

```
dbda@iacsd: /home
dbda@iacsd:/home$ ls -l
total 76
drwxr-xr-x  2 root      root    4096 Mar 11 15:00 all
drwxr-x---  2 apple    red    4096 Mar 11 18:31 apple
drwxr-x---  2 banana   red    4096 Mar 11 18:32 banana
drwxr-x---  2 cat      red    4096 Mar 11 18:33 cat
drwxr-x---  2 china    orange 4096 Mar 11 18:43 china
drwxr-x--- 17 dbda     dbda   4096 Mar 11 17:26 dbda
drwxr-x---  2 dog      red    4096 Mar 11 18:33 dog
drwxr-x---  2 elephant red    4096 Mar 11 18:34 elephant
drwxr-x---  2 fish     blue   4096 Mar 11 18:35 fish
drwxr-x---  2 gun      blue   4096 Mar 11 18:36 gun
drwxr-x---  2 horse    blue   4096 Mar 11 18:36 horse
drwxr-x---  2 icecream blue   4096 Mar 11 18:37 icecream
drwxr-x---  2 jelly     green  4096 Mar 11 18:38 jelly
drwxr-x---  2 kitkat    green  4096 Mar 11 18:38 kitkat
drwxr-x---  2 lolipop   green  4096 Mar 11 18:39 lolipop
drwxr-x---  2 marshmallow green 4096 Mar 11 18:40 marshmallow
drwxr-x---  2 new       orange 4096 Mar 11 18:41 new
drwxr-x---  2 oppo      orange 4096 Mar 11 18:42 oppo
drwxr-x---  2 vivo      orange 4096 Mar 11 18:42 vivo
dbda@iacsd:/home$
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```
dbda@iacsd: /home
dbda@iacsd:/home$ ls -l
total 80
drwxr-xr-x  2 root      root    4096 Mar 11 15:00 all
drwxr-x---  2 apple    red    4096 Mar 11 18:31 apple
drwxr-x---  2 banana   red    4096 Mar 11 18:32 banana
drwxr-x---  2 cat      red    4096 Mar 11 18:33 cat
drwxr-x---  2 china    orange 4096 Mar 11 18:43 china
drwxr-x--- 17 dbda     dbda   4096 Mar 11 17:26 dbda
drwxr-x---  2 dog      red    4096 Mar 11 18:33 dog
drwxr-x---  2 elephant red    4096 Mar 11 18:34 elephant
drwxrwxrwx  2 root      root    4096 Mar 11 18:51 everyone
drwxr-x---  2 fish     blue   4096 Mar 11 18:35 fish
drwxr-x---  2 gun      blue   4096 Mar 11 18:36 gun
drwxr-x---  2 horse    blue   4096 Mar 11 18:36 horse
drwxr-x---  2 icecream blue   4096 Mar 11 18:37 icecream
drwxr-x---  2 jelly     green  4096 Mar 11 18:38 jelly
drwxr-x---  2 kitkat    green  4096 Mar 11 18:38 kitkat
drwxr-x---  2 lolipop   green  4096 Mar 11 18:39 lolipop
drwxr-x---  2 marshmallow green 4096 Mar 11 18:40 marshmallow
drwxr-x---  2 new       orange 4096 Mar 11 18:41 new
drwxr-x---  2 oppo      orange 4096 Mar 11 18:42 oppo
drwxr-x---  2 vivo      orange 4096 Mar 11 18:42 vivo
dbda@iacsd:/home$
```

```
dbda@iacsd: /home

dbda@iacsd:/home$ sudo addgroup one
[sudo] password for dbda:
Adding group 'one' (GID 1007) ...
Done.
dbda@iacsd:/home$ sudo addgroup two
Adding group 'two' (GID 1008) ...
Done.
dbda@iacsd:/home$
```

```
elephant@iacsd: ~

dbda@iacsd:/home$ sudo -s
root@iacsd:/home# su apple
apple@iacsd:/home$ whoami >>apple.txt
bash: apple.txt: Permission denied
apple@iacsd:/home$ cd
apple@iacsd:~$ whoami >>apple.txt
apple@iacsd:~$ ls
apple.txt
apple@iacsd:~$ su banana
Password:
banana@iacsd:/home/apple$ cd
banana@iacsd:~$ whoami >>banana.txt
banana@iacsd:~$ ls
banana.txt
banana@iacsd:~$ su cat
Password:
cat@iacsd:/home/banana$ cd
cat@iacsd:~$ whoami >>cat.txt
cat@iacsd:~$ su dog
Password:
dog@iacsd:/home/cat$ cd
dog@iacsd:~$ whoami >>cat.txt
dog@iacsd:~$ su dog
Password:
dog@iacsd:~$ whoami >> dog.txt
dog@iacsd:~$ su elephant
Password:
elephant@iacsd:/home/dog$ cd
elephant@iacsd:~$ whoami >> elephant.txt
elephant@iacsd:~$
```

```
china@iacsd: ~  
marshall@iacsd:~$ su new  
Password:  
new@iacsd:/home/marshall$ cd  
new@iacsd:~$ whoami >>new.txt  
new@iacsd:~$ ls  
new.txt  
new@iacsd:~$ su oppo  
Password:  
oppo@iacsd:/home/new$ cd  
oppo@iacsd:~$ whoami >>oppo.txt  
oppo@iacsd:~$ ls  
oppo.txt  
oppo@iacsd:~$ su vivo  
Password:  
vivo@iacsd:/home/oppo$ cd  
vivo@iacsd:~$ whoami >>vivo.txt  
vivo@iacsd:~$ ls  
vivo.txt  
vivo@iacsd:~$ su china  
Password:  
china@iacsd:/home/vivo$ cd  
china@iacsd:~$ whoami >>china.txt  
china@iacsd:~$ ls  
china.txt  
china@iacsd:~$
```

```
dbda@iacsd: /home
tty:x:5:
disk:x:6:
lp:x:7:
mail:x:8:
news:x:9:
uucp:x:10:
man:x:12:
proxy:x:13:
knem:x:15:
dialout:x:20:
fax:x:21:
voice:x:22:
cdrom:x:24:dbda
floppy:x:25:
tape:x:26:
sudo:x:27:dbda,jelly,kitkat,lolipop,marshmallow
audio:x:29:pulse
dip:x:30:dbda
www-data:x:33:
backup:x:34:
operator:x:37:
list:x:38:
irc:x:39:
src:x:40:
```

```
dbda@iacsd: /home
geoclue:x:124:131::/var/lib/geoclue:/usr/sbin/nologin
pulse:x:125:132:PulseAudio daemon,,,:/run/pulse:/usr/sbin/nologin
gnome-initial-setup:x:126:65534::/run/gnome-initial-setup:/bin/false
hplip:x:127:7:HPLIP system user,,,:/run/hplip:/bin/false
gdm:x:128:134:Gnome Display Manager:/var/lib/gdm3:/bin/false
dbda:x:1000:1000:dbda,,,:/home/dbda:/bin/bash
apple:x:1001:1001::,/home/apple:/bin/bash
banana:x:1002:1001::,/home/banana:/bin/bash
cat:x:1003:1001::,/home/cat:/bin/bash
dog:x:1004:1001::,/home/dog:/bin/bash
elephant:x:1005:1001::,/home/elephant:/bin/bash
fish:x:1006:1002::,/home/fish:/bin/bash
gun:x:1007:1002::,/home/gun:/bin/bash
horse:x:1008:1002::,/home/horse:/bin/bash
icecream:x:1009:1002::,/home/icecream:/bin/bash
jelly:x:1010:1003::,/home/jelly:/bin/bash
kitkat:x:1011:1003::,/home/kitkat:/bin/bash
lolipop:x:1012:1003::,/home/lolipop:/bin/bash
marshmallow:x:1013:1003::,/home/marshmallow:/bin/bash
new:x:1014:1004::,/home/new:/bin/bash
oppo:x:1015:1007::,/home/oppo:/bin/bash
vivo:x:1016:1008::,/home/vivo:/bin/bash
china:x:1017:1004::,/home/china:/bin/bash
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```
dbda@iacsd: /home
rtkit:x:123:
whoopsie:x:124:
sssd:x:125:
fwupd-refresh:x:126:
nm-openvpn:x:127:
scanner:x:128:saned
saned:x:129:
colord:x:130:
geoclue:x:131:
pulse:x:132:
pulse-access:x:133:
gdm:x:134:
lxd:x:135:dbda
dbda:x:1000:
smbshare:x:136:dbda
dac:x:1005:
ditiss:x:1006:
red:x:1001:
blue:x:1002:
green:x:1003:
orange:x:1004:
one:x:1007:fish,gun
two:x:1008:
dbda@iacsd:/home$
```

```
dbda@iacsd: ~
dbda@iacsd:~$ head -n 1 numbers.txt
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 31 32 33 34 35 36 37 38
39 40 41 42 43 44 45 46 47 48 49 50
dbda@iacsd:~$ rm numbers.txt
dbda@iacsd:~$ nano numbers.txt
dbda@iacsd:~$ head -n 15 numbers.txt
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
dbda@iacsd:~$ tail -n 10 numbers.txt
42
43
```

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

```
dbda@iacsd: ~  
8  
7  
6  
5  
4  
3  
2  
1  
dbda@iacsd:~$ grep '4' numbers.txt  
4  
14  
24  
34  
40  
41  
42  
43  
44  
45  
46  
47  
48  
49  
dbda@iacsd:~$
```

```
dbda@iacsd: ~  
23  
22  
21  
20  
19  
18  
17  
16  
15  
14  
13  
12  
11  
10  
9  
8  
7  
6  
5  
4  
3  
2  
1  
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```

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