create tar file

Tar -xvf file.tar file: to delete tar file

```
shtlp_0053@SHTLP0053: ~  
shtlp_0053@SHTLP0053:~$ ls  
ashish      file1.txt      file.txt      myscript.sh.save  Public  
Desktop     file1.txt.save linuxcommandline1.sh names              snap  
dir         file2          Music         new               Templates  
Documents   file2.txt      myfirstfile.sh out1.txt          text.txt  
Downloads   file3          myfirstfile.txt Pictures           Videos  
file1       file3.txt      myscript.sh   prabha  
shtlp_0053@SHTLP0053:~$ tar -cvf file2.tar file2  
file2  
shtlp_0053@SHTLP0053:~$
```

28)grep :grep “word” filename  
watch for patterns

```
shtlp_0053@SHTLP0053: ~/Desktop
shtlp_0053@SHTLP0053:~$ pwd
/home/shtlp_0053
shtlp_0053@SHTLP0053:~$ ls
ashish      file1.txt      file3.txt      myscript.sh    prabha
Desktop     file1.txt.save file.txt        myscript.sh.save Public
dir         file2          linuxcommandline1.sh names           snap
Documents   file2.tar      Music          new            Templates
Downloads   file2.txt      myfirstfile.sh out1.txt        text.txt
file1       file3          myfirstfile.txt Pictures         Videos
shtlp_0053@SHTLP0053:~$ cd Desktop
shtlp_0053@SHTLP0053:~/Desktop$ man tar >xn.txt
shtlp_0053@SHTLP0053:~/Desktop$ grep "options" xn.txt
```

```
shtlp_0053@SHTLP0053: ~/Desktop
Any number of options not taking arguments can be clustered together
vided that this does not create ambiguity. Arguments to long options
or (abbreviating some options):
The options in all three styles can be intermixed, although doing so
with old options is not encouraged.
The options listed in the table below tell GNU tar what operation it is
Show built-in defaults for various tar options and exit. No ar-
Display a list of available options and exit. No arguments al-
--list or --extract options).
Disable the use of some potentially harmful options.
These options control tar actions when extracting a file over an exist-
Compression options
decompression. The argument can contain command line options.
order-sensitive, i.e. it affects all options that follow.
This option is positional: it affects all --files-from options
--null Instruct subsequent -T options to read null-terminated names
tar options. The --verbatim-files-from option disables this be-
This option affects all --files-from options that occur after it
File name matching options
These options affect both exclude and include patterns.
--transform options.
Compatibility options
given one of the --create, --append or --update options, this
shtlp_0053@SHTLP0053:~/Desktop$
```

29) netstat -a

display all active network connection

```
shtlp_0053@SHTLP0053: ~  
shtlp_0053@SHTLP0053:~$ netstat -a  
Active Internet connections (servers and established)  
Proto Recv-Q Send-Q Local Address           Foreign Address         State  
tcp        0      0 localhost:domain        0.0.0.0:*               LISTEN  
tcp        0      0 localhost:ipp           0.0.0.0:*               LISTEN  
tcp        0      0 SHTLP0053:60976        ec2-52-88-226-242:https ESTABLISHED  
tcp        0      0 SHTLP0053:44350        40.99.31.130:https      ESTABLISHED  
tcp        0      0 SHTLP0053:42038        123.208.120.34.bc:https ESTABLISHED  
tcp        0      0 SHTLP0053:37216        del12s06-in-f14.1:https ESTABLISHED  
tcp        0      0 SHTLP0053:55456        52.114.36.188:https     ESTABLISHED  
tcp        0      0 SHTLP0053:44162        55.65.117.34.bc.g:https ESTABLISHED  
tcp        0      0 SHTLP0053:55458        52.114.36.188:https     ESTABLISHED  
tcp        0    124 SHTLP0053:56878        52.123.160.9:https      FIN_WAIT1  
tcp        0      0 SHTLP0053:51928        52.111.252.0:https      ESTABLISHED  
tcp        0      0 SHTLP0053:49318        52.113.194.132:https    ESTABLISHED  
tcp        0    32 SHTLP0053:60978        ec2-52-88-226-242:https FIN_WAIT1  
tcp        0      0 SHTLP0053:37718        82.221.107.34.bc.g:http ESTABLISHED  
tcp        0    128 SHTLP0053:55454        52.114.36.188:https     FIN_WAIT1  
tcp        0      0 SHTLP0053:40374        del11s15-in-f14.1:https ESTABLISHED  
tcp        0      1 SHTLP0053:35498        fracktail.canonica:http LAST_ACK  
tcp        0      0 SHTLP0053:53816        del11s15-in-f3.1e:https ESTABLISHED  
tcp        0      0 SHTLP0053:37720        82.221.107.34.bc.g:http ESTABLISHED  
tcp        0      0 SHTLP0053:55460        52.114.36.188:https     ESTABLISHED  
tcp6       0      0 ip6-localhost:ipp      [::]:*                 LISTEN
```