1)

```
shashankshankar@lt-shashanks:~$ mkdir new_dir
shashankshankar@lt-shashanks:~$
```

2)

```
shashankshankar@lt-shashanks:~$ mkdir new_dir
shashankshankar@lt-shashanks:~$ cd new_dir
shashankshankar@lt-shashanks:~/new_dir$
```

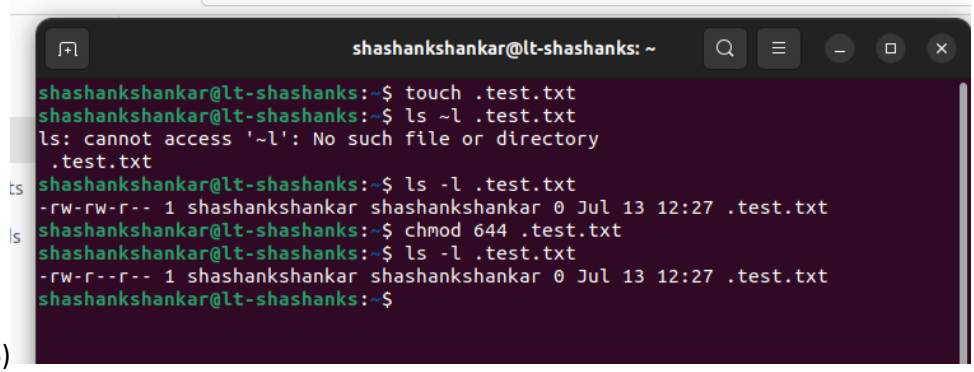
3)

```
shashankshankar@lt-shashanks:~$ mkdir new_dir
shashankshankar@lt-shashanks:~$ cd new_dir
shashankshankar@lt-shashanks:~/new_dir$ touch file.txt
shashankshankar@lt-shashanks:~/new_dir$
```

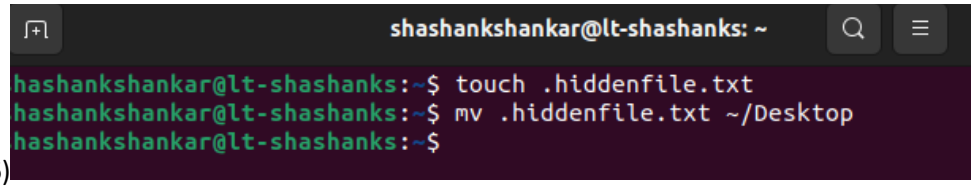
4)

```
shashankshankar@lt-shashanks:~$ mkdir new_dir
shashankshankar@lt-shashanks:~$ cd new_dir
shashankshankar@lt-shashanks:~/new_dir$ touch file.txt
shashankshankar@lt-shashanks:~/new_dir$ touch .hiddenfile.txt
shashankshankar@lt-shashanks:~/new_dir$
```

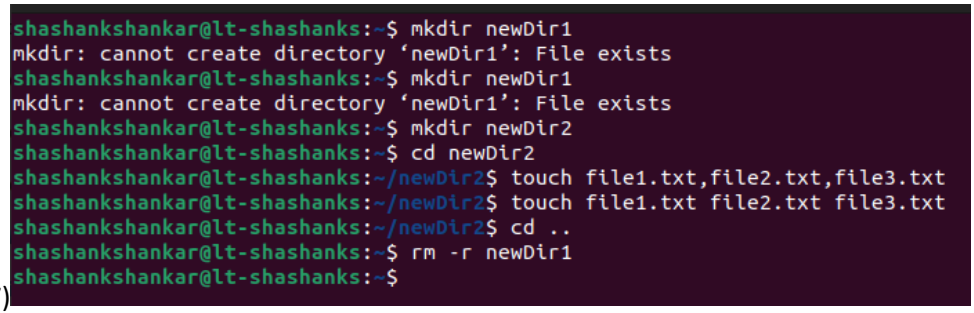
5)


shashankshankar@lt-shashanks: ~
shashankshankar@lt-shashanks:~$ touch .test.txt
shashankshankar@lt-shashanks:~$ ls ~l .test.txt
ls: cannot access '~l': No such file or directory
.test.txt
shashankshankar@lt-shashanks:~$ ls -l .test.txt
-rw-rw-r-- 1 shashankshankar shashankshankar 0 Jul 13 12:27 .test.txt
shashankshankar@lt-shashanks:~$ chmod 644 .test.txt
shashankshankar@lt-shashanks:~$ ls -l .test.txt
-rw-r--r-- 1 shashankshankar shashankshankar 0 Jul 13 12:27 .test.txt
shashankshankar@lt-shashanks:~$

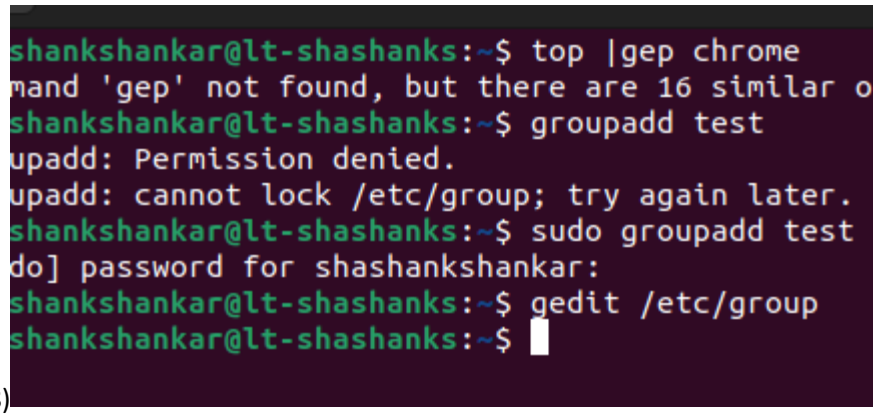
6)


shashankshankar@lt-shashanks: ~
hashankshankar@lt-shashanks:~$ touch .hiddenfile.txt
hashankshankar@lt-shashanks:~$ mv .hiddenfile.txt ~/Desktop
hashankshankar@lt-shashanks:~$

7)

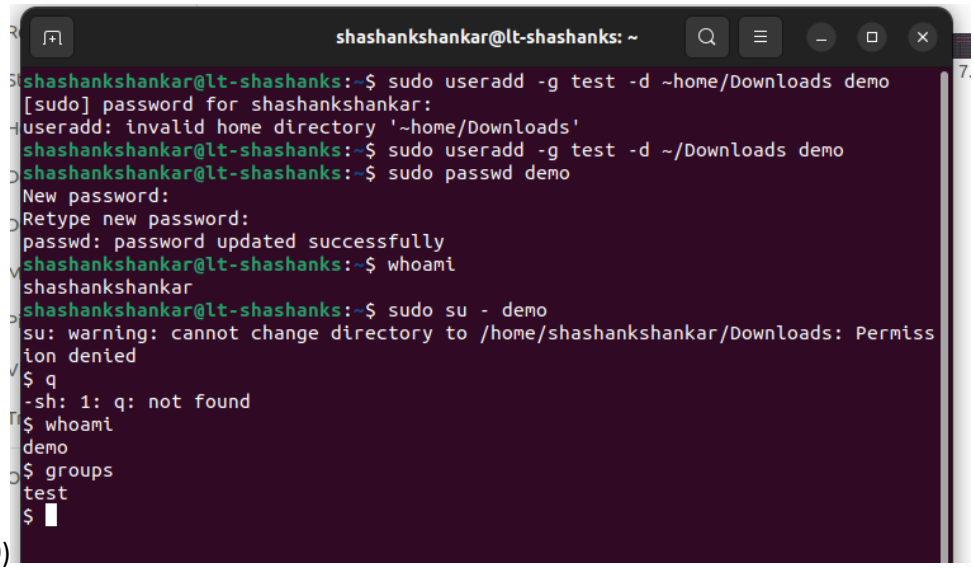

shashankshankar@lt-shashanks:~$ mkdir newDir1
mkdir: cannot create directory ‘newDir1’: File exists
shashankshankar@lt-shashanks:~$ mkdir newDir1
mkdir: cannot create directory ‘newDir1’: File exists
shashankshankar@lt-shashanks:~$ mkdir newDir2
shashankshankar@lt-shashanks:~$ cd newDir2
shashankshankar@lt-shashanks:~/newDir2$ touch file1.txt,file2.txt,file3.txt
shashankshankar@lt-shashanks:~/newDir2$ touch file1.txt file2.txt file3.txt
shashankshankar@lt-shashanks:~/newDir2$ cd ..
shashankshankar@lt-shashanks:~$ rm -r newDir1
shashankshankar@lt-shashanks:~$

8)


shankshankar@lt-shashanks:~$ top |gep chrome
mand 'gep' not found, but there are 16 similar o
shankshankar@lt-shashanks:~$ groupadd test
upadd: Permission denied.
upadd: cannot lock /etc/group; try again later.
shankshankar@lt-shashanks:~$ sudo groupadd test
do] password for shashankshankar:
shankshankar@lt-shashanks:~$ gedit /etc/group
shankshankar@lt-shashanks:~$

```
72 gdm:x:133:
73 lxd:x:134:rxadmin,shashankshankar
74 rxadmin:x:1000:
75 sambashare:x:135:rxadmin,shashankshankar
76 shashankshankar:x:1001:
77 test:x:1002:
```

9)

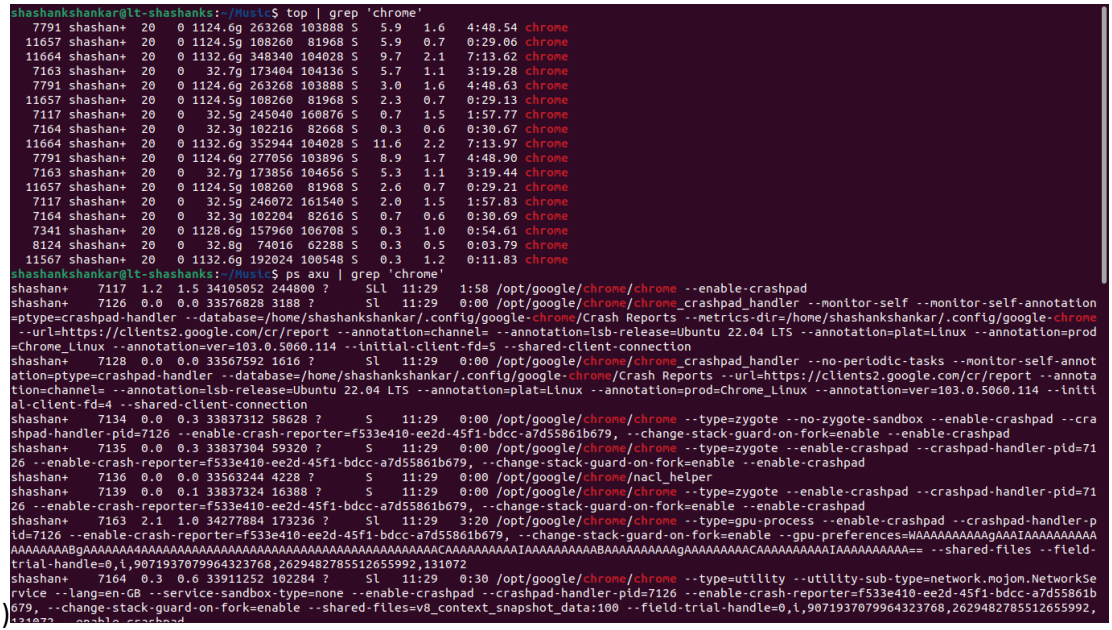


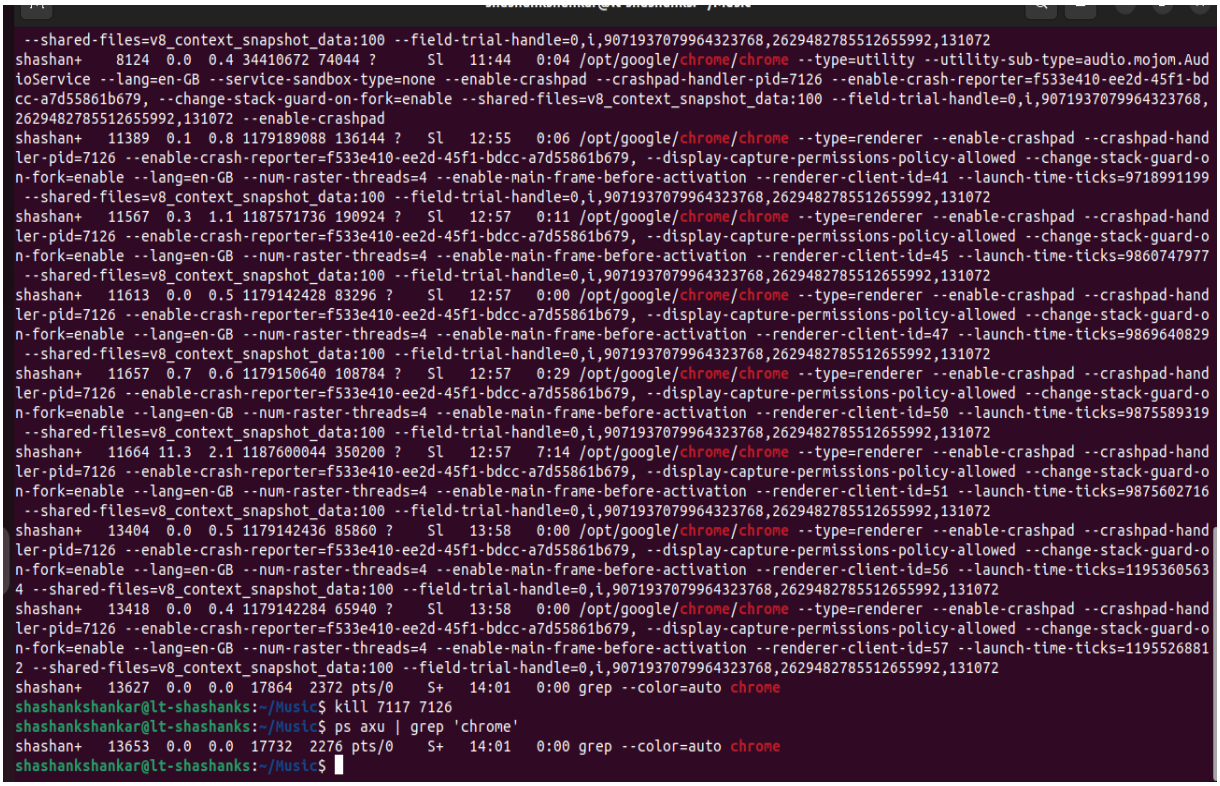
10)

```
shashankshankar@lt-shashanks:~$ cd newdir
bash: cd: newdir: No such file or directory
shashankshankar@lt-shashanks:~$ cd new_dir
shashankshankar@lt-shashanks:~/new_dir$ ln -s file.txt k1
shashankshankar@lt-shashanks:~/new_dir$ ls
file.txt  k1
shashankshankar@lt-shashanks:~/new_dir$ ln -s ~/new_dir/ file.txt ~/Downloads k2
ln: target 'k2': No such file or directory
shashankshankar@lt-shashanks:~/new_dir$ ln -s ~/new_dir/ file.txt ~/Downloads /k2
ln: target '/k2': No such file or directory
shashankshankar@lt-shashanks:~/new_dir$ ln -s ~/new_dir/ file.txt ~/Downloads/k2ln: target '/home/shashankshankar/Downloads/k2': No such
or directory
shashankshankar@lt-shashanks:~/new_dir$ ln -s ~/new_dir/ file.txt ~/Downloads/k2
ln: target '/home/shashankshankar/Downloads/k2': No such file or directory
shashankshankar@lt-shashanks:~/new_dir$ ln -s ~/new_dir/ file.txt ~/Downloads/k23
ln: target '/home/shashankshankar/Downloads/k23': No such file or directory
shashankshankar@lt-shashanks:~/new_dir$ ln -s ~/new_dir/file.txt ~/Downloads/k2
shashankshankar@lt-shashanks:~/new_dir$ ls
file.txt  k1
shashankshankar@lt-shashanks:~/new_dir$ cd ..
shashankshankar@lt-shashanks:~$ cd downloads
bash: cd: downloads: No such file or directory
shashankshankar@lt-shashanks:~$ cd Downloads
shashankshankar@lt-shashanks:~/Downloads$ ls
 abcd.txt          'Linux exercises (1)'                            'Shashank_ RxLogix Self Declaration for Health.odt'
 abc.txt           'RxLogix Job Application Form Rev 2.0 (1).docx'  'Shashank_ RxLogix Self Declaration for Health.pdf'
 habcd.txt         'RxLogix Job Application Form Rev 2.0 (2).docx'  'WhatsApp Image 2022-07-11 at 4.22.44 PM.jpeg'
 k2                'RxLogix Job Application Form Rev 2.0.docx'      'WhatsApp Image 2022-07-12 at 2.16.52 PM.jpeg'
'Linux exercises'  'RxLogix_Self-Declaration for Health.docx'
shashankshankar@lt-shashanks:~/Downloads$ ln -s ~/new_dir/file.txt ~/Music/k2
shashankshankar@lt-shashanks:~/Downloads$ ls
 abcd.txt          'Linux exercises (1)'                            'Shashank_ RxLogix Self Declaration for Health.odt'
 abc.txt           'RxLogix Job Application Form Rev 2.0 (1).docx'  'Shashank_ RxLogix Self Declaration for Health.pdf'
 habcd.txt         'RxLogix Job Application Form Rev 2.0 (2).docx'  'WhatsApp Image 2022-07-11 at 4.22.44 PM.jpeg'
 k2                'RxLogix Job Application Form Rev 2.0.docx'      'WhatsApp Image 2022-07-12 at 2.16.52 PM.jpeg'
'Linux exercises'  'RxLogix_Self-Declaration for Health.docx'
```

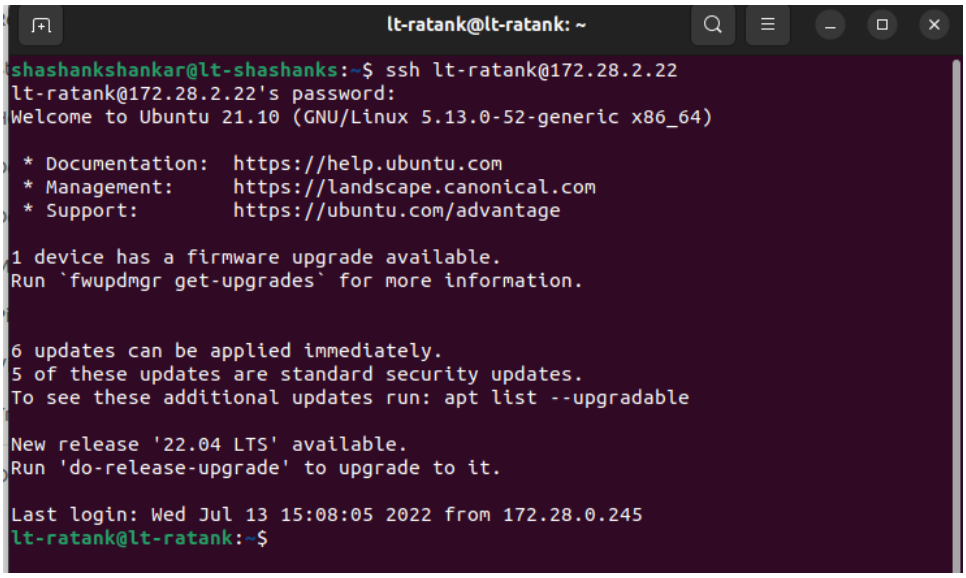
```
bash: cd: downloads: No such file or directory
shashankshankar@lt-shashanks:~$ cd Downloads
shashankshankar@lt-shashanks:~/Downloads$ ls
 abcd.txt          'Linux exercises (1)'                            'Shashank_ RxLogix Self Declaration for Health.odt'
 abc.txt           'RxLogix Job Application Form Rev 2.0 (1).docx'  'Shashank_ RxLogix Self Declaration for Health.pdf'
 habcd.txt         'RxLogix Job Application Form Rev 2.0 (2).docx'  'WhatsApp Image 2022-07-11 at 4.22.44 PM.jpeg'
 k2                'RxLogix Job Application Form Rev 2.0.docx'      'WhatsApp Image 2022-07-12 at 2.16.52 PM.jpeg'
'Linux exercises'  'RxLogix_Self-Declaration for Health.docx'
shashankshankar@lt-shashanks:~/Downloads$ ln -s ~/new_dir/file.txt ~/Music/k2
shashankshankar@lt-shashanks:~/Downloads$ ls
 abcd.txt          'Linux exercises (1)'                            'Shashank_ RxLogix Self Declaration for Health.odt'
 abc.txt           'RxLogix Job Application Form Rev 2.0 (1).docx'  'Shashank_ RxLogix Self Declaration for Health.pdf'
 habcd.txt         'RxLogix Job Application Form Rev 2.0 (2).docx'  'WhatsApp Image 2022-07-11 at 4.22.44 PM.jpeg'
 k2                'RxLogix Job Application Form Rev 2.0.docx'      'WhatsApp Image 2022-07-12 at 2.16.52 PM.jpeg'
'Linux exercises'  'RxLogix_Self-Declaration for Health.docx'
shashankshankar@lt-shashanks:~/Downloads$ ln -s ~/new_dir/file.txt ~/Music/k3
shashankshankar@lt-shashanks:~/Downloads$ cd ..
shashankshankar@lt-shashanks:~$ cd Music
shashankshankar@lt-shashanks:~/Music$ ls
k2  k3
```

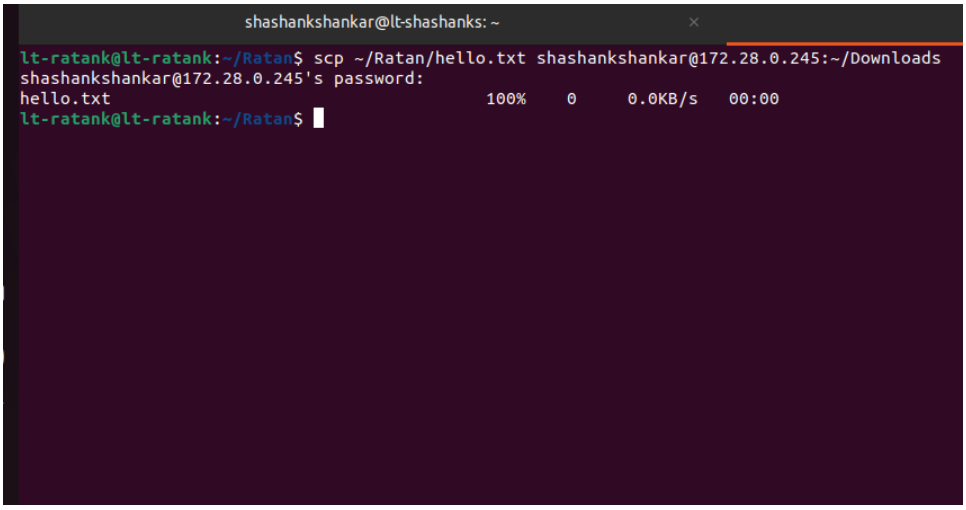
11)


shashankshankar@lt-shashanks:~/Music$ top | grep 'chrome'
7791 shashan+ 20 0 1124.6g 263268 103888 S 5.9 1.6 4:48.54 chrome
11657 shashan+ 20 0 1124.5g 108260 81968 S 5.9 0.7 0:29.06 chrome
11664 shashan+ 20 0 1132.6g 348340 104028 S 9.7 2.1 7:13.62 chrome
7163 shashan+ 20 0 32.7g 173404 104136 S 5.7 1.1 3:19.28 chrome
7791 shashan+ 20 0 1124.6g 263268 103888 S 3.0 1.6 4:48.63 chrome
11657 shashan+ 20 0 1124.5g 108260 81968 S 2.3 0.7 0:29.13 chrome
7117 shashan+ 20 0 32.5g 245040 160876 S 0.7 1.5 1:57.77 chrome
7164 shashan+ 20 0 32.3g 102216 82668 S 0.3 0.6 0:30.67 chrome
11664 shashan+ 20 0 1132.6g 352944 104028 S 11.6 2.2 7:13.97 chrome
7791 shashan+ 20 0 1124.6g 277056 103896 S 8.9 1.7 4:48.90 chrome
7163 shashan+ 20 0 32.7g 173856 104656 S 5.3 1.1 3:19.44 chrome
11657 shashan+ 20 0 1124.5g 108260 81968 S 2.6 0.7 0:29.21 chrome
7117 shashan+ 20 0 32.5g 246072 161540 S 2.0 1.5 1:57.83 chrome
7164 shashan+ 20 0 32.3g 102204 82616 S 0.7 0.6 0:30.69 chrome
7341 shashan+ 20 0 1128.6g 157960 106708 S 0.3 1.0 0:54.61 chrome
8124 shashan+ 20 0 32.8g 74016 62288 S 0.3 0.5 0:03.79 chrome
11567 shashan+ 20 0 1132.6g 192024 100548 S 0.3 1.2 0:11.83 chrome
shashankshankar@lt-shashanks:~/Music$ ps axu | grep 'chrome'
shashan+ 7117 1.2 1.5 34105052 244800 ? SLl 11:29 1:58 /opt/google/chrome/chrome --enable-crashpad
shashan+ 7126 0.0 0.0 33576828 3188 ? Sl 11:29 0:00 /opt/google/chrome/chrome_crashpad_handler --monitor-self --monitor-self-annotation=ptype=crashpad-handler --database=/home/shashankshankar/.config/google-chrome/Crash Reports --metrics-dir=/home/shashankshankar/.config/google-chrome --url=https://clients2.google.com/cr/report --annotation=channel= --annotation=lsb-release=Ubuntu 22.04 LTS --annotation=plat=Linux --annotation=prod=Chrome_Linux --annotation=ver=103.0.5060.114 --initial-client-fd=5 --shared-client-connection
shashan+ 7128 0.0 0.0 33567592 1616 ? Sl 11:29 0:00 /opt/google/chrome/chrome_crashpad_handler --no-periodic-tasks --monitor-self-annotation=ptype=crashpad-handler --database=/home/shashankshankar/.config/google-chrome/Crash Reports --url=https://clients2.google.com/cr/report --annotation=channel= --annotation=lsb-release=Ubuntu 22.04 LTS --annotation=plat=Linux --annotation=prod=Chrome_Linux --annotation=ver=103.0.5060.114 --initial-client-fd=4 --shared-client-connection
shashan+ 7134 0.0 0.3 33837312 58628 ? S 11:29 0:00 /opt/google/chrome/chrome --type=zygote --no-zygote-sandbox --enable-crashpad --crashpad-handler-pid=7126 --enable-crash-reporter=f533e410-ee2d-45f1-bdcc-a7d55861b679, --change-stack-guard-on-fork=enable --enable-crashpad
shashan+ 7135 0.0 0.3 33837304 59320 ? S 11:29 0:00 /opt/google/chrome/chrome --type=zygote --enable-crashpad --crashpad-handler-pid=7126 --enable-crash-reporter=f533e410-ee2d-45f1-bdcc-a7d55861b679, --change-stack-guard-on-fork=enable --enable-crashpad
shashan+ 7136 0.0 0.0 33563244 4228 ? S 11:29 0:00 /opt/google/chrome/nacl_helper
shashan+ 7139 0.0 0.1 33837324 16388 ? S 11:29 0:00 /opt/google/chrome/chrome --type=zygote --enable-crashpad --crashpad-handler-pid=7126 --enable-crash-reporter=f533e410-ee2d-45f1-bdcc-a7d55861b679, --change-stack-guard-on-fork=enable --enable-crashpad
shashan+ 7163 2.1 1.0 34277884 173236 ? Sl 11:29 3:20 /opt/google/chrome/chrome --type=gpu-process --enable-crashpad --crashpad-handler-pid=7126 --enable-crash-reporter=f533e410-ee2d-45f1-bdcc-a7d55861b679, --change-stack-guard-on-fork=enable --gpu-preferences=WAAAAAAAAAAgAAAIAAAAAAAAAA
--shared-files --field-trial-handle=0,i,907193707996432376 8,262948278551265599 2,131072
shashan+ 7164 0.3 0.6 33911252 102284 ? Sl 11:29 0:30 /opt/google/chrome/chrome --type=utility --utility-sub-type=network.mojom.NetworkService --lang=en-GB --service-sandbox-type=none --enable-crashpad --crashpad-handler-pid=7126 --enable-crash-reporter=f533e410-ee2d-45f1-bdcc-a7d55861b679, --change-stack-guard-on-fork=enable --shared-files=v8_context_snapshot_data:100 --field-trial-handle=0,i,907193707996432376 8,262948278551265599 2,131072


--shared-files=v8_context_snapshot_data:100 --field-trial-handle=0,i,907193707996432376 8,262948278551265599 2,131072
shashan+ 8124 0.0 0.4 34410672 74044 ? Sl 11:44 0:04 /opt/google/chrome/chrome --type=utility --utility-sub-type=audio.mojom.AudioService --lang=en-GB --service-sandbox-type=none --enable-crashpad --crashpad-handler-pid=7126 --enable-crash-reporter=f533e410-ee2d-45f1-bdcc-a7d55861b679, --change-stack-guard-on-fork=enable --shared-files=v8_context_snapshot_data:100 --field-trial-handle=0,i,907193707996432376 8,262948278551265599 2,131072 --enable-crashpad
shashan+ 11389 0.1 0.8 1179189088 136144 ? Sl 12:55 0:06 /opt/google/chrome/chrome --type=renderer --enable-crashpad --crashpad-handler-pid=7126 --enable-crash-reporter=f533e410-ee2d-45f1-bdcc-a7d55861b679, --display-capture-permissions-policy-allowed --change-stack-guard-on-fork=enable --lang=en-GB --num-raster-threads=4 --enable-main-frame-before-activation --renderer-client-id=41 --launch-time-ticks=9718991199 --shared-files=v8_context_snapshot_data:100 --field-trial-handle=0,i,907193707996432376 8,262948278551265599 2,131072
shashan+ 11567 0.3 1.1 1187571736 190924 ? Sl 12:57 0:11 /opt/google/chrome/chrome --type=renderer --enable-crashpad --crashpad-handler-pid=7126 --enable-crash-reporter=f533e410-ee2d-45f1-bdcc-a7d55861b679, --display-capture-permissions-policy-allowed --change-stack-guard-on-fork=enable --lang=en-GB --num-raster-threads=4 --enable-main-frame-before-activation --renderer-client-id=45 --launch-time-ticks=9860747977 --shared-files=v8_context_snapshot_data:100 --field-trial-handle=0,i,907193707996432376 8,262948278551265599 2,131072
shashan+ 11613 0.0 0.5 1179142428 83296 ? Sl 12:57 0:00 /opt/google/chrome/chrome --type=renderer --enable-crashpad --crashpad-handler-pid=7126 --enable-crash-reporter=f533e410-ee2d-45f1-bdcc-a7d55861b679, --display-capture-permissions-policy-allowed --change-stack-guard-on-fork=enable --lang=en-GB --num-raster-threads=4 --enable-main-frame-before-activation --renderer-client-id=47 --launch-time-ticks=9869640829 --shared-files=v8_context_snapshot_data:100 --field-trial-handle=0,i,907193707996432376 8,262948278551265599 2,131072
shashan+ 11657 0.7 0.6 1179150640 108784 ? Sl 12:57 0:29 /opt/google/chrome/chrome --type=renderer --enable-crashpad --crashpad-handler-pid=7126 --enable-crash-reporter=f533e410-ee2d-45f1-bdcc-a7d55861b679, --display-capture-permissions-policy-allowed --change-stack-guard-on-fork=enable --lang=en-GB --num-raster-threads=4 --enable-main-frame-before-activation --renderer-client-id=50 --launch-time-ticks=9875589319 --shared-files=v8_context_snapshot_data:100 --field-trial-handle=0,i,907193707996432376 8,262948278551265599 2,131072
shashan+ 11664 11.3 2.1 1187600044 350200 ? Sl 12:57 7:14 /opt/google/chrome/chrome --type=renderer --enable-crashpad --crashpad-handler-pid=7126 --enable-crash-reporter=f533e410-ee2d-45f1-bdcc-a7d55861b679, --display-capture-permissions-policy-allowed --change-stack-guard-on-fork=enable --lang=en-GB --num-raster-threads=4 --enable-main-frame-before-activation --renderer-client-id=51 --launch-time-ticks=9875602716 --shared-files=v8_context_snapshot_data:100 --field-trial-handle=0,i,907193707996432376 8,262948278551265599 2,131072
shashan+ 13404 0.0 0.5 1179142436 85860 ? Sl 13:58 0:00 /opt/google/chrome/chrome --type=renderer --enable-crashpad --crashpad-handler-pid=7126 --enable-crash-reporter=f533e410-ee2d-45f1-bdcc-a7d55861b679, --display-capture-permissions-policy-allowed --change-stack-guard-on-fork=enable --lang=en-GB --num-raster-threads=4 --enable-main-frame-before-activation --renderer-client-id=56 --launch-time-ticks=1195360563 4 --shared-files=v8_context_snapshot_data:100 --field-trial-handle=0,i,907193707996432376 8,262948278551265599 2,131072
shashan+ 13418 0.0 0.4 1179142284 65940 ? Sl 13:58 0:00 /opt/google/chrome/chrome --type=renderer --enable-crashpad --crashpad-handler-pid=7126 --enable-crash-reporter=f533e410-ee2d-45f1-bdcc-a7d55861b679, --display-capture-permissions-policy-allowed --change-stack-guard-on-fork=enable --lang=en-GB --num-raster-threads=4 --enable-main-frame-before-activation --renderer-client-id=57 --launch-time-ticks=1195526881 2 --shared-files=v8_context_snapshot_data:100 --field-trial-handle=0,i,907193707996432376 8,262948278551265599 2,131072
shashan+ 13627 0.0 0.0 17864 2372 pts/0 S+ 14:01 0:00 grep --color=auto chrome
shashankshankar@lt-shashanks:~/Music$ kill 7117 7126
shashankshankar@lt-shashanks:~/Music$ ps axu | grep 'chrome'
shashan+ 13653 0.0 0.0 17732 2276 pts/0 S+ 14:01 0:00 grep --color=auto chrome
shashankshankar@lt-shashanks:~/Music$

12)


lt-ratank@lt-ratank: ~
shashankshankar@lt-shashanks:~$ ssh lt-ratank@172.28.2.22
lt-ratank@172.28.2.22's password:
Welcome to Ubuntu 21.10 (GNU/Linux 5.13.0-52-generic x86_64)
* Documentation: https://help.ubuntu.com
* Management: https://landscape.canonical.com
* Support: https://ubuntu.com/advantage
1 device has a firmware upgrade available.
Run `fwupdmgr get-upgrades` for more information.
6 updates can be applied immediately.
5 of these updates are standard security updates.
To see these additional updates run: apt list --upgradable
New release '22.04 LTS' available.
Run 'do-release-upgrade' to upgrade to it.
Last login: Wed Jul 13 15:08:05 2022 from 172.28.0.245
lt-ratank@lt-ratank:~$


shashankshankar@lt-shashanks: ~
lt-ratank@lt-ratank:~/Ratan$ scp ~/Ratan/hello.txt shashankshankar@172.28.0.245:~/Downloads
shashankshankar@172.28.0.245's password:
hello.txt 100% 0 0.0KB/s 00:00
lt-ratank@lt-ratank:~/Ratan$