

```
tushar@tushar-ThinkPad-X230: ~/film
File Edit View Search Terminal Help
tushar@tushar-ThinkPad-X230:~$ cd song
tushar@tushar-ThinkPad-X230:~/song$ touch song1.mp3
tushar@tushar-ThinkPad-X230:~/song$ touch song2.mp3
tushar@tushar-ThinkPad-X230:~/song$ touch song3.mp3
tushar@tushar-ThinkPad-X230:~/song$ touch song[4..6].mp3
tushar@tushar-ThinkPad-X230:~/song$ tree
.
├── song1.mp3
├── song2.mp3
├── song3.mp3
├── song4.mp3
├── song5.mp3
└── song6.mp3

0 directories, 6 files
tushar@tushar-ThinkPad-X230:~/song$ cd ..
tushar@tushar-ThinkPad-X230:~$ mkdir snap
tushar@tushar-ThinkPad-X230:~$ cd snap
tushar@tushar-ThinkPad-X230:~/snap$ touch snap[1..6].jpg
tushar@tushar-ThinkPad-X230:~/snap$ tree
.
├── snap1.jpg
├── snap2.jpg
├── snap3.jpg
├── snap4.jpg
├── snap5.jpg
└── snap6.jpg

0 directories, 6 files
tushar@tushar-ThinkPad-X230:~/snap$ cd ..
tushar@tushar-ThinkPad-X230:~$ mkdir film
tushar@tushar-ThinkPad-X230:~$ cd film
tushar@tushar-ThinkPad-X230:~/film$ touch film[1..6].avi
tushar@tushar-ThinkPad-X230:~/film$ tree
.
├── film1.avi
├── film2.avi
├── film3.avi
├── film4.avi
├── film5.avi
└── film6.avi

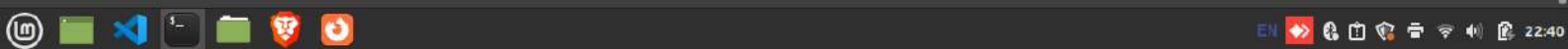
0 directories, 6 files
tushar@tushar-ThinkPad-X230:~/film$
```

```
tushar@tushar-ThinkPad-X230: ~/snap
File Edit View Search Terminal Help

tushar@tushar-ThinkPad-X230:~$ mv song/song2.mp3 song/music/song2.mp3
tushar@tushar-ThinkPad-X230:~$ mv song/song3.mp3 song/music/song3.mp3
tushar@tushar-ThinkPad-X230:~$ mv song/song4.mp3 song/music/song4.mp3
tushar@tushar-ThinkPad-X230:~$ mv song/song5.mp3 song/music/song5.mp3
tushar@tushar-ThinkPad-X230:~$ mv song/song6.mp3 song/music/song6.mp3
tushar@tushar-ThinkPad-X230:~$ cd song
tushar@tushar-ThinkPad-X230:~/song$ tree
.
├── music
│   ├── song1.mp3
│   ├── song2.mp3
│   ├── song3.mp3
│   ├── song4.mp3
│   ├── song5.mp3
│   └── song6.mp3
└── 1 directory, 6 files

tushar@tushar-ThinkPad-X230:~/song$ cd ..
tushar@tushar-ThinkPad-X230:~$ mkdir snap/pictures
tushar@tushar-ThinkPad-X230:~$ cd snap
tushar@tushar-ThinkPad-X230:~/snap$ tree
.
├── pictures
│   ├── snap1.jpg
│   ├── snap2.jpg
│   ├── snap3.jpg
│   ├── snap4.jpg
│   ├── snap5.jpg
│   └── snap6.jpg
└── 1 directory, 6 files

tushar@tushar-ThinkPad-X230:~/snap$ mv snap/snap1.jpg snap/pictures/snap1.jpg
mv: cannot stat 'snap/snap1.jpg': No such file or directory
tushar@tushar-ThinkPad-X230:~/snap$
```



```
tushar@tushar-ThinkPad-X230: ~/snap
File Edit View Search Terminal Help
tushar@tushar-ThinkPad-X230:~/snap$ cd ..
tushar@tushar-ThinkPad-X230:~$ mv snap/snap1.jpg snap/pictures/snap1.jpg
tushar@tushar-ThinkPad-X230:~$ cd snap
tushar@tushar-ThinkPad-X230:~/snap$ tree
├── pictures
│   ├── snap1.jpg
│   ├── snap2.jpg
│   ├── snap3.jpg
│   ├── snap4.jpg
│   ├── snap5.jpg
│   └── snap6.jpg
└── 1 directory, 6 files

tushar@tushar-ThinkPad-X230:~/snap$ cd ..
tushar@tushar-ThinkPad-X230:~$ mv snap/snap2.jpg snap/pictures/snap2.jpg
tushar@tushar-ThinkPad-X230:~$ mv snap/snap3.jpg snap/pictures/snap3.jpg
tushar@tushar-ThinkPad-X230:~$ mv snap/snap4.jpg snap/pictures/snap4.jpg
tushar@tushar-ThinkPad-X230:~$ mv snap/snap5.jpg snap/pictures/snap5.jpg
tushar@tushar-ThinkPad-X230:~$ mv snap/snap6.jpg snap/pictures/snap6.jpg
tushar@tushar-ThinkPad-X230:~$ cd snap
tushar@tushar-ThinkPad-X230:~/snap$ tree
├── pictures
│   ├── snap1.jpg
│   ├── snap2.jpg
│   ├── snap3.jpg
│   ├── snap4.jpg
│   ├── snap5.jpg
│   └── snap6.jpg
└── 1 directory, 6 files

tushar@tushar-ThinkPad-X230:~/snap$
```

```
tushar@tushar-ThinkPad-X230: ~/film
File Edit View Search Terminal Help
tushar@tushar-ThinkPad-X230:~/film$ tree
.
├── film1.avi
├── film2.avi
├── film3.avi
├── film4.avi
├── film5.avi
├── film6.avi
└── video

1 directory, 6 files
tushar@tushar-ThinkPad-X230:~/film$ cd ..
tushar@tushar-ThinkPad-X230:~$ mv film/film1.avi film/video/film1.avi
tushar@tushar-ThinkPad-X230:~$ mv film/film2.avi film/video/film2.avi
tushar@tushar-ThinkPad-X230:~$ mv film/film3.avi film/video/film3.avi
tushar@tushar-ThinkPad-X230:~$ mv film/film4.avi film/video/film4.avi
tushar@tushar-ThinkPad-X230:~$ mv film/film5.avi film/video/film5.avi
tushar@tushar-ThinkPad-X230:~$ mv film/film6.avi film/video/film6.avi
tushar@tushar-ThinkPad-X230:~$ cd film
tushar@tushar-ThinkPad-X230:~/film$ tree
.
└── video
    ├── film1.avi
    ├── film2.avi
    ├── film3.avi
    ├── film4.avi
    ├── film5.avi
    └── film6.avi

1 directory, 6 files
tushar@tushar-ThinkPad-X230:~/film$
```

The screenshot shows a Linux terminal window titled "tushar@tushar-ThinkPad-X230: ~" with the following commands and output:

```
tushar@tushar-ThinkPad-X230:~/film$ cd ..
tushar@tushar-ThinkPad-X230:~$ mkdir friends family work
tushar@tushar-ThinkPad-X230:~$ ls
a.out      Downloads  friends    os1.c      string1.c
%.c        f1cd.l    input1.txt pr12.l     task2
c++.cpp    f2cd.l    input2.txt pr23.l     Templates
cd04.l     family    lex.yy.c   pr34.l     Unity
cd04.y     file4.l   micromamba Public      Videos
cd1.c      file4.y   Music      work
CNPR5.c    film     'My project' 'python program' y.tab.c
Desktop    foex2.c  'My project (1)' snap        y.tab.h
Documents  forex1c  'New Unity Project' song
```

The terminal window is overlaid on a Google Docs editor showing a document titled "assignment-1.docx". The document content includes:

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

- From your home directory,
  - Move songs file into your Music subdirectory.
  - Move snap file into your Pictures subdirectory.
  - Move your movie files into Videos subdirectory
- Create 3 subdirectories for organizing your files named friends, family, work
- Copy files (all types ) containing numbers 1 and 2 to the friends folder.  
Copy files (all types) containing numbers 3 and 4 to the family folder.  
Copy files (all types) containing numbers 5 and 6 to the work folder.

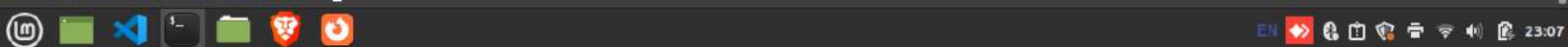
```
tushar@tushar-ThinkPad-X230: ~  
File Edit View Search Terminal Help  
tushar@tushar-ThinkPad-X230:~$ cp song/music/song{3,4}.mp3 family  
tushar@tushar-ThinkPad-X230:~$ cp song/music/song{5,6}.mp3 work  
tushar@tushar-ThinkPad-X230:~$ cp snap/pictures/snap{1,2}.jpg friends  
tushar@tushar-ThinkPad-X230:~$ cp snap/pictures/snap{3,4}.jpg family  
tushar@tushar-ThinkPad-X230:~$ cp snap/pictures/snap{5,6}.jpg work  
tushar@tushar-ThinkPad-X230:~$ cp film/videos/film{1,2}.avi friends  
cp: cannot stat 'film/videos/film1.avi': No such file or directory  
cp: cannot stat 'film/videos/film2.avi': No such file or directory  
tushar@tushar-ThinkPad-X230:~$ cp film/video/film{1,2}.avi friends  
tushar@tushar-ThinkPad-X230:~$ cp film/video/film{3,4}.avi family  
tushar@tushar-ThinkPad-X230:~$ cp film/video/film{5,6}.avi work  
tushar@tushar-ThinkPad-X230:~$ cd song  
tushar@tushar-ThinkPad-X230:~/song$ tree  
.  
├── music  
│   ├── song1.mp3  
│   ├── song2.mp3  
│   ├── song3.mp3  
│   ├── song4.mp3  
│   ├── song5.mp3  
│   └── song6.mp3  
└── 1 directory, 6 files  
tushar@tushar-ThinkPad-X230:~/song$ cd ..  
tushar@tushar-ThinkPad-X230:~$ friends  
friends: command not found  
tushar@tushar-ThinkPad-X230:~$ cd friends  
tushar@tushar-ThinkPad-X230:~/friends$ tree  
.  
├── film1.avi  
├── film2.avi  
├── snap1.jpg  
├── snap2.jpg  
├── song1.mp3  
└── song2.mp3  
0 directories, 6 files  
tushar@tushar-ThinkPad-X230:~/friends$ cd ..  
tushar@tushar-ThinkPad-X230:~$ fa
```

```
tushar@tushar-ThinkPad-X230: ~/work
File Edit View Search Terminal Help
tushar@tushar-ThinkPad-X230:~/song$ cd ..
tushar@tushar-ThinkPad-X230:~$ friends
friends: command not found
tushar@tushar-ThinkPad-X230:~$ cd friends
tushar@tushar-ThinkPad-X230:~/friends$ tree
.
├── film1.avi
├── film2.avi
├── snap1.jpg
├── snap2.jpg
├── song1.mp3
└── song2.mp3

0 directories, 6 files
tushar@tushar-ThinkPad-X230:~/friends$ cd ..
tushar@tushar-ThinkPad-X230:~$ cd family
tushar@tushar-ThinkPad-X230:~/family$ tree
.
├── film3.avi
├── film4.avi
├── snap3.jpg
├── snap4.jpg
├── song3.mp3
└── song4.mp3

0 directories, 6 files
tushar@tushar-ThinkPad-X230:~/family$ cd ..
tushar@tushar-ThinkPad-X230:~$ cd work
tushar@tushar-ThinkPad-X230:~/work$ tree
.
├── film5.avi
├── film6.avi
├── snap5.jpg
├── snap6.jpg
├── song5.mp3
└── song6.mp3

0 directories, 6 files
tushar@tushar-ThinkPad-X230:~/work$
```

The image shows a Linux desktop environment. At the top, there is a terminal window titled "tushar@tushar-ThinkPad-X230: ~/work". The terminal displays a series of commands and their outputs, showing the user navigating through directories: from ~/song to ~, then to ~/friends, then to ~/family, and finally to ~/work. In each directory, the user runs the 'tree' command, which lists the contents of the directory. The files listed are: film1.avi, film2.avi, snap1.jpg, snap2.jpg, song1.mp3, song2.mp3 in ~/friends; film3.avi, film4.avi, snap3.jpg, snap4.jpg, song3.mp3, song4.mp3 in ~/family; and film5.avi, film6.avi, snap5.jpg, snap6.jpg, song5.mp3, song6.mp3 in ~/work. The terminal window has a menu bar with "File", "Edit", "View", "Search", "Terminal", and "Help". At the bottom of the screen, there is a taskbar with several icons: a terminal icon, a file manager icon, a web browser icon, a music player icon, and a social media icon. The system status bar at the bottom right shows the language "EN", a network icon, a volume icon, and the time "23:07".

```
tushar@tushar-ThinkPad-X230:~/family$ ls
film3.avi  film4.avi  snap3.jpg  snap4.jpg  song3.mp3  song4.mp3
tushar@tushar-ThinkPad-X230:~/family$ rm *
tushar@tushar-ThinkPad-X230:~/family$ ls
tushar@tushar-ThinkPad-X230:~/family$ cd ..
tushar@tushar-ThinkPad-X230:~$ ls
a.out      Downloads  friends    os1.c      string1.c
%.c        f1cd.l    input1.txt Pictures    task2
c++.cpp    f2cd.l    input2.txt pr12.l     Templates
cd04.l     family    lex.yy.c   pr23.l     Unity
cd04.y     file4.l   micromamba pr34.l     Videos
cd1.c      file4.y   Music      Public      work
CNP5.c     film      'My project' 'python program' y.tab.c
Desktop    foex2.c   'My project (1)' snap          y.tab.h
Documents  forex1c   'New Unity Project' song
tushar@tushar-ThinkPad-X230:~$ cd friends
tushar@tushar-ThinkPad-X230:~/friends$ ls
film1.avi  film2.avi  snap1.jpg  snap2.jpg  song1.mp3  song2.mp3
tushar@tushar-ThinkPad-X230:~/friends$ cd ..
tushar@tushar-ThinkPad-X230:~$ rm -r friends
tushar@tushar-ThinkPad-X230:~$ ls
a.out      Downloads  input1.txt  Pictures    task2
%.c        f1cd.l    input2.txt pr12.l     Templates
c++.cpp    f2cd.l    lex.yy.c   pr23.l     Unity
cd04.l     family    micromamba pr34.l     Videos
cd04.y     file4.l   Music      Public      work
cd1.c      file4.y   'My project' 'python program' y.tab.c
CNP5.c     film      'My project (1)' snap          y.tab.h
Desktop    foex2.c   'New Unity Project' song
Documents  forex1c   os1.c      string1.c
tushar@tushar-ThinkPad-X230:~$
```



```
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:Mailing 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
rtkit:x:107:112:RealtimeKit,,,:/proc:/usr/sbin/nologin
systemd-coredump:x:108:113:systemd Core Dumper,,,:/run/systemd:/usr/sbin/nologin
kernoops:x:109:65534:Kernel Oops Tracking Daemon,,,:/usr/sbin/nologin
uuid:x:110:118:/:run/uuid:/usr/sbin/nologin
cups-pk-helper:x:111:114:user for cups-pk-helper service,,,:/home/cups-pk-helper:/usr/sbin/nologin
tcpdump:x:112:120:/:nonexistent:/usr/sbin/nologin
geoclue:x:113:122:/:var/lib/geoclue:/usr/sbin/nologin
avahi-autoipd:x:114:123:Avahi autoip daemon,,,:/var/lib/avahi-autoipd:/usr/sbin/nologin
usbmux:x:115:46:usbmux daemon,,,:/var/lib/usbmux:/usr/sbin/nologin
lightdm:x:116:124:Light Display Manager:/var/lib/lightdm:/bin/false
dnsmasq:x:117:65534:dnsmasq,,,:/var/lib/misc:/usr/sbin/nologin
_flatpak:x:118:127:Flatpak system-wide installation helper,,,:/nonexistent:/usr/sbin/nologin
avahi:x:119:128:Avahi mDNS daemon,,,:/var/run/avahi-daemon:/usr/sbin/nologin
saned:x:120:129:/:var/lib/saned:/usr/sbin/nologin
colord:x:121:130:colord colour management daemon,,,:/var/lib/colord:/usr/sbin/nologin
pulse:x:122:131:PulseAudio daemon,,,:/var/run/pulse:/usr/sbin/nologin
speech-dispatcher:x:123:29:Speech Dispatcher,,,:/run/speech-dispatcher:/bin/false
nm-openvpn:x:124:133:NetworkManager OpenVPN,,,:/var/lib/openvpn/chroot:/usr/sbin/nologin
hplip:x:125:7:HPLIP system user,,,:/run/hplip:/bin/false
tushar:x:1000:1000:tushar gaikwad,,,:/home/tushar:/bin/bash
fwupd-refresh:x:126:135:fwupd-refresh user,,,:/run/systemd:/usr/sbin/nologin
tom:x:1001:1001:,,,:/home/tom:/bin/bash
bob:x:1002:1002:,,,:/home/bob:/bin/bash
sam:x:1003:1003:,,,:/home/sam:/bin/bash
prince:x:1004:1004:,,,:/home/prince:/bin/bash
tushar@tushar-ThinkPad-X230:~$
```



tushar@tushar-ThinkPad-X230: ~

File Edit View Search Terminal Help

```
tushar@tushar-ThinkPad-X230:~$ sudo addgroup dac
Adding group 'dac' (GID 1005) ...
Done.
tushar@tushar-ThinkPad-X230:~$ sudo addgroup dbda
Adding group 'dbda' (GID 1006) ...
Done.
tushar@tushar-ThinkPad-X230:~$ sudo addgroup ditiss
Adding group 'ditiss' (GID 1007) ...
Done.
tushar@tushar-ThinkPad-X230:~$
```



EN 23:26

tushar@tushar-ThinkPad-X230: ~

File Edit View Search Terminal Help

```
kernoops:x:109:65534:Kernel Oops Tracking Daemon,,,:/usr/sbin/nologin
uuid:x:110:118::/run/uuid:/usr/sbin/nologin
cups-pk-helper:x:111:114:user for cups-pk-helper service,,,:/home/cups-pk-helper:/usr/sbin/nologin
tcpdump:x:112:120::/nonexistent:/usr/sbin/nologin
geoclue:x:113:122::/var/lib/geoclue:/usr/sbin/nologin
avahi-autoipd:x:114:123:Avahi autoip daemon,,,:/var/lib/avahi-autoipd:/usr/sbin/nologin
usbmux:x:115:46:usbmux daemon,,,:/var/lib/usbmux:/usr/sbin/nologin
lightdm:x:116:124:Light Display Manager:/var/lib/lightdm:/bin/false
dnsmasq:x:117:65534:dnsmasq,,,:/var/lib/misc:/usr/sbin/nologin
_flatpak:x:118:127:Flatpak system-wide installation helper,,,:/nonexistent:/usr/sbin/nologin
avahi:x:119:128:Avahi mDNS daemon,,,:/var/run/avahi-daemon:/usr/sbin/nologin
saned:x:120:129::/var/lib/saned:/usr/sbin/nologin
colord:x:121:130:colord colour management daemon,,,:/var/lib/colord:/usr/sbin/nologin
pulse:x:122:131:PulseAudio daemon,,,:/var/run/pulse:/usr/sbin/nologin
speech-dispatcher:x:123:29:Speech Dispatcher,,,:/run/speech-dispatcher:/bin/false
nm-openvpn:x:124:133:NetworkManager OpenVPN,,,:/var/lib/openvpn/chroot:/usr/sbin/nologin
hplip:x:125:7:HPLIP system user,,,:/run/hplip:/bin/false
tushar:x:1000:1000:tushar gaikwad,,,:/home/tushar:/bin/bash
fwupd-refresh:x:126:135:fwupd-refresh user,,,:/run/systemd:/usr/sbin/nologin
prince:x:1004:1004,,,:/home/prince:/bin/bash
tom:x:1001:1005,,,:/home/tom:/bin/bash
bob:x:1002:1006,,,:/home/bob:/bin/bash
sam:x:1003:1007,,,:/home/sam:/bin/bash
tushar@tushar-ThinkPad-X230:~$ group tom
```

Command 'group' not found, did you mean:

```
command 'groups' from deb coreutils (8.30-3ubuntu2)
command 'grop' from deb gropp (2:0.16-1.1build1)
```

Try: sudo apt install <deb name>

```
tushar@tushar-ThinkPad-X230:~$ groups tom
tom : dac
tushar@tushar-ThinkPad-X230:~$ groups bob
bob : dbda
tushar@tushar-ThinkPad-X230:~$ groups sam
sam : ditls
tushar@tushar-ThinkPad-X230:~$
```



EN 00:05

```
prince@tushar-ThinkPad-X230: ~/iacsd
File Edit View Search Terminal Help
prince@tushar-ThinkPad-X230:~$ mkdir iacsd
prince@tushar-ThinkPad-X230:~$ cd iacsd
prince@tushar-ThinkPad-X230:~/iacsd$ touch project{1..4}
prince@tushar-ThinkPad-X230:~/iacsd$ ls
project1 project2 project3 project4
prince@tushar-ThinkPad-X230:~/iacsd$
```

```
root@tushar-ThinkPad-X230: /home/prince/iacsd
File Edit View Search Terminal Help
root@tushar-ThinkPad-X230:/home/prince#
root@tushar-ThinkPad-X230:/home/prince# ls -l
total 4
drwxrwxr-x 2 prince prince 4096 Mar 11 00:09 iacsd
root@tushar-ThinkPad-X230:/home/prince# chown dac project1
chown: invalid user: 'dac'
root@tushar-ThinkPad-X230:/home/prince# cd iacsd
root@tushar-ThinkPad-X230:/home/prince/iacsd# chown dac project1
chown: invalid user: 'dac'
root@tushar-ThinkPad-X230:/home/prince/iacsd# chown tom project1
root@tushar-ThinkPad-X230:/home/prince/iacsd# chgrp dac project2
root@tushar-ThinkPad-X230:/home/prince/iacsd# ls -l
total 0
-rw-rw-r-- 1 tom prince 0 Mar 11 00:09 project1
-rw-rw-r-- 1 prince dac 0 Mar 11 00:09 project2
-rw-rw-r-- 1 prince prince 0 Mar 11 00:09 project3
-rw-rw-r-- 1 prince prince 0 Mar 11 00:09 project4
root@tushar-ThinkPad-X230:/home/prince/iacsd# chown dbda project4
chown: invalid user: 'dbda'
root@tushar-ThinkPad-X230:/home/prince/iacsd# chmod 764 project4
root@tushar-ThinkPad-X230:/home/prince/iacsd# chown dbda project4
chown: invalid user: 'dbda'
root@tushar-ThinkPad-X230:/home/prince/iacsd# chgrp dbda project4
root@tushar-ThinkPad-X230:/home/prince/iacsd# ls -l
total 0
-rw-rw-r-- 1 tom prince 0 Mar 11 00:09 project1
-rw-rw-r-- 1 prince dac 0 Mar 11 00:09 project2
-rw-rw-r-- 1 prince prince 0 Mar 11 00:09 project3
-rwxrw-r-- 1 prince dbda 0 Mar 11 00:09 project4
root@tushar-ThinkPad-X230:/home/prince/iacsd#
```