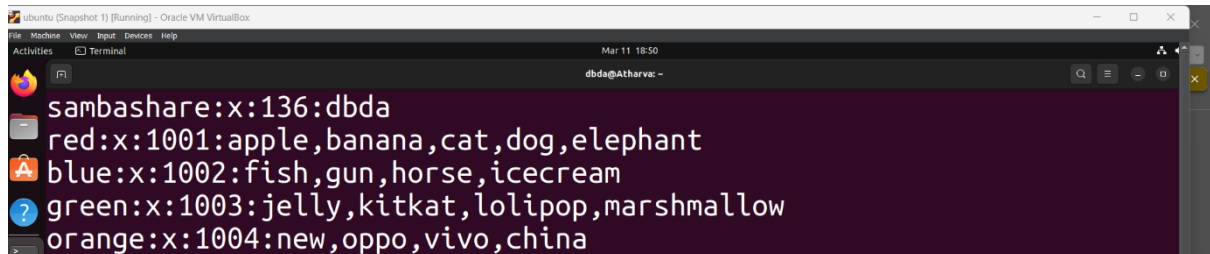


# ROLL NO:- 243557

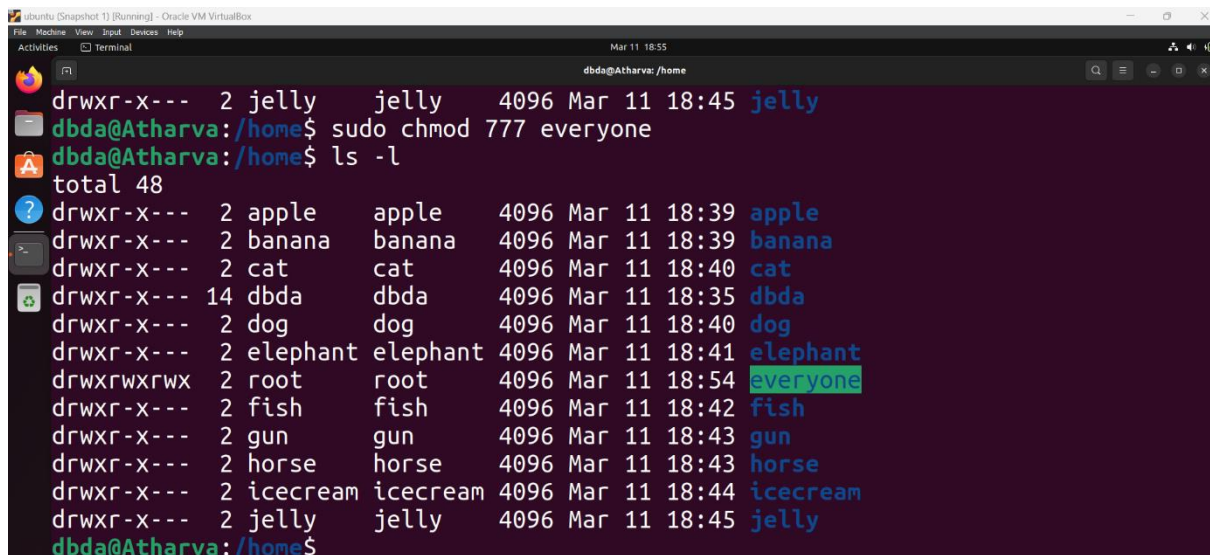
## SOLUTION QUES 1:-



A screenshot of a terminal window in Oracle VM VirtualBox. The terminal shows the following commands and their outputs:

```
sambashare: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
```

## SOLUTION QUES 2:-



A screenshot of a terminal window in Oracle VM VirtualBox. The terminal shows the following commands and their outputs:

```
drwxr-x--- 2 jelly jelly 4096 Mar 11 18:45 jelly
dbda@Atharva:/home$ sudo chmod 777 everyone
dbda@Atharva:/home$ ls -l
total 48
drwxr-x--- 2 apple apple 4096 Mar 11 18:39 apple
drwxr-x--- 2 banana banana 4096 Mar 11 18:39 banana
drwxr-x--- 2 cat cat 4096 Mar 11 18:40 cat
drwxr-x--- 14 dbda dbda 4096 Mar 11 18:35 dbda
drwxr-x--- 2 dog dog 4096 Mar 11 18:40 dog
drwxr-x--- 2 elephant elephant 4096 Mar 11 18:41 elephant
drwxrwxrwx 2 root root 4096 Mar 11 18:54 everyone
drwxr-x--- 2 fish fish 4096 Mar 11 18:42 fish
drwxr-x--- 2 gun gun 4096 Mar 11 18:43 gun
drwxr-x--- 2 horse horse 4096 Mar 11 18:43 horse
drwxr-x--- 2 icecream icecream 4096 Mar 11 18:44 icecream
drwxr-x--- 2 jelly jelly 4096 Mar 11 18:45 jelly
dbda@Atharva:/home$
```

## SOLUTION QUES 1 B):-

```
ubuntu (Snapshot 1) [Running] - Oracle VM VirtualBox
File Machine View Input Devices Help
Activities Terminal Mar 11 19:04
apple@Atharva: /home/everyone$ ls
apple.txt
apple@Atharva: /home/everyone$ su banana
Password:
banana@Atharva: /home/everyone$ cd ..
banana@Atharva: /home$ cd banana
banana@Atharva: ~$ whoami
banana
banana@Atharva: ~$ cd ..
banana@Atharva: /home$ ls
apple  cat  dog  everyone  gun  icecream
banana dbda elephant fish  horse  jelly
banana@Atharva: /home$ cd banana
banana@Atharva: ~$ whoami >> banana.txt
banana@Atharva: ~$ ls
banana.txt
banana@Atharva: ~$
```

```
ubuntu (Snapshot 1) [Running] - Oracle VM VirtualBox
File Machine View Input Devices Help
Cat@Atharva: /home/banana$ cd ..
cat@Atharva: /home$ cd cat
cat@Atharva: ~$ whoami >> cat.txt
cat@Atharva: ~$ ls
cat.txt
cat@Atharva: ~$ su dog
Password:
dog@Atharva: /home/cat$ cd ..
dog@Atharva: /home$ cd dog
dog@Atharva: ~$ whoami >> dog.txt
dog@Atharva: ~$ ls
dog.txt
dog@Atharva: ~$ su elephant
Password:
elephant@Atharva: /home/dog$ cd ..
elephant@Atharva: /home$ cd elephant
elephant@Atharva: ~$ whoami >> elephant
elephant@Atharva: ~$ ls
elephant
elephant@Atharva: ~$ whoami >> elephant.txt
elephant@Atharva: ~$ ls
elephant elephant.txt
elephant@Atharva: ~$ rm elephant
elephant@Atharva: ~$ ls
elephant.txt
elephant@Atharva: ~$ su fish
Password:
fish@Atharva: /home/elephant$ cd ..
fish@Atharva: /home$ cd fish
fish@Atharva: ~$ whoami >> fish.txt
```

```
ubuntu (Snapshot 1) [Running] - Oracle VM VirtualBox
File Machine View Input Devices Help
Atharva@Atharva:~$ cd /usr
Atharva@Atharva:~/usr$ whoami >> fish.txt
Atharva@Atharva:~/usr$ ls
fish.txt
Atharva@Atharva:~/usr$ su gun
Password:
gun@Atharva:~/usr$ cd ..
gun@Atharva:~/usr$ cd gun
gun@Atharva:~/usr$ whoami >> gun.txt
gun@Atharva:~/usr$ su horse
Password:
horse@Atharva:~/usr$ cd ..
horse@Atharva:~/usr$ cd horse
horse@Atharva:~/usr$ whoami >> horse.txt
horse@Atharva:~/usr$ ls
horse.txt
horse@Atharva:~/usr$ su icecream
Password:
icecream@Atharva:~/usr$ cd ..
icecream@Atharva:~/usr$ cd icecream/
icecream@Atharva:~/usr$ whoami >> icecream.txt
icecream@Atharva:~/usr$ ls
icecream.txt
icecream@Atharva:~/usr$ su jelly
Password:
jelly@Atharva:~/usr$ cd ..
jelly@Atharva:~/usr$ cd jelly
jelly@Atharva:~/usr$ whoami >> jelly.txt
jelly@Atharva:~/usr$ ls
jelly.txt
```

```
ubuntu (Snapshot 1) [Running] - Oracle VM VirtualBox
File Machine View Input Devices Help
Atharva@Atharva:~$ cd /usr
Atharva@Atharva:~/usr$ whoami >> gun.txt
Atharva@Atharva:~/usr$ cd /usr
Atharva@Atharva:~/usr$ cd gun
Atharva@Atharva:~/usr$ whoami >> icecream.txt
Atharva@Atharva:~/usr$ cd /usr
Atharva@Atharva:~/usr$ cd kitkat
Atharva@Atharva:~/usr$ whoami >> kitkat.txt
Atharva@Atharva:~/usr$ ls
kitkat.txt
Atharva@Atharva:~/usr$ su lolipop
Password:
lolipop@Atharva:~/usr$ cd ..
lolipop@Atharva:~/usr$ cd lolipop
lolipop@Atharva:~/usr$ whoami >> lolipop.txt
lolipop@Atharva:~/usr$ ls
lolipop.txt
lolipop@Atharva:~/usr$ su marshmallow
Password:
marshmallow@Atharva:~/usr$ cd ..
marshmallow@Atharva:~/usr$ cd marshmallow
marshmallow@Atharva:~/usr$ whoami >> marshmallow.txt
marshmallow@Atharva:~/usr$ su new
Password:
new@Atharva:~/usr$ cd ..
new@Atharva:~/usr$ cd new
new@Atharva:~/usr$ whoami >> new.txt
new@Atharva:~/usr$ ls
new.txt
new@Atharva:~/usr$ su oppo
Password:
oppo@Atharva:~/usr$ cd ..
oppo@Atharva:~/usr$ cd oppo
oppo@Atharva:~/usr$ whoami >> oppo.txt
oppo@Atharva:~/usr$ ls
```

```
marshall@Atharva:~$ sudo su new
Password:
new@Atharva:~$ cd ..
new@Atharva:~$ cd new
new@Atharva:~$ whoami >> new.txt
new@Atharva:~$ ls
new.txt
new@Atharva:~$ su oppo
Password:
oppo@Atharva:~$ cd ..
oppo@Atharva:~$ cd oppo
oppo@Atharva:~$ whoami >> oppo.txt
oppo@Atharva:~$ ls
oppo.txt
oppo@Atharva:~$ su vivo
Password:
vivo@Atharva:~$ cd ..
vivo@Atharva:~$ cd vivo
vivo@Atharva:~$ whoami >> vivo.txt
vivo@Atharva:~$ ls
vivo.txt
vivo@Atharva:~$ su china
Password:
china@Atharva:~$ cd ..
china@Atharva:~$ cd china
china@Atharva:~$ whoami >> china.txt
china@Atharva:~$ ls
china.txt
china@Atharva:~$
```

**SOLUTION:-Primary group change oppo and vivo:-**

```
oppo:x:1015:1022:OPPO,,,:/home/oppo:/bin/bash
vivo:x:1016:1023:VIVO,,,:/home/vivo:/bin/bash
china:x:1017:1021:CHINA,,,:/home/china:/bin/bash
dbda@Atharva:~$
```

**SOLUTION:-jelly kitkat lolipop marshmallow added to sudo group:-**

```
sudo:x:27:dbda,jelly,kitkat,lolipop,marshmallow
audio:x:29:pulse
dip:x:30:dbda
www-data:x:33:
```

**SOLUTION:- fish and gun added to one group**

```
one:x:1022:fish,gun
two:x:1023:
root@Atharva:~$
```

### SOLUTION q2) a):-

```
dbda@Atharva:~/demo$ head -n 15 number.txt
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
dbda@Atharva:~/demo$
```

### SOLUTION q2) b):-

```
dbda@Atharva:~/demo$ tail number.txt
41
42
43
44
45
46
47
48
49
50
dbda@Atharva:~/demo$
```

### SOLUTION q2) c):-

```
ubuntu (Snapshot 1) [Running] - Oracle VM VirtualBox
File Machine View Input Devices Help
dbda@Atharva:~/demo$ tac number.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
dbda@Atharva:~/demo$
```

### SOLUTION q2) d):-

```
dbda@Atharva:~/demo$ cat number.txt | grep '4'
4
14
24
34
40
41
42
43
44
45
46
47
48
49
dbda@Atharva:~/demo$
```

### SOLUTION q3) a,b,c):-

```
dbda@Atharva:~/demo$ cat student.txt
Rollno:name:marks
1111:Ram:87
2222:Sham:69
3333:Teena:58
4444:Priya:74
dbda@Atharva:~/demo$ cat student.txt | grep 'Sham'
2222:Sham:69
dbda@Atharva:~/demo$ cat student.txt | grep 'Priya' | cut -d ':' -f3
74
dbda@Atharva:~/demo$ wc -l student.txt
5 student.txt
dbda@Atharva:~/demo$
```