

```
lt-ashutoshb@lt-ashutoshb:~$ cd Downloads
lt-ashutoshb@lt-ashutoshb:~/Downloads$ mkdir testdirectory
lt-ashutoshb@lt-ashutoshb:~/Downloads$
```

1. Created a new directory named testdirectory

```
lt-ashutoshb@lt-ashutoshb:~$ cd Downloads
lt-ashutoshb@lt-ashutoshb:~/Downloads$ mkdir testdirectory
lt-ashutoshb@lt-ashutoshb:~/Downloads$ cd testdirectory
lt-ashutoshb@lt-ashutoshb:~/Downloads/testdirectory$
```

2. Switched to the directory named testdirectory

```
lt-ashutoshb@lt-ashutoshb:~$ cd Downloads
lt-ashutoshb@lt-ashutoshb:~/Downloads$ mkdir testdirectory
lt-ashutoshb@lt-ashutoshb:~/Downloads$ cd testdirectory
lt-ashutoshb@lt-ashutoshb:~/Downloads/testdirectory$ touch newtestfile.txt
lt-ashutoshb@lt-ashutoshb:~/Downloads/testdirectory$
```

3. Created newtestfile.txt

```
lt-ashutoshb@lt-ashutoshb:~$ cd Downloads
lt-ashutoshb@lt-ashutoshb:~/Downloads$ mkdir testdirectory
lt-ashutoshb@lt-ashutoshb:~/Downloads$ cd testdirectory
lt-ashutoshb@lt-ashutoshb:~/Downloads/testdirectory$ touch newtestfile.txt
lt-ashutoshb@lt-ashutoshb:~/Downloads/testdirectory$ touch .hiddentestfile.txt
lt-ashutoshb@lt-ashutoshb:~/Downloads/testdirectory$
```

4. Created hiddentestfile

```
chmod: cannot access 'hiddentestfile.txt': No such file or directory
lt-ashutoshb@lt-ashutoshb:~$ sudo chmod 000 hiddentestfile.txt
[sudo] password for lt-ashutoshb:
chmod: cannot access 'hiddentestfile.txt': No such file or directory
lt-ashutoshb@lt-ashutoshb:~$ sudo chmod 000 hiddentestfile.txt
chmod: cannot access 'hiddentestfile.txt': No such file or directory
lt-ashutoshb@lt-ashutoshb:~$ sudo chmod 000 .hiddentestfile.txt
lt-ashutoshb@lt-ashutoshb:~$
```

5. Modified the access of the hidden text file so that it can be edited only by root user.

```
lt-ashutoshb@lt-ashutoshb:~$ pwd
/home/lt-ashutoshb
lt-ashutoshb@lt-ashutoshb:~$ mkdir directorytest
lt-ashutoshb@lt-ashutoshb:~$ cd directorytest
lt-ashutoshb@lt-ashutoshb:~/directorytest$ touch file{1,2,3}
lt-ashutoshb@lt-ashutoshb:~/directorytest$
```

6. Created 3 text files in directorytest

```
lt-ashutoshb@lt-ashutoshb:~$ pwd
/home/lt-ashutoshb
lt-ashutoshb@lt-ashutoshb:~$ mkdir directorytest
lt-ashutoshb@lt-ashutoshb:~$ cd directorytest
lt-ashutoshb@lt-ashutoshb:~/directorytest$ touch file{1,2,3}
lt-ashutoshb@lt-ashutoshb:~/directorytest$ rm -r directortttest
rm: cannot remove 'directortttest': No such file or directory
lt-ashutoshb@lt-ashutoshb:~/directorytest$ rm -r directorytest
rm: cannot remove 'directorytest': No such file or directory
lt-ashutoshb@lt-ashutoshb:~/directorytest$ rm -r directorytest
rm: cannot remove 'directorytest': No such file or directory
lt-ashutoshb@lt-ashutoshb:~/directorytest$ cd
lt-ashutoshb@lt-ashutoshb:~$ rm -r directorytest
lt-ashutoshb@lt-ashutoshb:~$
```

7. Created a new directory named directorytest in which created three test files and then removed the whole directory

```
>9 pulse:x:130:
70 pulse-access:x:131:
71 gdm:x:132:
72 lxd:x:133:rxadmin
73 rxadmin:x:1000:
74 sambashare:x:134:rxadmin
75 systemd-coredump:x:999:
76 lt-ashutoshb:x:1001:
77 Ashutoshbansal:x:1002:
78 dx:x:1003:
79 Ashutosh:x:1004:
```

8. Created a new user group

```
lt-ashutoshb@lt-ashutoshb:~$ ln -s /home/lt-ashutoshb/Downloads/testdirectory/newtestfile.txt toFolder1
lt-ashutoshb@lt-ashutoshb:~$ ls -lrt
total 52
drwxr-xr-x 2 lt-ashutoshb lt-ashutoshb 4096 Jul 2 12:57 Videos
drwxr-xr-x 2 lt-ashutoshb lt-ashutoshb 4096 Jul 2 12:57 Templates
drwxr-xr-x 2 lt-ashutoshb lt-ashutoshb 4096 Jul 2 12:57 Public
drwxr-xr-x 2 lt-ashutoshb lt-ashutoshb 4096 Jul 2 12:57 Pictures
drwxr-xr-x 2 lt-ashutoshb lt-ashutoshb 4096 Jul 2 12:57 Music
drwxr-xr-x 2 lt-ashutoshb lt-ashutoshb 4096 Jul 2 12:57 Desktop
drwx----- 4 lt-ashutoshb lt-ashutoshb 4096 Jul 2 13:04 snap
drwxrwxr-x 2 lt-ashutoshb lt-ashutoshb 4096 Jul 12 10:35 TAR
drwxrwxr-x 2 lt-ashutoshb lt-ashutoshb 4096 Jul 12 10:47 Ashutosh
drwxrwxr-x 2 lt-ashutoshb lt-ashutoshb 4096 Jul 12 18:10 'Linux_Assignment solutions'
drwxrwxr-x 2 lt-ashutoshb lt-ashutoshb 4096 Jul 12 18:12 testdirectory
drwxr-xr-x 3 lt-ashutoshb lt-ashutoshb 4096 Jul 13 04:12 Downloads
drwxr-xr-x 2 lt-ashutoshb lt-ashutoshb 4096 Jul 13 04:33 Documents
lrwxrwxrwx 1 lt-ashutoshb lt-ashutoshb 58 Jul 13 05:00 toFolder1 -> /home/lt-ashutoshb/Downloads/testdirectory/newtestfile.txt
lt-ashutoshb@lt-ashutoshb:~$
```

9.Created a softlink named toFolder1 for the newtestfile.txt

```
lt-ashutoshb@lt-ashutoshb:~$ top

top - 12:08:11 up 2:22, 1 user, load average: 0.80, 0.42, 0.53
Tasks: 307 total, 1 running, 306 sleeping, 0 stopped, 0 zombie
%Cpu(s): 0.8 us, 1.1 sy, 0.0 ni, 97.9 id, 0.2 wa, 0.0 hi, 0.0 si, 0.0 st
MiB Mem : 15804.8 total, 11240.7 free, 2077.2 used, 2486.9 buff/cache
MiB Swap: 2048.0 total, 2048.0 free, 0.0 used. 13040.6 avail Mem

  PID USER      PR  NI    VIRT    RES    SHR S  %CPU  %MEM    TIME+  COMMAND
 1567 lt-ashu+   20   0 5194844 297024 126844 S   6.6   1.8   3:23.59 gnome-s+
   426 root       -51   0         0         0         0 S   6.3   0.0   0:58.82 irq/135+
 9764 lt-ashu+   20   0 550500    49848 38348 S   1.3   0.3   0:00.28 gnome-t+
 2227 lt-ashu+   20   0   13.9g 330404 81532 S   0.7   2.0   2:34.13 teams
 4537 lt-ashu+   20   0   32.3g 104340 82780 S   0.7   0.6   0:13.75 chrome
   735 avahi      20   0    8364    4820   3516 S   0.3   0.0   0:05.97 avahi-d+
 2304 lt-ashu+   20   0 5763940 254556 116472 S   0.3   1.6   1:00.71 teams
 4829 lt-ashu+   20   0   44.5g 142376 94952 S   0.3   0.9   0:08.67 chrome
 8513 lt-ashu+   20   0   40.5g 132204 91248 S   0.3   0.8   0:04.43 chrome
 9596 root        0 -20         0         0         0 I   0.3   0.0   0:00.33 kworker+
 9699 lt-ashu+   20   0 633616    61292 39952 S   0.3   0.4   0:00.92 gedit
 9959 lt-ashu+   20   0   13028    4116   3268 R   0.3   0.0   0:00.02 top
     1 root      20   0 164360    10744 7644 S   0.0   0.1   0:01.26 systemd
     2 root      20   0         0         0         0 S   0.0   0.0   0:00.01 kthreadd
     3 root        0 -20         0         0         0 I   0.0   0.0   0:00.00 rcu_gp
     4 root        0 -20         0         0         0 I   0.0   0.0   0:00.00 rcu_par+
     6 root        0 -20         0         0         0 I   0.0   0.0   0:00.00 kworker+

lt-ashutoshb@lt-ashutoshb:~$ top| grep chrome
 4489 lt-ashu+   20   0   32.5g 242668 160760 S   0.3   1.5   0:54.66 chrome
 8703 lt-ashu+   20   0   40.5g 89664 70200 S   0.3   0.6   0:00.36 chrome
 4489 lt-ashu+   20   0   32.5g 242668 160760 S   0.6   1.5   0:54.67 chrome
```

10.Using Top command memory usage of google chrome

```
lt-ashutoshb@lt-ashutoshb:~$ kill 4489 4497
lt-ashutoshb@lt-ashutoshb:~$ ps aux | grep 'chrome'
lt-ashu+ 10250 0.0 0.0 9128 2372 pts/0 S+ 12:14 0:00 grep --color=auto chrome
lt-ashutoshb@lt-ashutoshb:~$
```

11.End the process

```
lt-ashutoshb@lt-ashutoshb:~$ ssh lt-dineshs@172.28.2.112
ssh: connect to host 172.28.2.112 port 22: No route to host
lt-ashutoshb@lt-ashutoshb:~$ ssh lt-dineshs@172.28.2.112
The authenticity of host '172.28.2.112 (172.28.2.112)' can't be established.
ECDSA key fingerprint is SHA256:hLqv1hTl2UprNhIgbUVHcGUZ2yWtVrxfrFfo9+8QMS0.
Are you sure you want to continue connecting (yes/no/[fingerprint])? yes
Warning: Permanently added '172.28.2.112' (ECDSA) to the list of known hosts.
lt-dineshs@172.28.2.112'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

0 updates can be applied immediately.

New release '22.04 LTS' available.
Run 'do-release-upgrade' to upgrade to it.

Last login: Wed Jul 13 09:42:02 2022 from 172.28.2.176
lt-dineshs@lt-dineshs:~$
```

12.Used ssh command

```
New release '22.04 LTS' available.
Run 'do-release-upgrade' to upgrade to it.

Last login: Wed Jul 13 09:42:02 2022 from 172.28.2.176
lt-dineshs@lt-dineshs:~$ scp ~/Desktop new.txt
cp: -r not specified; omitting directory '/home/lt-dineshs/Desktop'
lt-dineshs@lt-dineshs:~$ scp ~/Desktop new.txt lt-ashutoshb@172.28.2.121:~/Desktop/
The authenticity of host '172.28.2.121 (172.28.2.121)' can't be established.
ECDSA key fingerprint is SHA256:XsKct3HPXEof7q5SdxlnUwIE8EM5q3WtEWUryJJAr3BI.
Are you sure you want to continue connecting (yes/no/[fingerprint])? yes
Warning: Permanently added '172.28.2.121' (ECDSA) to the list of known hosts.
lt-ashutoshb@172.28.2.121's password:
/home/lt-dineshs/Desktop: not a regular file
new.txt: No such file or directory
lt-dineshs@lt-dineshs:~$ scp ~/Desktop/new.txt lt-ashutoshb@172.28.2.121:~/Desktop/
lt-ashutoshb@172.28.2.121's password:
new.txt
lt-dineshs@lt-dineshs:~$
```

Used scp command