

# Chandan Pati | linux assignment 2 | Roll no :**243509**

Q.1 Create group and user as given below

Red

- apple
- banana
- cat
- dog
- elephant

Soln:

Blue

- fish
- gun
- horse
- icecream

green

- jelly
- kitkat
- lolipop
- marshmallow

orange

- new
- oppo
- vivo
- china

users created

```
smbshare:x:136:dbda
red:x:1001:apple,banana,cat,dog,elephant
blue:x:1002:fish,gun,horse,icecream
green:x:1003:jelly,kitkat,lolipop,marshmallow
orange:x:1004:new,oppo,vivo,china
```

a. create directory named EVERYONE in /home. Give all permission to EVERYONE

```
chandan@Chandan-Admin: /home
chandan@Chandan-Admin:/home$ pwd
/home
chandan@Chandan-Admin:/home$ sudo mkdir EVERYONE
chandan@Chandan-Admin:/home$ sudo chmod 777 EVERYONE/
chandan@Chandan-Admin:/home$ ls -l
total 92
drwxr-x---  2 apple      Red      4096 Mar 11 20:01 apple
drwxr-x---  2 banana    Red      4096 Mar 11 20:08 banana
drwxr-x---  2 apple     Blue     4096 Mar 10 19:25 bob
drwxr-x---  2 cat       Red      4096 Mar 11 20:04 cat
drwxr-x--- 19 chandan   chandan 4096 Mar 10 19:09 chandan
drwxr-x---  2 china     orange   4096 Mar 11 21:49 china
drwxr-x---  2 dog       Red      4096 Mar 11 20:04 dog
drwxr-x---  2 elephant  Red      4096 Mar 11 20:04 elephant
drwxrwxrwx  2 root      root     4096 Mar 11 21:52 EVERYONE
drwxr-x---  2 fish      Blue     4096 Mar 11 21:21 fish
drwxr-x---  2 gun       Blue     4096 Mar 11 21:23 gun
drwxr-x---  2 horse     Blue     4096 Mar 11 21:25 horse
```

b. Create a file with every user (whoami >> username.txt)

```
icecream@Chandan-Admin: /home/EVERYONE
chandan@Chandan-Admin:/home/EVERYONE$ su apple
Password:
apple@Chandan-Admin:/home/EVERYONE$ whoami >> apple.txt
apple@Chandan-Admin:/home/EVERYONE$ su banana
Password:
banana@Chandan-Admin:/home/EVERYONE$ whoami >> banana.txt
banana@Chandan-Admin:/home/EVERYONE$ su cat
Password:
cat@Chandan-Admin:/home/EVERYONE$ whoami >> cat.txt
cat@Chandan-Admin:/home/EVERYONE$ su dog
Password:
dog@Chandan-Admin:/home/EVERYONE$ whoami >> dog.txt
dog@Chandan-Admin:/home/EVERYONE$ su elephant
Password:
elephant@Chandan-Admin:/home/EVERYONE$ whoami >> elephant.txt
elephant@Chandan-Admin:/home/EVERYONE$ su fish
Password:
fish@Chandan-Admin:/home/EVERYONE$ whoami >> fish.txt
fish@Chandan-Admin:/home/EVERYONE$ su gun
Password:
gun@Chandan-Admin:/home/EVERYONE$ whoami >> gun.txt
gun@Chandan-Admin:/home/EVERYONE$ su horse
Password:
horse@Chandan-Admin:/home/EVERYONE$ whoami >> horse.txt
horse@Chandan-Admin:/home/EVERYONE$ su icecream
Password:
icecream@Chandan-Admin:/home/EVERYONE$ whoami >> icecream.txt
```

```
marshmallo@Chandan-Admin: /home/EVERYONE
icecream@Chandan-Admin:/home/EVERYONE$ su jelly
Password:
jelly@Chandan-Admin:/home/EVERYONE$ whoami >> jelly.txt
jelly@Chandan-Admin:/home/EVERYONE$ su kitkat
Password:
kitkat@Chandan-Admin:/home/EVERYONE$ whoami >> kitkat.txt
kitkat@Chandan-Admin:/home/EVERYONE$ su lolipop
Password:
lolipop@Chandan-Admin:/home/EVERYONE$ whoami >> lolipop
lolipop@Chandan-Admin:/home/EVERYONE$ su marshmallo
Password:
marshmallo@Chandan-Admin:/home/EVERYONE$ whoami >> marshmallo.txt
```

```
oppo@Chandan-Admin: /home/EVERYONE
marshmallow@Chandan-Admin: /home/EVERYONE$ su new
Password:
new@Chandan-Admin: /home/EVERYONE$ whoami >> new.txt
new@Chandan-Admin: /home/EVERYONE$ su oppo
Password:
oppo@Chandan-Admin: /home/EVERYONE$ whoami >> oppo.txt
```

```
china@Chandan-Admin: /home/EVERYONE
vivo@Chandan-Admin: /home/EVERYONE$ su vivo
Password:
vivo@Chandan-Admin: /home/EVERYONE$ whoami >> vivo.txt
vivo@Chandan-Admin: /home/EVERYONE$ su china
Password:
china@Chandan-Admin: /home/EVERYONE$ whoami >> china.txt
china@Chandan-Admin: /home/EVERYONE$
china@Chandan-Admin: /home/EVERYONE$
china@Chandan-Admin: /home/EVERYONE$
```

```
china@Chandan-Admin: /home/EVERYONE
china@Chandan-Admin: /home/EVERYONE$ cat jelly.txt
jelly
china@Chandan-Admin: /home/EVERYONE$ cat kitkat.txt
kitkat
china@Chandan-Admin: /home/EVERYONE$ cat lolipop.txt
lolipop
china@Chandan-Admin: /home/EVERYONE$ cat marshmallo.txt
marshmallo
china@Chandan-Admin: /home/EVERYONE$ cat new.txt
new
china@Chandan-Admin: /home/EVERYONE$ cat oppo.txt
oppo
china@Chandan-Admin: /home/EVERYONE$ cat vivo.txt
vivo
china@Chandan-Admin: /home/EVERYONE$ cat china.txt
china
china@Chandan-Admin: /home/EVERYONE$
```

```
china@Chandan-Admin: /home/EVERYONE
china@Chandan-Admin: /home/EVERYONE$ cat apple.txt
apple
china@Chandan-Admin: /home/EVERYONE$ cat banana.txt
banana
china@Chandan-Admin: /home/EVERYONE$ cat cat.txt
cat
china@Chandan-Admin: /home/EVERYONE$ cat dog.txt
dog
china@Chandan-Admin: /home/EVERYONE$ cat elephant.txt
elephant
china@Chandan-Admin: /home/EVERYONE$ cat fish.txt
fish
china@Chandan-Admin: /home/EVERYONE$ cat gun.txt
gun
china@Chandan-Admin: /home/EVERYONE$ cat horse.txt
horse
china@Chandan-Admin: /home/EVERYONE$ cat icecream.txt
icecream
china@Chandan-Admin: /home/EVERYONE$
```

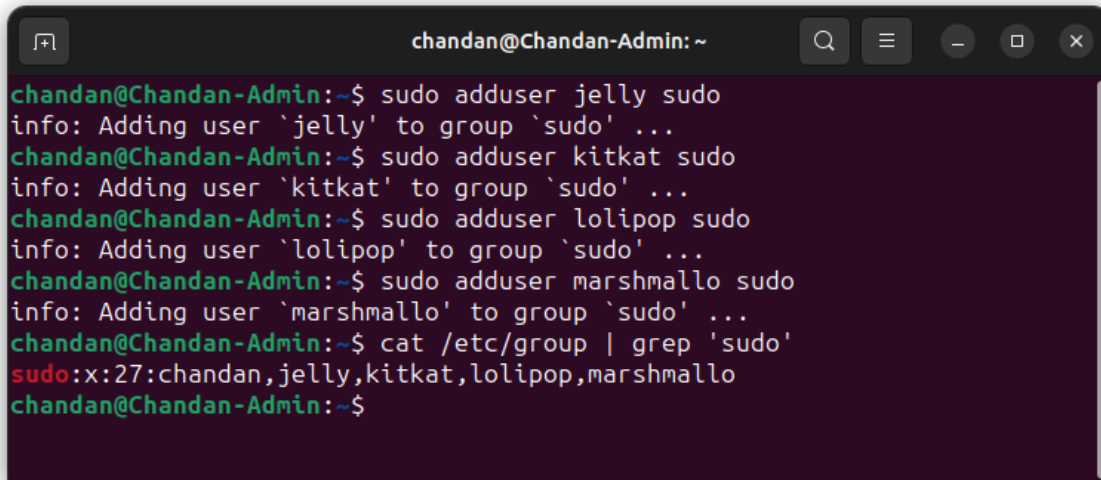
oppo -> primary group change -> one  
vivo -> primary group change -> two

```
chandan@Chandan-Admin: ~  
chandan@Chandan-Admin:~$ sudo addgroup one  
info: Selecting GID from range 1000 to 59999 ...  
info: Adding group `one' (GID 1005) ...  
chandan@Chandan-Admin:~$ sudo addgroup two  
info: Selecting GID from range 1000 to 59999 ...  
info: Adding group `two' (GID 1006) ...  
chandan@Chandan-Admin:~$
```

```
chandan@Chandan-Admin: ~  
chandan@Chandan-Admin:~$ sudo usermod -g one oppo  
chandan@Chandan-Admin:~$ sudo usermod -g two vivo
```

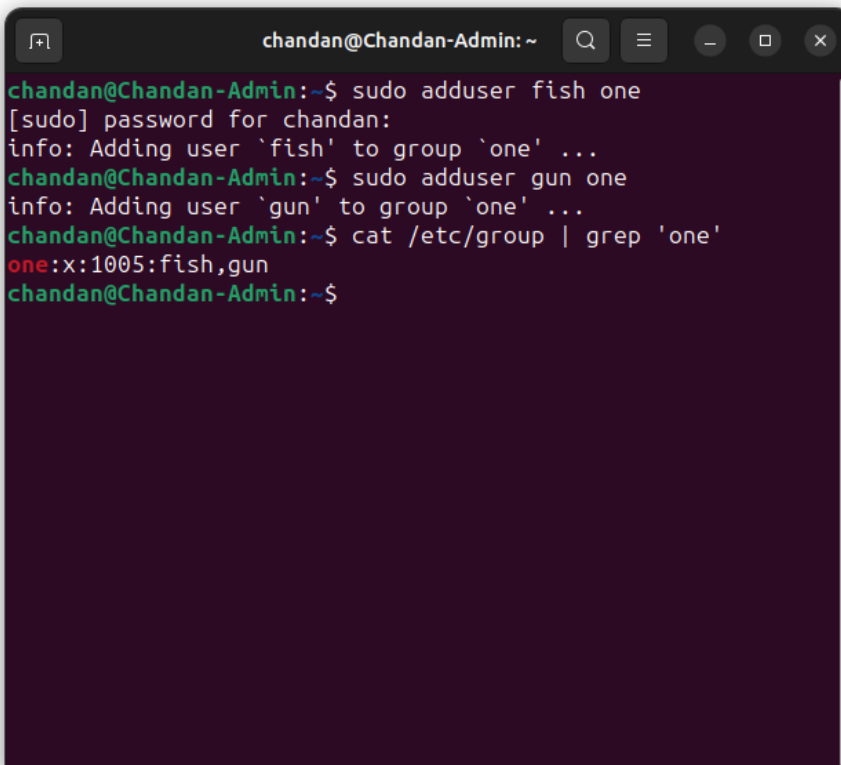
```
chandan@Chandan-Admin: ~  
oppo:x:1016:1005:Oppo,,,:/home/oppo:/bin/bash  
china:x:1018:1004:China,,,:/home/china:/bin/bash  
vivo:x:1019:1006:Vivo,,,:/home/vivo:/bin/bash  
chandan@Chandan-Admin:~$
```

jelly,kitkat, lolipop, marshmallow -> add these users to sudo group

A terminal window titled 'chandan@Chandan-Admin: ~' with search, menu, and window control icons. It shows the execution of 'sudo adduser' for four users: jelly, kitkat, lolipop, and marshmallow, all being added to the 'sudo' group. A final 'cat /etc/group | grep sudo' command shows the updated group entry.

```
chandan@Chandan-Admin:~$ sudo adduser jelly sudo
info: Adding user `jelly' to group `sudo' ...
chandan@Chandan-Admin:~$ sudo adduser kitkat sudo
info: Adding user `kitkat' to group `sudo' ...
chandan@Chandan-Admin:~$ sudo adduser lolipop sudo
info: Adding user `lolipop' to group `sudo' ...
chandan@Chandan-Admin:~$ sudo adduser marshmallow sudo
info: Adding user `marshmallow' to group `sudo' ...
chandan@Chandan-Admin:~$ cat /etc/group | grep 'sudo'
sudo:x:27:chandan,jelly,kitkat,lolipop,marshmallow
chandan@Chandan-Admin:~$
```

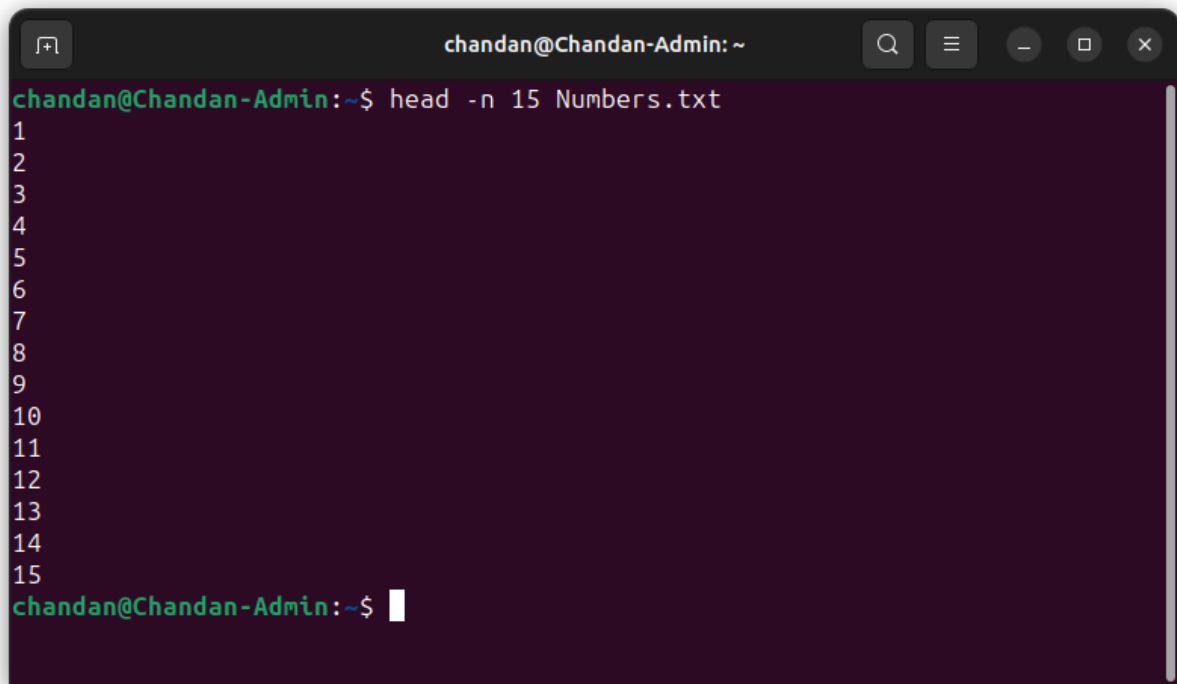
fish,gun -> add these users to one group as well (secondary group)

A terminal window titled 'chandan@Chandan-Admin: ~' with search, menu, and window control icons. It shows the execution of 'sudo adduser' for two users: fish and gun, both being added to a group named 'one'. A final 'cat /etc/group | grep one' command shows the updated group entry.

```
chandan@Chandan-Admin:~$ sudo adduser fish one
[sudo] password for chandan:
info: Adding user `fish' to group `one' ...
chandan@Chandan-Admin:~$ sudo adduser gun one
info: Adding user `gun' to group `one' ...
chandan@Chandan-Admin:~$ cat /etc/group | grep 'one'
one:x:1005:fish,gun
chandan@Chandan-Admin:~$
```

Q.2 Create Numbers.txt which will contain numbers from 1-50

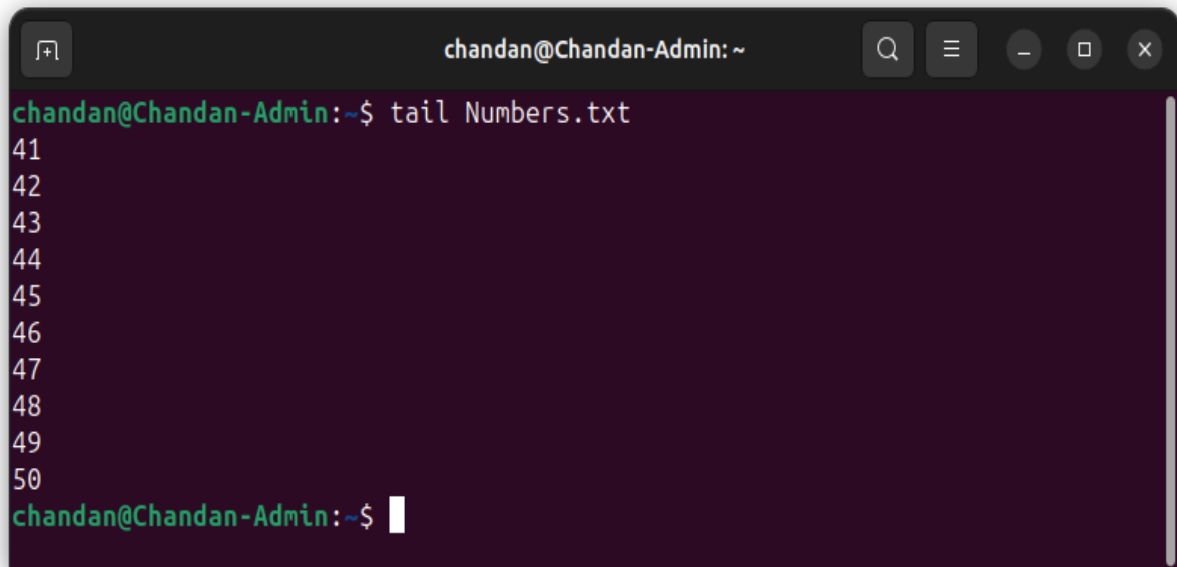
a. display first 15 numbers



```
chandan@Chandan-Admin: ~  
chandan@Chandan-Admin:~$ head -n 15 Numbers.txt  
1  
2  
3  
4  
5  
6  
7  
8  
9  
10  
11  
12  
13  
14  
15  
chandan@Chandan-Admin:~$
```



b. display last 10 numbers

A terminal window with a dark background and a title bar that reads 'chandan@Chandan-Admin: ~'. The terminal shows the command 'tail Numbers.txt' being executed. The output consists of ten lines of numbers, starting from 41 and ending at 50. The prompt 'chandan@Chandan-Admin:~\$' is visible at the bottom of the terminal, followed by a cursor.

```
chandan@Chandan-Admin:~$ tail Numbers.txt
41
42
43
44
45
46
47
48
49
50
chandan@Chandan-Admin:~$
```

c. display numbers in reverse

```
chandan@Chandan-Ad...  🔍  ≡  -  □  ×  
chandan@Chandan-Admin:~$ tac Numbers.txt  
50  
49  
48  
47  
46  
45  
44  
43  
42  
41  
40  
39  
38  
37  
36  
35  
34  
33  
32  
31  
30  
29  
28  
27  
26  
25  
24  
23  
22  
21  
20  
19  
18  
17  
16  
15  
14  
13  
12  
11  
10  
9  
8  
7  
6  
5  
4  
3  
2  
1  
chandan@Chandan-Admin:~$ clear
```

d.display numbers which includes 4 in it



```
chandan@Chandan-Admin: ~  
chandan@Chandan-Admin:~$ grep 4 Numbers.txt  
4  
14  
24  
34  
40  
41  
42  
43  
44  
45  
46  
47  
48  
49  
chandan@Chandan-Admin:~$
```

A terminal window with a dark background. The title bar shows 'chandan@Chandan-Admin: ~' and standard window controls. The command 'grep 4 Numbers.txt' has been executed, resulting in a list of numbers: 4, 14, 24, 34, 40, 41, 42, 43, 44, 45, 46, 47, 48, and 49. The prompt 'chandan@Chandan-Admin:~\$' is visible at the bottom.

Q.3 create Student.txt file as given below

Rollno:name:marks

1111:Ram:87

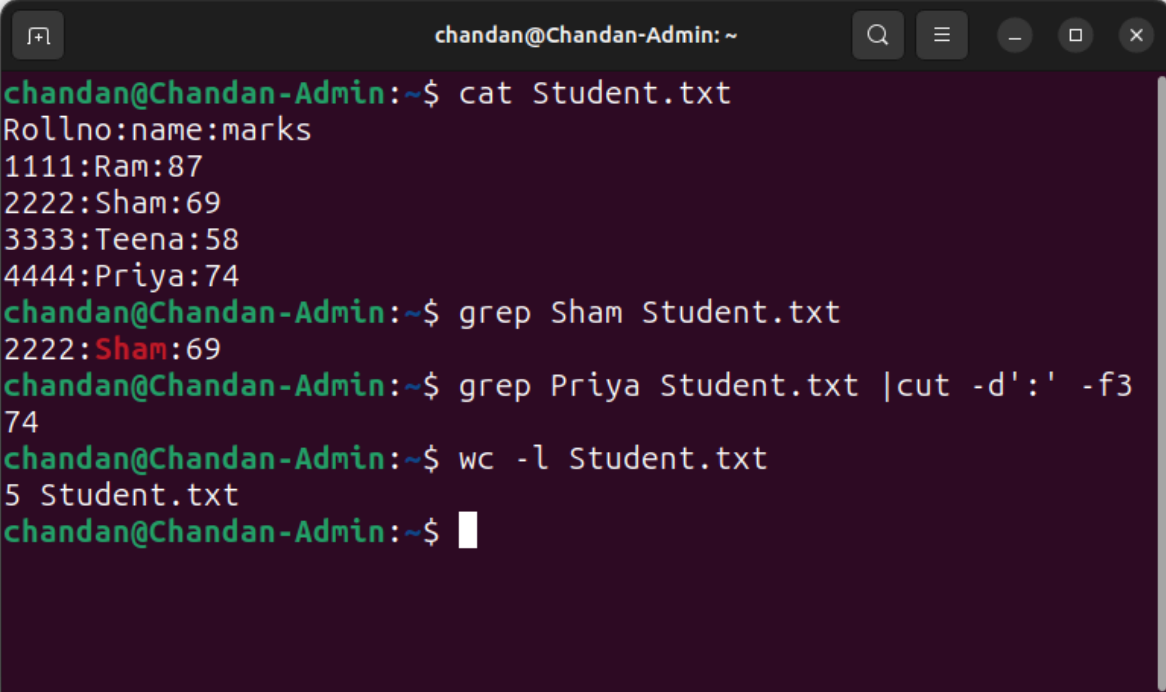
2222:Sham:69

3333:Teena:58

4444:Priya:74

- Display only details of sham
- Display only marks of Priya
- Display total number of lines in student.txt

soln :



```
chandan@Chandan-Admin: ~  
chandan@Chandan-Admin:~$ cat Student.txt  
Rollno:name:marks  
1111:Ram:87  
2222:Sham:69  
3333:Teena:58  
4444:Priya:74  
chandan@Chandan-Admin:~$ grep Sham Student.txt  
2222:Sham:69  
chandan@Chandan-Admin:~$ grep Priya Student.txt |cut -d':' -f3  
74  
chandan@Chandan-Admin:~$ wc -l Student.txt  
5 Student.txt  
chandan@Chandan-Admin:~$
```