

Q.1 Create group and user as given below**Red**

```
dbda@iacsd: ~  
dbda@iacsd:~$ sudo addgroup red  
[sudo] password for dbda:  
Adding group 'red' (GID 1007) ...  
Done.  
dbda@iacsd:~$
```

Apple

```
dbda@iacsd: ~  
dbda@iacsd:~$ sudo addgroup red  
[sudo] password for dbda:  
Adding group 'red' (GID 1007) ...  
Done.  
dbda@iacsd:~$ sudo adduser apple --gid 1007  
Adding user 'apple' ...  
Adding new user 'apple' (1005) with group 'red' ...  
Creating home directory '/home/apple' ...  
Copying files from '/etc/skel' ...  
New password:  
BAD PASSWORD: The password is shorter than 8 characters  
Retype new password:  
passwd: password updated successfully  
Changing the user information for apple  
Enter the new value, or press ENTER for the default  
Full Name []: apple  
Room Number []:  
Work Phone []:  
Home Phone []:  
Other []:  
Is the information correct? [Y/n] y  
dbda@iacsd:~$
```

Banana

```
dbda@iacsd: ~  
dbda@iacsd:~$ sudo adduser banana --gid 1007  
Adding user 'banana' ...  
Adding new user 'banana' (1006) with group 'red' ...  
The home directory '/home/banana' already exists. Not copying from '/etc/skel'.  
adduser: Warning: The home directory '/home/banana' does not belong to the user you are currently creating.  
New password:  
BAD PASSWORD: The password is shorter than 8 characters  
Retype new password:  
passwd: password updated successfully  
Changing the user information for banana  
Enter the new value, or press ENTER for the default  
Full Name []: banana  
Room Number []:  
Work Phone []:  
Home Phone []:  
Other []:  
Is the information correct? [Y/n] y  
dbda@iacsd:~$
```

Cat

```
dbda@iacsd: ~  
dbda@iacsd:~$ sudo adduser cat --gid 1007  
Adding user 'cat' ...  
Adding new user 'cat' (1007) with group 'red' ...  
Creating home directory '/home/cat' ...  
Copying files from '/etc/skel' ...  
New password:  
BAD PASSWORD: The password is shorter than 8 characters  
Retype new password:  
passwd: password updated successfully  
Changing the user information for cat  
Enter the new value, or press ENTER for the default  
Full Name []: cat  
Room Number []:  
Work Phone []:  
Home Phone []:  
Other []:  
Is the information correct? [Y/n] y  
dbda@iacsd:~$
```

Dog

```
dbda@iacsd: ~  
dbda@iacsd:~$ sudo adduser dog --gid 1007  
Adding user 'dog' ...  
Adding new user 'dog' (1008) with group 'red' ...  
Creating home directory '/home/dog' ...  
Copying files from '/etc/skel' ...  
New password:  
BAD PASSWORD: The password is shorter than 8 characters  
Retype new password:  
passwd: password updated successfully  
Changing the user information for dog  
Enter the new value, or press ENTER for the default  
Full Name []: dog  
Room Number []:  
Work Phone []:  
Home Phone []:  
Other []:  
Is the information correct? [Y/n] y  
dbda@iacsd:~$
```

Elephant

```
dbda@iacsd: ~  
dbda@iacsd:~$ sudo adduser elephant --gid 1007  
Adding user 'elephant' ...  
Adding new user 'elephant' (1009) with group 'red' ...  
Creating home directory '/home/elephant' ...  
Copying files from '/etc/skel' ...  
New password:  
BAD PASSWORD: The password contains the user name in some form  
Retype new password:  
passwd: password updated successfully  
Changing the user information for elephant  
Enter the new value, or press ENTER for the default  
Full Name []: elephant  
Room Number []:  
Work Phone []:  
Home Phone []:  
Other []:  
Is the information correct? [Y/n] y  
dbda@iacsd:~$
```

Blue

```
dbda@iacsd: ~  
dbda@iacsd:~$ sudo addgroup blue  
Adding group 'blue' (GID 1008) ...  
Done.  
dbda@iacsd:~$
```

Fish

```
dbda@iacsd: ~  
dbda@iacsd:~$ sudo adduser fish --gid 1008  
Adding user 'fish' ...  
Adding new user 'fish' (1010) with group 'blue' ...  
Creating home directory '/home/fish' ...  
Copying files from '/etc/skel' ...  
New password:  
BAD PASSWORD: The password is shorter than 8 characters  
Retype new password:  
passwd: password updated successfully  
Changing the user information for fish  
Enter the new value, or press ENTER for the default  
Full Name []: fish  
Room Number []:  
Work Phone []:  
Home Phone []:  
Other []:  
Is the information correct? [Y/n] y  
dbda@iacsd:~$
```

Gun

```
dbda@iacsd: ~  
dbda@iacsd:~$ sudo adduser gun --gid 1008  
Adding user 'gun' ...  
Adding new user 'gun' (1011) with group 'blue' ...  
Creating home directory '/home/gun' ...  
Copying files from '/etc/skel' ...  
New password:  
BAD PASSWORD: The password is shorter than 8 characters  
Retype new password:  
passwd: password updated successfully  
Changing the user information for gun  
Enter the new value, or press ENTER for the default  
    Full Name []: gun  
    Room Number []:  
    Work Phone []:  
    Home Phone []:  
    Other []:  
Is the information correct? [Y/n] y  
dbda@iacsd:~$
```

Horse

```
dbda@iacsd: ~  
dbda@iacsd:~$ sudo adduser horse --gid 1008  
Adding user 'horse' ...  
Adding new user 'horse' (1012) with group 'blue' ...  
Creating home directory '/home/horse' ...  
Copying files from '/etc/skel' ...  
New password:  
BAD PASSWORD: The password is shorter than 8 characters  
Retype new password:  
passwd: password updated successfully  
Changing the user information for horse  
Enter the new value, or press ENTER for the default  
    Full Name []: horse  
    Room Number []:  
    Work Phone []:  
    Home Phone []:  
    Other []:  
Is the information correct? [Y/n] y  
dbda@iacsd:~$
```

Icecream

```
dbda@iacsd: ~  
dbda@iacsd:~$ sudo adduser icecream --gid 1008  
Adding user 'icecream' ...  
Adding new user 'icecream' (1013) with group 'blue' ...  
Creating home directory '/home/icecream' ...  
Copying files from '/etc/skel' ...  
New password:  
BAD PASSWORD: The password contains the user name in some form  
Retype new password:  
passwd: password updated successfully  
Changing the user information for icecream  
Enter the new value, or press ENTER for the default  
    Full Name []: icecream  
    Room Number []:  
    Work Phone []:  
    Home Phone []:  
    Other []:  
Is the information correct? [Y/n] y  
dbda@iacsd:~$
```

Green

```
dbda@iacsd: ~  
dbda@iacsd:~$ sudo addgroup green  
Adding group 'green' (GID 1009) ...  
Done.  
dbda@iacsd:~$
```

Jelly

```
dbda@iacsd: ~  
dbda@iacsd:~$ sudo adduser jelly --gid 1009  
Adding user 'jelly' ...  
Adding new user 'jelly' (1014) with group 'green' ...  
Creating home directory '/home/jelly' ...  
Copying files from '/etc/skel' ...  
New password:  
BAD PASSWORD: The password is shorter than 8 characters  
Retype new password:  
passwd: password updated successfully  
Changing the user information for jelly  
Enter the new value, or press ENTER for the default  
    Full Name []: jelly  
    Room Number []:  
    Work Phone []:  
    Home Phone []:  
    Other []:  
Is the information correct? [Y/n] y  
dbda@iacsd:~$
```

Kitkat

```
dbda@iacsd: ~  
dbda@iacsd:~$ sudo adduser kitkat --gid 1009  
Adding user 'kitkat' ...  
Adding new user 'kitkat' (1015) with group 'green' ...  
Creating home directory '/home/kitkat' ...  
Copying files from '/etc/skel' ...  
New password:  
BAD PASSWORD: The password is shorter than 8 characters  
Retype new password:  
passwd: password updated successfully  
Changing the user information for kitkat  
Enter the new value, or press ENTER for the default  
    Full Name []: kitkat  
    Room Number []:  
    Work Phone []:  
    Home Phone []:  
    Other []:  
Is the information correct? [Y/n] y  
dbda@iacsd:~$
```

Lollipop

```
dbda@iacsd: ~  
dbda@iacsd:~$ sudo adduser lollipop --gid 1009  
Adding user 'lollipop' ...  
Adding new user 'lollipop' (1016) with group 'green' ...  
The home directory '/home/lollipop' already exists. Not copying from '/etc/skel'.  
New password:  
BAD PASSWORD: The password is shorter than 8 characters  
Retype new password:  
passwd: password updated successfully  
Changing the user information for lollipop  
Enter the new value, or press ENTER for the default  
    Full Name []: lollipop  
    Room Number []:  
    Work Phone []:  
    Home Phone []:  
    Other []:  
Is the information correct? [Y/n] y  
dbda@iacsd:~$
```

Marshmallow

```
dbda@iacsd: ~  
dbda@iacsd:~$ sudo adduser marshmallow --gid 1009  
Adding user 'marshmallow' ...  
Adding new user 'marshmallow' (1017) with group 'green' ...  
Creating home directory '/home/marshmallow' ...  
Copying files from '/etc/skel' ...  
New password:  
BAD PASSWORD: The password contains the user name in some form  
Retype new password:  
passwd: password updated successfully  
Changing the user information for marshmallow  
Enter the new value, or press ENTER for the default  
    Full Name []: marshmallow  
    Room Number []:  
    Work Phone []:  
    Home Phone []:  
    Other []:  
Is the information correct? [Y/n] y  
dbda@iacsd:~$
```

Orange

```
dbda@iacsd: ~  
dbda@iacsd:~$ sudo addgroup orange  
Adding group 'orange' (GID 1010) ...  
Done.  
dbda@iacsd:~$
```

New

```
dbda@iacsd: ~  
dbda@iacsd:~$ sudo adduser new --gid 1010  
Adding user 'new' ...  
Adding new user 'new' (1018) with group 'orange' ...  
Creating home directory '/home/new' ...  
Copying files from '/etc/skel' ...  
New password:  
BAD PASSWORD: The password is shorter than 8 characters  
Retype new password:  
passwd: password updated successfully  
Changing the user information for new  
Enter the new value, or press ENTER for the default  
Full Name []: orange  
Room Number []:  
Work Phone []:  
Home Phone []:  
Other []:  
Is the information correct? [Y/n] y  
dbda@iacsd:~$
```

Oppo

```
dbda@iacsd: ~  
dbda@iacsd:~$ sudo adduser oppo --gid 1010  
Adding user 'oppo' ...  
Adding new user 'oppo' (1019) with group 'orange' ...  
Creating home directory '/home/oppo' ...  
Copying files from '/etc/skel' ...  
New password:  
BAD PASSWORD: The password is a palindrome  
Retype new password:  
passwd: password updated successfully  
Changing the user information for oppo  
Enter the new value, or press ENTER for the default  
Full Name []: oppo  
Room Number []:  
Work Phone []:  
Home Phone []:  
Other []:  
Is the information correct? [Y/n] y  
dbda@iacsd:~$
```

Vivo

```
dbda@iacsd: ~  
dbda@iacsd:~$ sudo adduser vivo --gid 1010  
Adding user 'vivo' ...  
Adding new user 'vivo' (1020) with group 'orange' ...  
Creating home directory '/home/vivo' ...  
Copying files from '/etc/skel' ...  
New password:  
BAD PASSWORD: The password is shorter than 8 characters  
Retype new password:  
passwd: password updated successfully  
Changing the user information for vivo  
Enter the new value, or press ENTER for the default  
Full Name []: vivo  
Room Number []:  
Work Phone []:  
Home Phone []:  
Other []:  
Is the information correct? [Y/n] y  
dbda@iacsd:~$
```

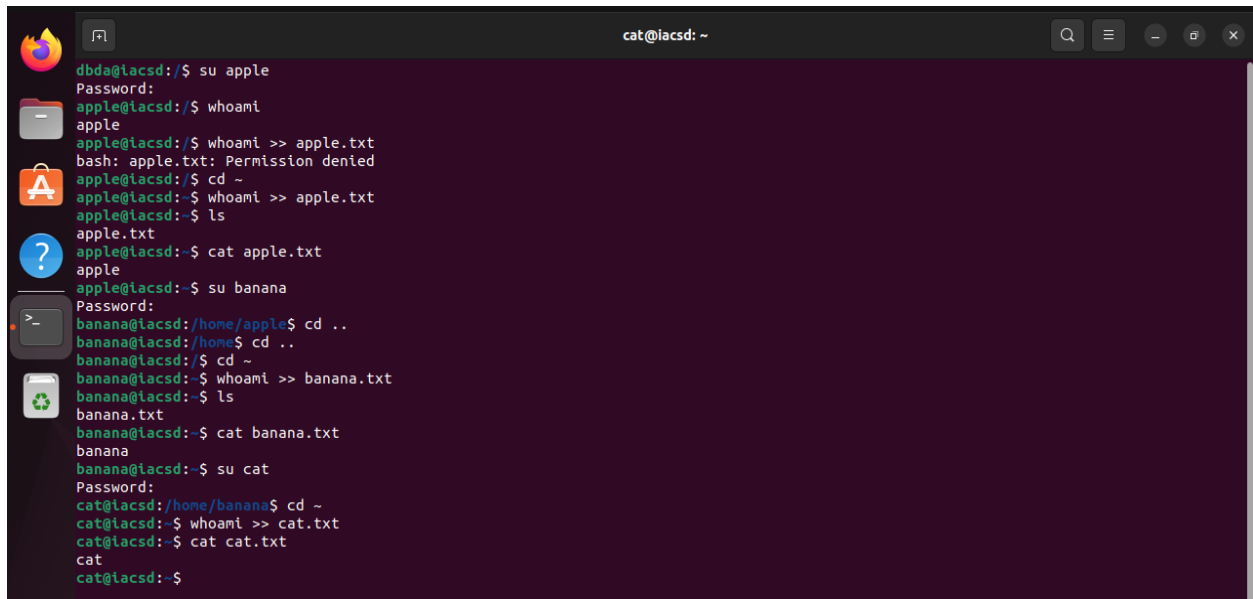
china

```
dbda@iacsd: ~  
dbda@iacsd:~$ sudo adduser china --gid 1010  
Adding user 'china' ...  
Adding new user 'china' (1021) with group 'orange' ...  
Creating home directory '/home/china' ...  
Copying files from '/etc/skel' ...  
New password:  
BAD PASSWORD: The password is shorter than 8 characters  
Retype new password:  
passwd: password updated successfully  
Changing the user information for china  
Enter the new value, or press ENTER for the default  
Full Name []: china  
Room Number []:  
Work Phone []:  
Home Phone []:  
Other []:  
Is the information correct? [Y/n] y  
dbda@iacsd:~$
```

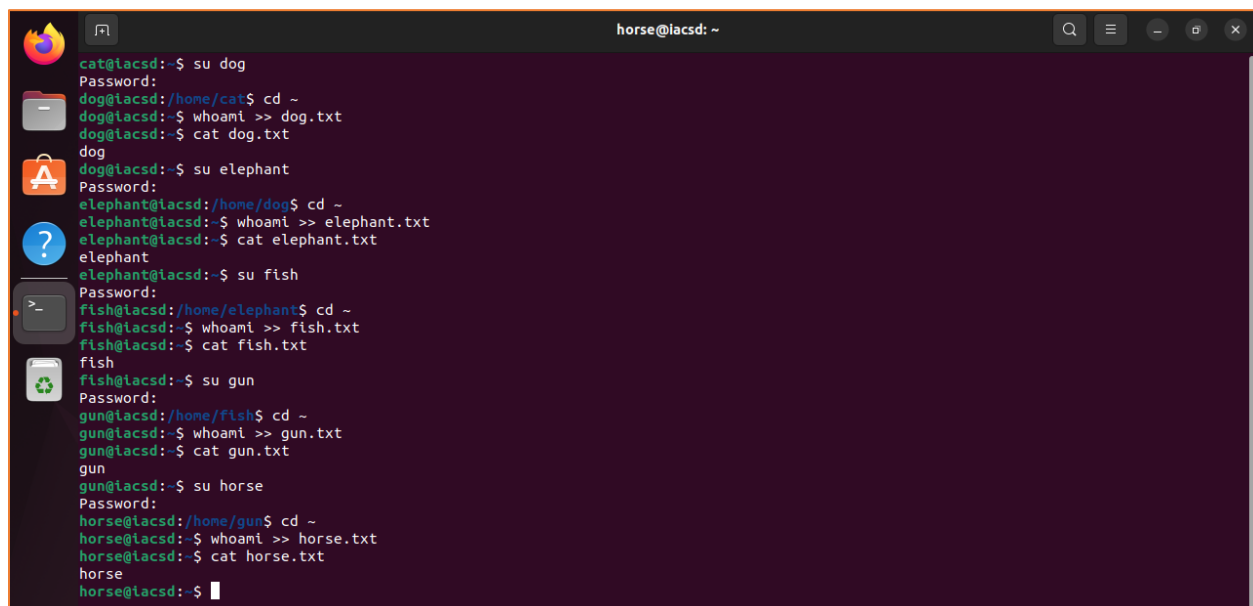
- a. create directory named EVERYONE in /home. Give all permission to EVERYONE.

```
dbda@iacsd: /home  
dbda@iacsd:/home$ sudo mkdir EVERYONE  
dbda@iacsd:/home$ sudo chmod 777 EVERYONE  
dbda@iacsd:/home$ ls -l  
total 104  
drwxr-x--- 2 apple red 4096 Mar 11 19:15 apple  
drwxr-x--- 2 banana blue 4096 Mar 11 19:16 banana  
drwxr-x--- 2 bob bob 4096 Mar 10 22:47 bob  
drwxr-x--- 2 cat red 4096 Mar 11 19:20 cat  
drwxr-x--- 2 china orange 4096 Mar 11 21:44 china  
drwxr-x--- 18 dbda dbda 4096 Mar 11 15:33 dbda  
drwxr-x--- 2 dog red 4096 Mar 11 19:22 dog  
drwxr-x--- 2 elephant red 4096 Mar 11 19:24 elephant  
drwxrwxrwx 2 root root 4096 Mar 11 21:50 EVERYONE  
drwxr-x--- 2 fish blue 4096 Mar 11 19:31 fish  
drwxr-x--- 2 gun blue 4096 Mar 11 19:34 gun  
drwxr-x--- 2 horse blue 4096 Mar 11 19:35 horse  
drwxr-x--- 2 icecream blue 4096 Mar 11 19:37 icecream  
drwxr-x--- 2 jelly green 4096 Mar 11 19:43 jelly  
drwxr-x--- 2 kitkat green 4096 Mar 11 19:45 kitkat  
drwxr-x--- 2 lollipop green 4096 Mar 11 21:22 lollipop  
drwxr-x--- 2 marshmallow green 4096 Mar 11 21:25 marshmallow  
drwxr-xr-x 2 root root 4096 Mar 10 21:55 Music  
drwxr-x--- 2 new orange 4096 Mar 11 21:31 new  
drwxr-x--- 2 oppo orange 4096 Mar 11 21:40 oppo  
drwxr-xr-x 2 root root 4096 Mar 10 21:58 Pictures  
drwxr-x--- 2 prince prince 4096 Mar 10 23:53 prince  
drwxr-x--- 2 sam sam 4096 Mar 10 22:56 sam  
drwxr-x--- 2 tom tom 4096 Mar 10 22:46 tom  
drwxr-xr-x 2 root root 4096 Mar 10 22:02 Videos  
drwxr-x--- 2 vivo orange 4096 Mar 11 21:42 vivo  
dbda@iacsd:/home$
```

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



```
cat@iacsd: ~  
dbda@iacsd:/$ su apple  
Password:  
apple@iacsd:/$ whoami  
apple  
apple@iacsd:/$ whoami >> apple.txt  
bash: apple.txt: Permission denied  
apple@iacsd:/$ cd ~  
apple@iacsd:/$ whoami >> apple.txt  
apple@iacsd:/$ ls  
apple.txt  
apple@iacsd:/$ cat apple.txt  
apple  
apple@iacsd:/$ su banana  
Password:  
banana@iacsd:/home/apple$ cd ..  
banana@iacsd:/home$ cd ..  
banana@iacsd:/$ cd ~  
banana@iacsd:/$ whoami >> banana.txt  
banana@iacsd:/$ ls  
banana.txt  
banana@iacsd:/$ cat banana.txt  
banana  
banana@iacsd:/$ su cat  
Password:  
cat@iacsd:/home/banana$ cd ~  
cat@iacsd:/$ whoami >> cat.txt  
cat@iacsd:/$ cat cat.txt  
cat  
cat@iacsd:/$
```



```
horse@iacsd: ~  
cat@iacsd:/$ su dog  
Password:  
dog@iacsd:/home/cat$ cd ~  
dog@iacsd:/$ whoami >> dog.txt  
dog@iacsd:/$ cat dog.txt  
dog  
dog@iacsd:/$ su elephant  
Password:  
elephant@iacsd:/home/dog$ cd ~  
elephant@iacsd:/$ whoami >> elephant.txt  
elephant@iacsd:/$ cat elephant.txt  
elephant  
elephant@iacsd:/$ su fish  
Password:  
fish@iacsd:/home/elephant$ cd ~  
fish@iacsd:/$ whoami >> fish.txt  
fish@iacsd:/$ cat fish.txt  
fish  
fish@iacsd:/$ su gun  
Password:  
gun@iacsd:/home/fish$ cd ~  
gun@iacsd:/$ whoami >> gun.txt  
gun@iacsd:/$ cat gun.txt  
gun  
gun@iacsd:/$ su horse  
Password:  
horse@iacsd:/home/gun$ cd ~  
horse@iacsd:/$ whoami >> horse.txt  
horse@iacsd:/$ cat horse.txt  
horse  
horse@iacsd:/$
```

```
marshmallow@iacsd: ~  
icecream@iacsd:~$ whoami >> icecream.txt  
icecream@iacsd:~$ cat icecream.txt  
icecream  
icecream@iacsd:~$ su jelly  
Password:  
jelly@iacsd:/home/icecream$ cd ~  
jelly@iacsd:~$ whoami >> jelly.txt  
jelly@iacsd:~$ cat jelly.txt  
jelly  
jelly@iacsd:~$ su kitkat  
Password:  
kitkat@iacsd:/home/jelly$ cd ~  
kitkat@iacsd:~$ whoami >> kitkat.txt  
kitkat@iacsd:~$ cat kitkat.txt  
cat: kitkat.txt: No such file or directory  
kitkat@iacsd:~$ cat kitkat.txt  
kitkat  
kitkat@iacsd:~$ su lolipop  
Password:  
lolipop@iacsd:/home/kitkat$ cd ~  
lolipop@iacsd:~$ whoami >> lolipop.txt  
lolipop@iacsd:~$ cat lolipop.txt  
lolipop  
lolipop@iacsd:~$ su marshmallow  
Password:  
marshmallow@iacsd:/home/lolipop$ cd ~  
marshmallow@iacsd:~$ whoami >> marshmallow.txt  
marshmallow@iacsd:~$ cat marshmallow.txt  
marshmallow  
marshmallow@iacsd:~$
```

```
dbda@iacsd: /home  
marshmallow@iacsd:~$ su oppo  
Password:  
oppo@iacsd:/home/marshmallow$ cd ~  
oppo@iacsd:~$ whoami >> oppo.txt  
oppo@iacsd:~$ cat oppo.txt  
oppo
```

```
china@iacsd: ~  
dbda@iacsd:/$ su vivo  
Password:  
vivo@iacsd:/$ cd ~  
vivo@iacsd:~$ whoami >> vivo.txt  
vivo@iacsd:~$ cat vivo.txt  
vivo  
vivo@iacsd:~$ su china  
Password:  
china@iacsd:/home/vivo$ cd ~  
china@iacsd:~$ whoami >> china.txt  
china@iacsd:~$ cat china.txt  
china  
china@iacsd:~$
```


oppo -> primary group change -> one

vivo -> primary group change -> two

```
dbda@iacsd: /home
dbda@iacsd:~$ ls -l
total 104
drwxr-x--- 2 apple    red    4096 Mar 11 22:01 apple
drwxr-x--- 2 banana  blue   4096 Mar 11 22:04 banana
drwxr-x--- 2 bob     bob    4096 Mar 10 22:47 bob
drwxr-x--- 2 cat     red    4096 Mar 11 22:05 cat
drwxr-x--- 2 china  orange 4096 Mar 11 22:34 china
drwxr-x--- 18 dbda   dbda   4096 Mar 11 15:33 dbda
drwxr-x--- 2 dog     red    4096 Mar 11 22:09 dog
drwxr-x--- 2 elephant red    4096 Mar 11 22:10 elephant
drwxrwxrwx 2 root    root   4096 Mar 11 21:50 EVERYONE
drwxr-x--- 2 fish    blue   4096 Mar 11 22:11 fish
drwxr-x--- 2 gun     blue   4096 Mar 11 22:12 gun
drwxr-x--- 2 horse   blue   4096 Mar 11 22:12 horse
drwxr-x--- 2 icecream blue   4096 Mar 11 22:14 icecream
drwxr-x--- 2 jelly    green  4096 Mar 11 22:15 jelly
drwxr-x--- 2 kitkat   green  4096 Mar 11 22:17 kitkat
drwxr-x--- 2 lollipop green  4096 Mar 11 22:19 lollipop
drwxr-x--- 2 marshmallow green  4096 Mar 11 22:20 marshmallow
drwxr-xr-x 2 root     root   4096 Mar 10 21:55 Music
drwxr-x--- 2 new      orange 4096 Mar 11 21:31 new
drwxr-x--- 2 oppo     one    4096 Mar 11 22:21 oppo
drwxr-xr-x 2 root     root   4096 Mar 10 21:58 Pictures
drwxr-x--- 2 prince   prince 4096 Mar 10 23:53 prince
drwxr-x--- 2 sam      sam    4096 Mar 10 22:56 sam
drwxr-x--- 2 tom      tom    4096 Mar 10 22:46 tom
drwxr-xr-x 2 root     root   4096 Mar 10 22:02 Videos
drwxr-x--- 2 vivo     two    4096 Mar 11 22:33 vivo
dbda@iacsd:~$
```

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

```
dbda@iacsd:~$ sudo usermod -aG sudo jelly
dbda@iacsd:~$ sudo usermod -aG sudo k
kernoops kitkat
dbda@iacsd:~$ sudo usermod -aG sudo kitkat
dbda@iacsd:~$ sudo usermod -aG sudo marshmallow
dbda@iacsd:~$
```


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

```
dbda@iacsd:~$ sudo usermod -g one fish
dbda@iacsd:~$ sudo usermod -g one gun
dbda@iacsd:~$ sudo usermod -aG sudo fish
dbda@iacsd:~$ sudo usermod -aG sudo gun
dbda@iacsd:~$
```

```
dbda@iacsd:~$ id jelly
uid=1014(jelly) gid=1009(green) groups=1009(green),27(sudo)
dbda@iacsd:~$ id kitkat
uid=1015(kitkat) gid=1009(green) groups=1009(green),27(sudo)
dbda@iacsd:~$ id lollipop
uid=1016(lollipop) gid=1009(green) groups=1009(green)
dbda@iacsd:~$ id marshmallow
uid=1017(marshmallow) gid=1009(green) groups=1009(green),27(sudo)
dbda@iacsd:~$ id fish
uid=1010(fish) gid=1011(one) groups=1011(one),27(sudo)
dbda@iacsd:~$ id gun
uid=1011(gun) gid=1011(one) groups=1011(one),27(sudo)
dbda@iacsd:~$
```

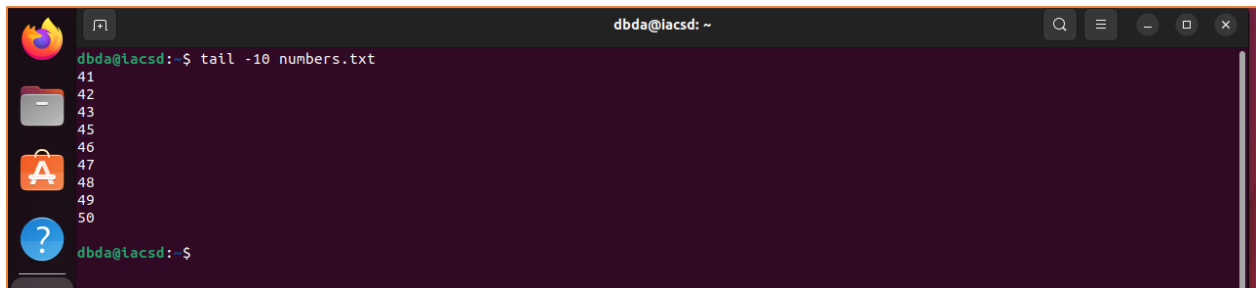
Q.2 Create Numbers.txt which will contain numbers from 1-50

a. display first 15 numbers



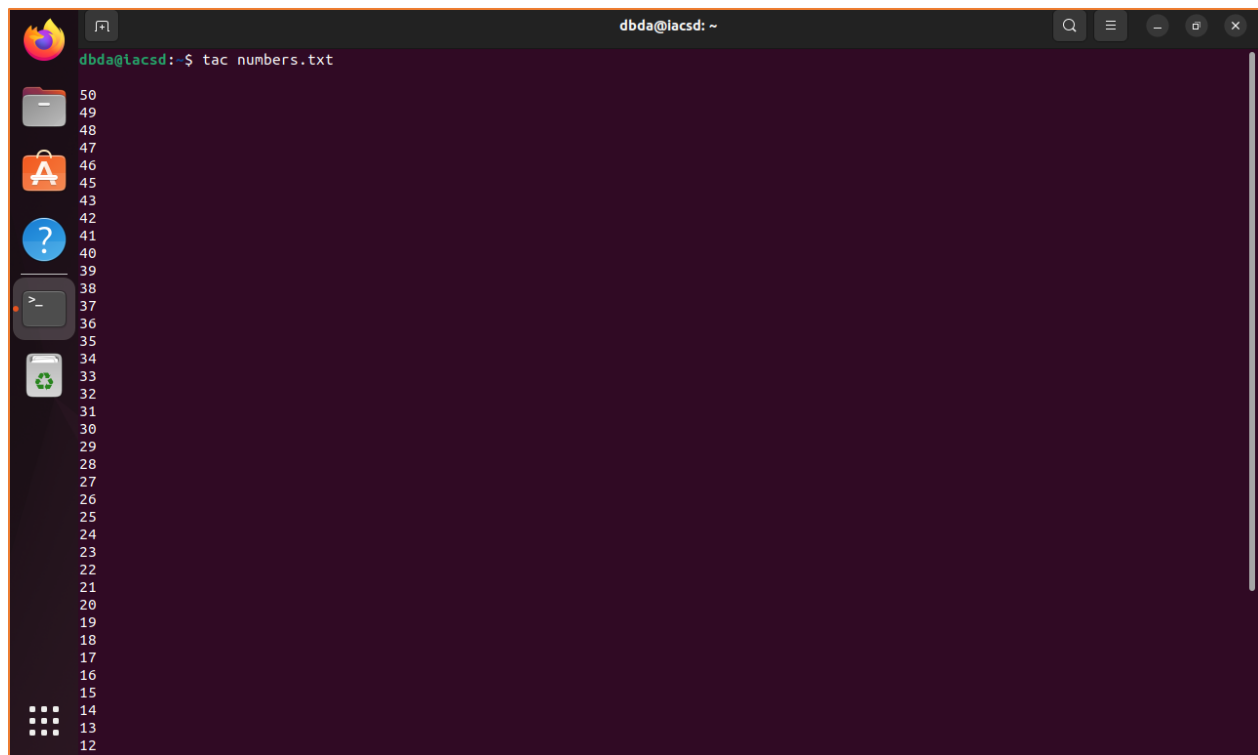
```
dbda@iacsd: ~  
dbda@iacsd:~$ touch numbers.txt  
dbda@iacsd:~$ nano numbers.txt  
dbda@iacsd:~$ head -15 numbers.txt  
1  
2  
3  
4  
5  
6  
7  
8  
9  
10  
11  
12  
13  
14  
15  
dbda@iacsd:~$
```

c. display last 10 numbers

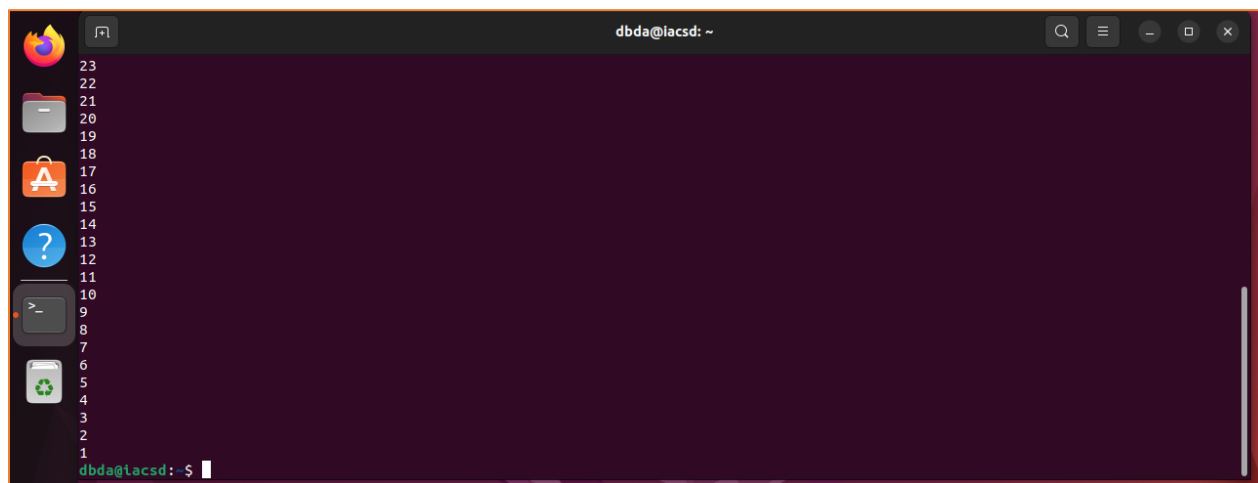


```
dbda@iacsd:~$ tail -10 numbers.txt  
41  
42  
43  
44  
45  
46  
47  
48  
49  
50  
dbda@iacsd:~$
```

d. display numbers in reverse order.

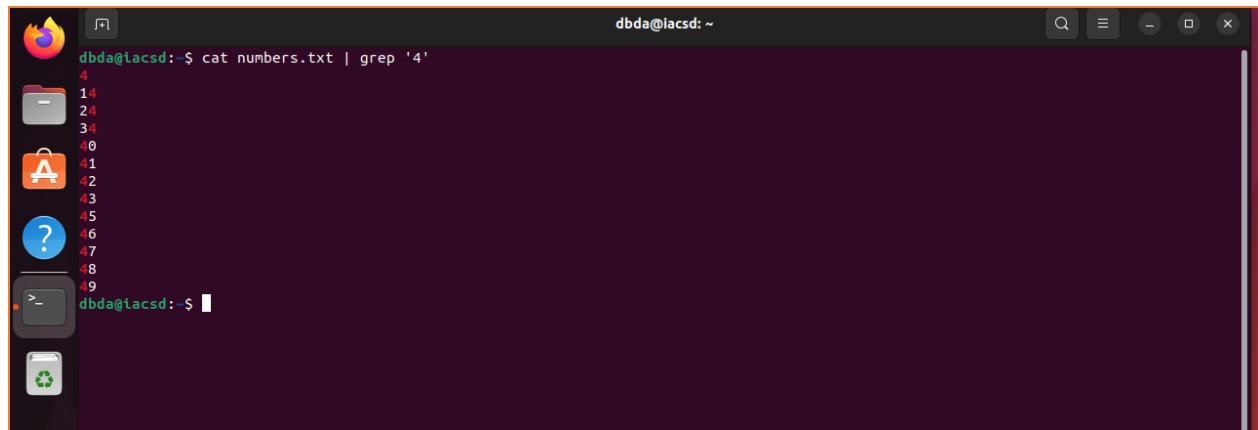


```
dbda@lacs d: ~  
dbda@lacs d:~$ tac numbers.txt  
50  
49  
48  
47  
46  
45  
43  
42  
41  
40  
39  
38  
37  
36  
35  
34  
33  
32  
31  
30  
29  
28  
27  
26  
25  
24  
23  
22  
21  
20  
19  
18  
17  
16  
15  
14  
13  
12
```



```
dbda@lacs d: ~  
dbda@lacs d:~$ tac numbers.txt  
23  
22  
21  
20  
19  
18  
17  
16  
15  
14  
13  
12  
11  
10  
9  
8  
7  
6  
5  
4  
3  
2  
1  
dbda@lacs d:~$
```

display numbers which includes 4 in it



```
dbda@iacsd: ~  
dbda@iacsd:~$ cat numbers.txt | grep '4'  
4  
14  
24  
34  
40  
41  
42  
43  
45  
46  
47  
48  
49  
dbda@iacsd:~$
```

Q.3 create Student.txt file as given below

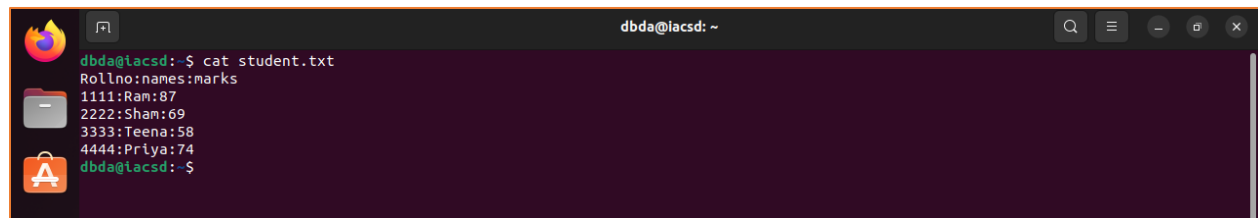
Rollno:name:marks

1111:Ram:87

2222:Sham:69

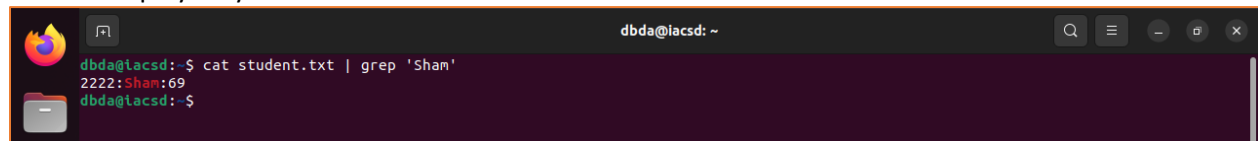
3333:Teena:58

4444:Priya:74



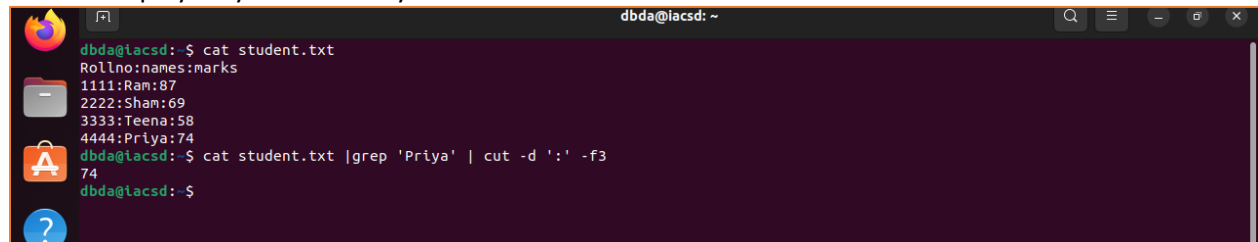
```
dbda@iacsd: ~  
dbda@iacsd:~$ cat student.txt  
Rollno:names:marks  
1111:Ram:87  
2222:Sham:69  
3333:Teena:58  
4444:Priya:74  
dbda@iacsd:~$
```

a. Display only details of sham



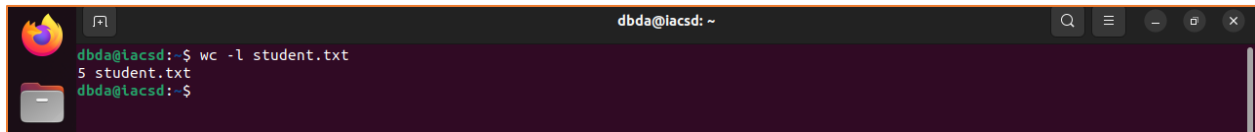
```
dbda@iacsd: ~  
dbda@iacsd:~$ cat student.txt | grep 'Sham'  
2222:Sham:69  
dbda@iacsd:~$
```

b. Display only marks of Priya



```
dbda@iacsd: ~  
dbda@iacsd:~$ cat student.txt  
Rollno:names:marks  
1111:Ram:87  
2222:Sham:69  
3333:Teena:58  
4444:Priya:74  
dbda@iacsd:~$ cat student.txt | grep 'Priya' | cut -d ':' -f3  
74  
dbda@iacsd:~$
```

Display total number of lines in student.txt

A terminal window with a dark purple background and a title bar that reads 'dbda@iacsd: ~'. The window contains the following text:

```
dbda@iacsd:~$ wc -l student.txt
5 student.txt
dbda@iacsd:~$
```