

Networking and Systems Administration Lab

Assignment 5: Managing Files, Creating Users and Groups Using Command-line tools.

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Roll no.: 40

RMCA-B

Sem-II

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 (In each set, replace X with the numbers 1 through 6)

```
amalthomson@amalthomson:~$ touch song1.mp3 song2.mp3 song3.mp3 song4.mp3 song5.mp3 song6.mp3
amalthomson@amalthomson:~$ touch snap1.jpg snap2.jpg snap3.jpg snap4.jpg snap5.jpg snap6.jpg
amalthomson@amalthomson:~$ touch film1.mp4 film2.mp4 film3.mp4 film4.mp4 film5.mp4 film6.mp4
```

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.

```
amalthomson@amalthomson:~$ mv *.jpg ./Pictures/
amalthomson@amalthomson:~$ mv *.mp4 ./Videos/
amalthomson@amalthomson:~$
```

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.

```
amalthomson@amalthomson:~$ mkdir -p {friends,family,work}
amalthomson@amalthomson:~$
```

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

```
amalthomson@amalthomson:~$ cp /home/amalthomson/Music song1.mp3 song2.mp3 song3.mp3 song4.mp3 song5.mp3 song6.mp3 /home/amalthomson/friends/
cp: -r not specified; omitting directory '/home/amalthomson/Music'
amalthomson@amalthomson:~$ cp /home/amalthomson/Pictures snap1.jpg snap2.jpg snap3.jpg snap4.jpg snap5.jpg snap6.jpg /home/amalthomson/family/
cp: -r not specified; omitting directory '/home/amalthomson/Pictures'
amalthomson@amalthomson:~$
```

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

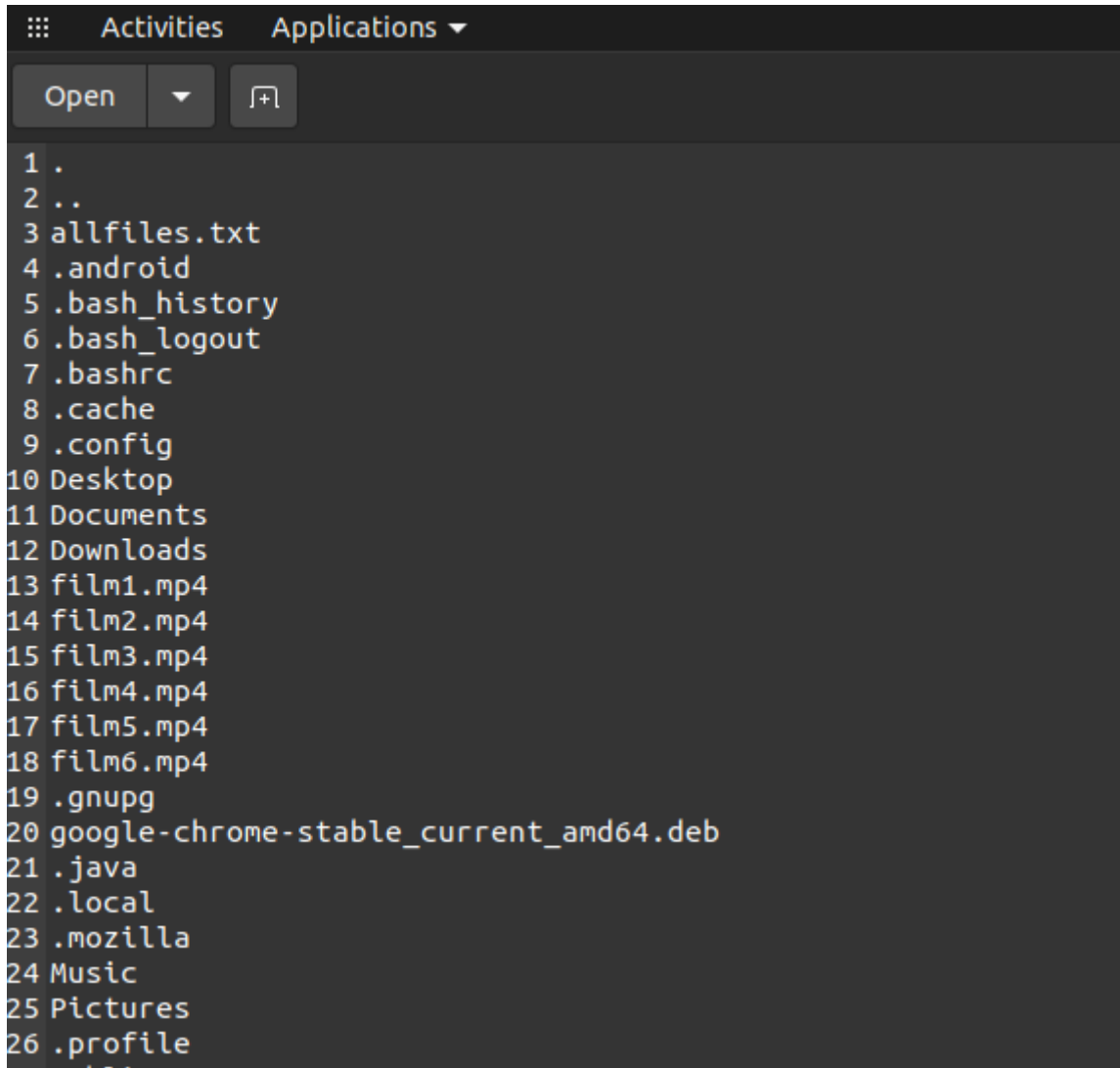
```
amalthomson@amalthomson:~$ rmdir {friends,family}
rmdir: failed to remove 'friends': Directory not empty
rmdir: failed to remove 'family': Directory not empty
amalthomson@amalthomson:~$
```

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

```
amalthomson@amalthomson:~$ rm -r friends family
amalthomson@amalthomson:~$
```

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.

```
amalthomson@amalthomson:~$ ls -a > allfiles.txt
amalthomson@amalthomson:~$
```



```
1 .
2 ..
3 allfiles.txt
4 .android
5 .bash_history
6 .bash_logout
7 .bashrc
8 .cache
9 .config
10 Desktop
11 Documents
12 Downloads
13 film1.mp4
14 film2.mp4
15 film3.mp4
16 film4.mp4
17 film5.mp4
18 film6.mp4
19 .gnupg
20 google-chrome-stable_current_amd64.deb
21 .java
22 .local
23 .mozilla
24 Music
25 Pictures
26 .profile
```

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

```
amalthomson@amalthomson:~$ date
Tuesday 17 August 2021 04:11:12 PM IST
```

9. Add the userJuliet

```
amalthomson@amalthomson:~$ sudo useradd Juliet
[sudo] password for amalthomson:
amalthomson@amalthomson:~$
```

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

```
amalthomson@amalthomson:~$ cat /etc/passwd | grep Juliet
Juliet:x:1002:1002::/home/Juliet:/bin/sh
```

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

```
amalthomson@amalthomson:~$ sudo passwd Juliet
[sudo] password for amalthomson:
New password:
Retype new password:
passwd: password updated successfully
amalthomson@amalthomson:~$
```

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

```
amalthomson@amalthomson:~$ sudo groupadd -g 30000 Shakespeare
amalthomson@amalthomson:~$
```

13. Create a supplementary group called artists.

```
amalthomson@amalthomson:~$ sudo groupadd artists
amalthomson@amalthomson:~$
```

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

```
amalthomson@amalthomson:~$ less /etc/group

Juliet:x:1002:
Shakespeare:x:30000:
artists:x:30001:
(END)
```

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

```
amalthomson@amalthomson:~$ sudo usermod -G Shakespeare Juliet
[sudo] password for amalthomson:
amalthomson@amalthomson:~$
```

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

```
amalthomson@amalthomson:~$ id Juliet
uid=1002(Juliet) gid=1002(Juliet) groups=1002(Juliet),30000(Shakespeare)
amalthomson@amalthomson:~$
```

17. Add Romeo and Hamlet to the Shakespeare group

```
amalthomson@amalthomson:~$ sudo usermod -G Shakesphere Romeo
amalthomson@amalthomson:~$ sudo usermod -G Shakesphere Hamlet
amalthomson@amalthomson:~$ id Romeo
uid=1003(Romeo) gid=1003(Romeo) groups=1003(Romeo),30000(Shakesphere)
amalthomson@amalthomson:~$ id Hamlet
uid=1004(Hamlet) gid=1004(Hamlet) groups=1004(Hamlet),30000(Shakesphere)
amalthomson@amalthomson:~$
```

18. Add Reba, Dolly and Elvis to the artists group.

```
amalthomson@amalthomson:~$ sudo useradd Reba
^[[Aamalthomson@amalthomson:~$ sudo useradd Dolly
amalthomson@amalthomson:~$ sudo useradd Elvis
amalthomson@amalthomson:~$ sudo usermod -G artists Reba
amalthomson@amalthomson:~$ sudo usermod -G artists Dolly
amalthomson@amalthomson:~$ sudo usermod -G artists Elvis
amalthomson@amalthomson:~$
```

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

```
Shakesphere:x:30000:Juliet,Romeo,Hamlet
artists:x:30001:Reba,Dolly,Elvis
```

20. Attempt to remove user Dolly.

```
amalthomson@amalthomson:~$ sudo userdel Dolly
amalthomson@amalthomson:~$ id Dolly
id: 'Dolly': no such user
amalthomson@amalthomson:~$
```