

ASSIGNMENT -5

Networking and System Administration Lab

Submitted by:

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S2RMCA:A batch

Roll No:44

1. a. Create six files with name of the form songX.mp3
- b. Create six files with name of the form snapX.mp3
- c. Create six files with name of the form filmX.mp3

```
jisha@jisha-VirtualBox:~$ touch song1.mp3 song2.mp3 song3.mp3 song4.mp3 song5.mp3 song6.mp3
jisha@jisha-VirtualBox:~$ touch snap1.mp3 snap2.mp3 snap3.mp3 snap4.mp3 snap5.mp3 snap6.mp3
jisha@jisha-VirtualBox:~$ touch film1.mp3 film2.mp3 film3.mp3 film4.mp3 film5.mp3 film6.mp3
jisha@jisha-VirtualBox:~$ ls
allFolder  appu.txt  archive.tar  BOOKS  Desktop  Downloads  film1.mp3  film2.mp3  film3.mp3  film4.mp3  film5.mp3  film6.mp3  hello  h.txt  minnu  number.txt  snap1.mp3  snap2.mp3  snap3.mp3  snap4.mp3  snap5.mp3  snap6.mp3  song1.mp3  song2.mp3  song3.mp3  song4.mp3  song5.mp3  song6.mp3  Templates  Videos
ammu.txt  class.txt  dal.txt  de.txt  Documents  fill1.mp3  fill2.mp3  fill3.mp3  fill4.mp3  fill5.mp3  fill6.mp3  ha  ha.pub  hi.txt  Music  Public  snap1.mp3  snap2.mp3  snap3.mp3  snap4.mp3  snap5.mp3  snap6.mp3  song1.mp3  song2.mp3  song3.mp3  song4.mp3  song5.mp3  song6.mp3  Templates  Videos
jisha@jisha-VirtualBox:~$
```

2. From your home directory, move the song files into your music subdirectory, the snapshot files into your pictures subdirectory, and the movie files into videos subdirectory.

```
jisha@jisha-VirtualBox:~$ mv song1.mp3 song2.mp3 song3.mp3 song4.mp3 song5.mp3 song6.mp3 ./Music/
jisha@jisha-VirtualBox:~$ ls
allFolder  appu.txt  archive.tar  BOOKS  Desktop  Downloads  film1.mp3  film2.mp3  film3.mp3  film4.mp3  film5.mp3  film6.mp3  hello  h.txt  minnu  number.txt  snap1.mp3  snap2.mp3  snap3.mp3  snap4.mp3  snap5.mp3  snap6.mp3  song1.mp3  song2.mp3  song3.mp3  song4.mp3  song5.mp3  song6.mp3  Templates  Videos
ammu.txt  class.txt  dal.txt  de.txt  Documents  fill1.mp3  fill2.mp3  fill3.mp3  fill4.mp3  fill5.mp3  fill6.mp3  ha  ha.pub  hi.txt  Music  Public  snap1.mp3  snap2.mp3  snap3.mp3  snap4.mp3  snap5.mp3  snap6.mp3  song1.mp3  song2.mp3  song3.mp3  song4.mp3  song5.mp3  song6.mp3  Templates  Videos
appu      class.txt  dal.txt  de.txt  Documents  fill1.mp3  fill2.mp3  fill3.mp3  fill4.mp3  fill5.mp3  fill6.mp3  ha  ha.pub  hi.txt  Music  Public  snap1.mp3  snap2.mp3  snap3.mp3  snap4.mp3  snap5.mp3  snap6.mp3  song1.mp3  song2.mp3  song3.mp3  song4.mp3  song5.mp3  song6.mp3  Templates  Videos
jisha@jisha-VirtualBox:~$ -R Music
Music:
song1.mp3 song2.mp3 song3.mp3 song4.mp3 song5.mp3 song6.mp3
jisha@jisha-VirtualBox:~$ mv snap1.mp3 snap2.mp3 snap3.mp3 snap4.mp3 snap5.mp3 snap6.mp3 ./Pictures/
mv: Target './Pictures/' is not a directory
jisha@jisha-VirtualBox:~$ mv snap1.mp3 snap2.mp3 snap3.mp3 snap4.mp3 snap5.mp3 snap6.mp3 ./Pictures/
jisha@jisha-VirtualBox:~$ ls -R Pictures
Pictures:
'Screenshot from 2021-06-13 10-31-33.png' 'Screenshot from 2021-06-13 10-34-39.png' 'Screenshot from 2021-06-13 10-35-58.png' 'Screenshot from 2021-06-13 11-13-41.png' snap1.mp3 snap6.mp3
'Screenshot from 2021-06-13 10-33-57.png' 'Screenshot from 2021-06-13 10-34-41.png' 'Screenshot from 2021-06-13 10-36-28.png' snap1.mp3
'Screenshot from 2021-06-13 10-34-14.png' 'Screenshot from 2021-06-13 10-34-42.png' 'Screenshot from 2021-06-13 11-11-28.png' snap1.mp3
jisha@jisha-VirtualBox:~$ mv film1.mp3 film2.mp3 film3.mp3 film4.mp3 film5.mp3 film6.mp3 ./Videos/
jisha@jisha-VirtualBox:~$ ls -R Videos
Videos:
film1.mp3 film2.mp3 film3.mp3 film4.mp3 film5.mp3 film6.mp3
jisha@jisha-VirtualBox:~$
```

3. In your home directory, create three subdirectories for organizing your files. Call these directories friends, family, and work. Create all three with one command.

```
jisha@jisha-VirtualBox:~$ mkdir friends family work
jisha@jisha-VirtualBox:~$ ls
allFolder  appu.txt  archive.tar  BOOKS  dal.txt  de.txt  Downloads  friends  ha.pub  hello.txt  h.txt  Music  Pictures  Templates  work  Videos
ammu.txt  class.txt  Desktop  Documents  family  ha  hello  hi.txt  minnu  number.txt  Public  Videos
jisha@jisha-VirtualBox:~$
```

4. Copy song files to the friends folder and snap files to family folder.

```
jisha@jisha-VirtualBox:~$ cp Pictures/snap6.mp3 family
jisha@jisha-VirtualBox:~$ cp Pictures/snap5.mp3 family
jisha@jisha-VirtualBox:~$ cp Pictures/snap4.mp3 family
jisha@jisha-VirtualBox:~$ cp Pictures/snap3.mp3 family
jisha@jisha-VirtualBox:~$ cp Pictures/snap2.mp3 family
jisha@jisha-VirtualBox:~$ cp Pictures/snap1.mp3 family
jisha@jisha-VirtualBox:~$ ls family
snap1.mp3 snap2.mp3 snap3.mp3 snap4.mp3 snap5.mp3 snap6.mp3
jisha@jisha-VirtualBox:~$
```

```
jisha@jisha-VirtualBox:~$ cp Music/song1.mp3 friends
jisha@jisha-VirtualBox:~$ cp Music/song2.mp3 friends
jisha@jisha-VirtualBox:~$ cp Music/song3.mp3 friends
jisha@jisha-VirtualBox:~$ cp Music/song4.mp3 friends
jisha@jisha-VirtualBox:~$ cp Music/song5.mp3 friends
jisha@jisha-VirtualBox:~$ cp Music/song6.mp3 friends
jisha@jisha-VirtualBox:~$ ls
allFolder  appu.txt  archive.tar  BOOKS  dal.txt  de.txt  Downloads  friends  ha.pub  hello.txt  h.txt  Music  Pictures  Templates  work  Videos
ammu.txt  class.txt  Desktop  Documents  family  ha  hello  hi.txt  minnu  number.txt  Public  Videos
jisha@jisha-VirtualBox:~$ cp Pictures/snap1.mp3
cp: missing destination file operand after 'Pictures/snap1.mp3'
Try 'cp --help' for more information.
jisha@jisha-VirtualBox:~$ cp Pictures/snap1.mp3 friends
jisha@jisha-VirtualBox:~$ cp Pictures/snap2.mp3 friends
jisha@jisha-VirtualBox:~$ cp Pictures/snap3.mp3 friends
jisha@jisha-VirtualBox:~$ cp Pictures/snap4.mp3 friends
jisha@jisha-VirtualBox:~$ cp Pictures/snap5.mp3 friends
jisha@jisha-VirtualBox:~$ cp Pictures/snap6.mp3 friends
jisha@jisha-VirtualBox:~$ ls
allFolder  appu.txt  archive.tar  BOOKS  dal.txt  de.txt  Downloads  friends  ha.pub  hello.txt  h.txt  Music  Pictures  Templates  work  Videos
ammu.txt  class.txt  Desktop  Documents  family  ha  hello  hi.txt  minnu  number.txt  Public  Videos
jisha@jisha-VirtualBox:~$
jisha@jisha-VirtualBox:~$ ls friends
snap1.mp3 snap2.mp3 snap3.mp3 snap4.mp3 snap5.mp3 snap6.mp3 song1.mp3 song2.mp3 song3.mp3 song4.mp3 song5.mp3 song6.mp3
jisha@jisha-VirtualBox:~$
```

5. Attempt to delete both family and friends projects with a single rmdir command.

```
jisha@jisha-VirtualBox:~$ rm -r family friends
jisha@jisha-VirtualBox:~$ ls
allfolder  appu  archive.tar  BOOKS  dai.txt  de.txt  Downloads  ha.pub  hello.txt  h.txt  Music  Pictures  Templates  work
ammu.txt  appu.txt  class.txt  Desktop  Documents  ha  hello  hi.txt  minnu  number.txt  Public  Videos
jisha@jisha-VirtualBox:~$
```

6. Use another command that will succeed in deleting both the family and friends folder.

```
jisha@jisha-VirtualBox:~$ rmdir family friends
rmdir: failed to remove 'family': No such file or directory
rmdir: failed to remove 'friends': No such file or directory
jisha@jisha-VirtualBox:~$
```

7. Redirect a long listing of all home directory files, including hidden, into a file named allfiles.txt. Confirm that the file contains the listing.

```
jisha@jisha-VirtualBox:~$ ls -al > allfiles.txt
jisha@jisha-VirtualBox:~$ ls
allfiles.txt  ammu.txt  archive.tar  BOOKS  dai.txt  de.txt  Downloads  ha.pub  hello.txt  h.txt  Music  Pictures  Templates  work
allfolder  appu  class.txt  Desktop  Documents  ha  hello  hi.txt  minnu  number.txt  Public  Videos
jisha@jisha-VirtualBox:~$ cat allfiles.txt
total 152
drwxr-xr-x 21 jisha jisha 4096 Aug 17 16:03 .
drwxr-xr-x  3 root root  4096 Jun 12 16:53 ..
-rw-rw-r--  1 jisha jisha    0 Aug 17 16:03 allfiles.txt
drwxrwxr-x  3 jisha jisha 4096 Aug  6 15:24 allfolder
-rw-rw-r--  1 jisha jisha    4 Jun 15 15:30 ammu.txt
-rw-rw-r--  1 jisha jisha    0 Jun 15 15:55 appu
-rw-rw-r--  1 jisha jisha   12 Jun 15 15:34 appu.txt
-rw-rw-r--  1 jisha jisha 10240 Aug  8 12:28 archive.tar
-rw-r--r--  1 jisha jisha 4595 Aug 14 12:45 .bash_history
-rw-r--r--  1 jisha jisha  220 Jun 12 16:53 .bash_logout
-rw-r--r--  1 jisha jisha 3771 Jun 12 16:53 .bashrc
drwxr-xrwx  2 jisha jisha 4096 Aug  3 15:38 books
drwxrwxr-x  2 jisha jisha 4096 Aug  3 15:41 BOOKS
drwx----- 15 jisha jisha 4096 Aug 14 11:13 .cache
-rw-rw-r--  1 jisha jisha   54 Aug  6 14:45 class.txt
drwx----- 12 jisha jisha 4096 Aug  3 15:51 .config
-rw-rw-r--  1 jisha jisha    0 Jun 15 15:54 dai.txt
drwxr-xr-x  2 jisha jisha 4096 Jun 12 17:07 Desktop
-rw-rw-r--  1 jisha jisha    0 Jun 15 15:54 de.txt
drwxr-xr-x  2 jisha jisha 4096 Jun 12 17:07 Documents
drwxr-xr-x  2 jisha jisha 4096 Jun 12 17:07 Downloads
drwx-----  3 jisha jisha 4096 Aug 17 14:21 .gnupg
-rw-----  1 jisha jisha 2655 Aug  8 12:31 ha
-rw-r--r--  1 jisha jisha  576 Aug  8 12:31 ha.pub
drwxrwxr-x  2 jisha jisha 4096 Aug  8 12:16 hello
-rw-rw-r--  1 jisha jisha   10 Jun 20 09:30 hello.txt
-rwxrw-r--  1 jisha jisha   34 Jun 20 09:45 hi.txt
-rw-rw-r--  1 jisha jisha   10 Jun 20 09:28 h.txt
drwx-----  3 jisha jisha 4096 Jun 12 17:07 .local
drwxrwxr-x  2 jisha jisha 4096 Jun 13 11:40 minnu
drwxr-xr-x  2 jisha jisha 4096 Aug 17 15:08 Music
-rw-rw-r--  1 jisha jisha   21 Jun 15 15:46 number.txt
drwxr-xr-x  2 jisha jisha 4096 Aug 17 15:11 Pictures
-rw-r--r--  1 jisha jisha  807 Jun 12 16:53 .profile
drwxr-xr-x  2 jisha jisha 4096 Jun 12 17:07 Public
drwx-----  2 jisha jisha 4096 Jun 12 17:09 .ssh
-rw-r--r--  1 jisha jisha    0 Aug  3 15:01 .sudo_as_admin_successful
drwxr-xr-x  2 jisha jisha 4096 Jun 12 17:07 Templates
drwxr-xr-x  2 jisha jisha 4096 Aug 17 15:13 Videos
drwxrwxr-x  2 jisha jisha 4096 Aug 17 15:21 work
jisha@jisha-VirtualBox:~$
```

8. In the command window, display today's date with day of the week, month, date and year

```
jisha@jisha-VirtualBox:~$ date
Tuesday 17 August 2021 04:06:25 PM IST
jisha@jisha-VirtualBox:~$
```

9. Add the user Juliet

```
jisha@jisha-VirtualBox:~$ sudo useradd juliet
[sudo] password for jisha:
jisha@jisha-VirtualBox:~$ cat /etc/passwd
root:x:0:0:root:/root:/bin/bash
daemon:x:1:1:daemon:/usr/sbin:/usr/sbin/nologin
bin:x:2:2:bin:/bin:/usr/sbin/nologin
sys:x:3:3:sys:/dev:/usr/sbin/nologin
sync:x:4:65534:sync:/bin:/bin/sync
games:x:5:60:games:/usr/games:/usr/sbin/nologin
man:x:6:12:man:/var/cache/man:/usr/sbin/nologin
lp:x:7:7:lp:/var/spool/lpd:/usr/sbin/nologin
mail:x:8:8:mail:/var/mail:/usr/sbin/nologin
news:x:9:9:news:/var/spool/news:/usr/sbin/nologin
uucp:x:10:10:uucp:/var/spool/uucp:/usr/sbin/nologin
proxy:x:13:13:proxy:/bin:/usr/sbin/nologin
www-data:x:33:33:www-data:/var/www:/usr/sbin/nologin
backup:x:34:34:backup:/var/backups:/usr/sbin/nologin
list:x:38:38:Mail List Manager:/var/list:/usr/sbin/nologin
irc:x:39:39:ircd:/var/run/ircd:/usr/sbin/nologin
gnats:x:41:41:Gnats Bug-Reporting System (admin):/var/lib/gnats:/usr/sbin/nologin
nobody:x:65534:65534:nobody:/nonexistent:/usr/sbin/nologin
systemd-network:x:100:102:systemd Network Management,,,:/run/systemd:/usr/sbin/nologin
systemd-resolve:x:101:103:systemd Resolver,,,:/run/systemd:/usr/sbin/nologin
systemd-timesync:x:102:104:systemd Time Synchronization,,,:/run/systemd:/usr/sbin/nologin
messagebus:x:103:106:/:nonexistent:/usr/sbin/nologin
syslog:x:104:110:/:home/syslog:/usr/sbin/nologin
_apt:x:105:65534:/:nonexistent:/usr/sbin/nologin
tss:x:106:111:TPM software stack,,,:/var/lib/tpm:/bin/false
uuidd:x:107:114:/:run/uuidd:/usr/sbin/nologin
tcpdump:x:108:115:/:nonexistent:/usr/sbin/nologin
avahi-autoipd:x:109:116:Avahi autoip daemon,,,:/var/lib/avahi-autoipd:/usr/sbin/nologin
usbmux:x:110:46:usbmux daemon,,,:/var/lib/usbmux:/usr/sbin/nologin
rtkit:x:111:117:RealtimeKit,,,:/proc:/usr/sbin/nologin
dovecot:x:112:65534:dovecot,,,:/usr/lib/dovecot:/usr/sbin/nologin
```

10. Confirm that Juliet has been added by examining the /etc/passwd file

```
jisha@jisha-VirtualBox:~$ cat /etc/passwd
root:x:0:0:root:/root:/bin/bash
daemon:x:1:1:daemon:/usr/sbin:/usr/sbin/nologin
bin:x:2:2:bin:/bin:/usr/sbin/nologin
sys:x:3:3:sys:/dev:/usr/sbin/nologin
sync:x:4:65534:sync:/bin:/bin/sync
games:x:5:60:games:/usr/games:/usr/sbin/nologin
man:x:6:12:man:/var/cache/man:/usr/sbin/nologin
systemd-coredump:x:999:999:systemd Core Dumper:/:/usr/lib/coredump:/usr/sbin/nologin
anna:x:3001:1001:/:home/anna:/bin/sh
ammu:x:2002:3002:/:home/ammu:/bin/sh
juliet:x:3002:3003:/:home/juliet:/bin/sh
jisha@jisha-VirtualBox:~$
```

11. Use the passwd command to initialize Juliet's password

```
jisha@jisha-VirtualBox:~$ sudo passwd juliet
New password:
Retype new password:
passwd: password updated successfully
jisha@jisha-VirtualBox:~$
```

12. Create a supplementary group called Shakespeare with a group id of 30000

```
jisha@jisha-VirtualBox:~$ sudo groupadd -g 3000 shakespeare
jisha@jisha-VirtualBox:~$ cat /etc/group
root:x:0:
daemon:x:1:
bin:x:2:
sys:x:3:
adm:x:4:syslog,jisha
tty:x:5:syslog
disk:x:6:
lp:x:7:
mail:x:8:
news:x:9:
uucp:x:10:
man:x:12:
proxy:x:13:
kmem:x:15:
dialout:x:20:
fax:x:21:
voice:x:22:
cdrom:x:24:jisha
floppy:x:25:
tape:x:26:
sudo:x:27:jisha
audio:x:29:pulse
dip:x:30:jisha
www-data:x:33:
backup:x:34:
operator:x:37:
list:x:38:
```

```
pulse-access:x:129:
gdm:x:130:
lxd:x:131:jisha
jisha:x:1000:
sambashare:x:132:jisha
systemd-coredump:x:999:
anna:x:1001:
mca:x:1002:anna
trees:x:1003:
plants:x:1004:
ammu:x:3002:
CN:x:1005:
juliet:x:3003:
shakespeare:x:3000:
jisha@jisha-VirtualBox:~$
```

13. Create a supplementary group called artists

```
jisha@jisha-VirtualBox:~$ sudo groupadd artists
jisha@jisha-VirtualBox:~$ cat /etc/group
```

```
root:x:0:
daemon:x:1:
bin:x:2:
sys:x:3:
adm:x:4:syslog,jisha
tty:x:5:syslog
disk:x:6:
lp:x:7:
mail:x:8:
news:x:9:
uucp:x:10:
man:x:12:
proxy:x:13:
kmem:x:15:
dialout:x:20:
fax:x:21:
voice:x:22:
cdrom:x:24:jisha
floppy:x:25:
tape:x:26:
sudo:x:27:jisha
audio:x:29:pulse
dip:x:30:jisha
www-data:x:33:
backup:x:34:
operator:x:37:
list:x:38:
irc:x:39:
src:x:40:
gnats:x:41:
shadow:x:42:
utmp:x:43:
video:x:44:
sasl:x:45:
plugdev:x:46:jisha
staff:x:50:
games:x:60:
users:x:100:
nogroup:x:65534:
```

```
whoopsie:x:125:
colord:x:126:
geoclue:x:127:
pulse:x:128:
pulse-access:x:129:
gdm:x:130:
lxd:x:131:jisha
jisha:x:1000:
sambashare:x:132:jisha
systemd-coredump:x:999:
anna:x:1001:
mca:x:1002:anna
trees:x:1003:
plants:x:1004:
ammu:x:3002:
CN:x:1005:
juliet:x:3003:
shakespeare:x:3000:
artists:x:3004:
jisha@jisha-VirtualBox:~$
```

14. Confirm that Shakespeare and artists have been added by examining the /etc/group file.

```
nm-openvpn:x:124:
whoopsie:x:125:
colord:x:126:
geoclue:x:127:
pulse:x:128:
pulse-access:x:129:
gdm:x:130:
lxd:x:131:jisha
jisha:x:1000:
smbashare:x:132:jisha
systemd-coredump:x:999:
anna:x:1001:
mca:x:1002:anna
trees:x:1003:
plants:x:1004:
ammu:x:3002:
CN:x:1005:
juliet:x:3003:
shakespeare:x:3000:
```

```
netdev:x:119:
lpadmin:x:120:jisha
avahi:x:121:
scanner:x:122:saned
saned:x:123:
nm-openvpn:x:124:
whoopsie:x:125:
colord:x:126:
geoclue:x:127:
pulse:x:128:
pulse-access:x:129:
gdm:x:130:
lxd:x:131:jisha
jisha:x:1000:
smbashare:x:132:jisha
systemd-coredump:x:999:
anna:x:1001:
mca:x:1002:anna
trees:x:1003:
plants:x:1004:
ammu:x:3002:
CN:x:1005:
juliet:x:3003:
shakespeare:x:3000:
artists:x:3004:
jisha@jisha-VirtualBox:~$
```

15. Add the Juliet user to the Shakespeare group as a supplementary group.


```
jisha@jisha-VirtualBox:~$ sudo usermod -G shakespeare juliet
jisha@jisha-VirtualBox:~$ cat /etc/group
root:x:0:
daemon:x:1:
bin:x:2:
sys:x:3:
adm:x:4:syslog,jisha
tty:x:5:syslog
disk:x:6:
lp:x:7:
mail:x:8:
news:x:9:
uucp:x:10:
man:x:12:
proxy:x:13:
kmem:x:15:
dialout:x:20:
fax:x:21:
voice:x:22:
cdrom:x:24:jisha
floppy:x:25:
tape:x:26:
sudo:x:27:jisha
audio:x:29:pulse
dip:x:30:jisha
update:x:32:
```

```
gdm:x:130:
lxd:x:131:jisha
jisha:x:1000:
smbashare:x:132:jisha
systemd-coredump:x:999:
anna:x:1001:
mca:x:1002:anna
trees:x:1003:
plants:x:1004:
ammu:x:3002:
CN:x:1005:
juliet:x:3003:
shakespeare:x:3000:juliet
artists:x:3004:
jisha@jisha-VirtualBox:~$
```

16. Confirm that Juliet has been added using the id command.

```
jisha@jisha-VirtualBox:~$ id -u juliet
3002
jisha@jisha-VirtualBox:~$ id -g juliet
3003
jisha@jisha-VirtualBox:~$
```

17. Add Romeo and Hamlet to the Shakespeare group.


```
jisha@jisha-VirtualBox:~$ sudo usermod -G shakespeare Romeo
jisha@jisha-VirtualBox:~$ sudo usermod -G shakespeare Juliet
usermod: user 'Juliet' does not exist
jisha@jisha-VirtualBox:~$ sudo usermod -G shakespeare Hamlet
jisha@jisha-VirtualBox:~$ cat /etc/group
root:x:0:
daemon:x:1:
bin:x:2:
sys:x:3:
adm:x:4:syslog,jisha
tty:x:5:syslog
disk:x:6:
lp:x:7:
mail:x:8:
news:x:9:
uucp:x:10:
```

```
juliet:x:3003:
shakespeare:x:3000:juliet,Romeo,Hamlet
artists:x:3004:
Romeo:x:3005:
Hamlet:x:3006:
jisha@jisha-VirtualBox:~$
```

Add Reba,

18.Dolly and Elvis to the artists group

```
jisha@jisha-VirtualBox:~$ sudo useradd Reba
jisha@jisha-VirtualBox:~$ sudo useradd Dolly
jisha@jisha-VirtualBox:~$ sudo useradd Elvis
jisha@jisha-VirtualBox:~$ sudo usermod -G artists Reba
jisha@jisha-VirtualBox:~$ sudo usermod -G artists Dolly
jisha@jisha-VirtualBox:~$ sudo usermod -G artists Elvis
jisha@jisha-VirtualBox:~$ cat /etc/group
root:x:0:
daemon:x:1:
bin:x:2:
sys:x:3:
adm:x:4:syslog,jisha
tty:x:5:syslog
disk:x:6:
lp:x:7:
mail:x:8:
news:x:9:
uucp:x:10:
man:x:12:
proxy:x:13:
kmem:x:15:
dialout:x:20:
fax:x:21:
voice:x:22:
cdrom:x:24:jisha
floppy:x:25:
tape:x:26:
sudo:x:27:jisha
audio:x:29:pulse
dip:x:30:jisha
lmod_data:x:32:
```

```

colord:x:126:
geoclue:x:127:
pulse:x:128:
pulse-access:x:129:
gdm:x:130:
lxd:x:131:jisha
jisha:x:1000:
sambashare:x:132:jisha
systemd-coredump:x:999:
anna:x:1001:
mca:x:1002:anna
trees:x:1003:
plants:x:1004:
ammu:x:3002:
CN:x:1005:
juliet:x:3003:
shakespeare:x:3000:juliet,Romeo,Hamlet
artists:x:3004:Reba,Dolly,Elvis
Romeo:x:3005:
Hamlet:x:3006:
Reba:x:3007:
Dolly:x:3008:
Elvis:x:3009:

```

19. Verify the supplemental group memberships by examining the /etc/gr

```

netdev:x:119:
lpadmin:x:120:jisha
avahi:x:121:
scanner:x:122:saned
saned:x:123:
nm-openvpn:x:124:
whoopsie:x:125:
colord:x:126:
geoclue:x:127:
pulse:x:128:
pulse-access:x:129:
gdm:x:130:
lxd:x:131:jisha
jisha:x:1000:
sambashare:x:132:jisha
systemd-coredump:x:999:
anna:x:1001:
mca:x:1002:anna
trees:x:1003:
plants:x:1004:
ammu:x:3002:
CN:x:1005:
juliet:x:3003:
shakespeare:x:3000:juliet,Romeo,Hamlet
artists:x:3004:Reba,Dolly,Elvis
Romeo:x:3005:
Hamlet:x:3006:
Reba:x:3007:
Dolly:x:3008:
Elvis:x:3009:
jisha@jisha-VirtualBox:~$

```

20. Attempt to remove user Dolly.

```
jisha@jisha-VirtualBox:~$ sudo userdel Dolly
jisha@jisha-VirtualBox:~$ cat /etc/group
root:x:0:
daemon:x:1:
bin:x:2:
sys:x:3:
adm:x:4:syslog,jisha
tty:x:5:syslog
disk:x:6:
lp:x:7:
mail:x:8:
news:x:9:
uucp:x:10:
man:x:12:
proxy:x:13:
kmem:x:15:
dialout:x:20:
fax:x:21:
voice:x:22:
cdrom:x:24:jisha
floppy:x:25:
tape:x:26:
sudo:x:27:jisha
audio:x:29:pulse
dip:x:30:jisha
```