

```
Activities Terminal Apr 10 18:58
vishalprajapati@lt-vishalp1: ~/assignment_solution

vishalprajapati@lt-vishalp1:~$ mkdir assignment_solution
vishalprajapati@lt-vishalp1:~$ cd assignment_solution/
vishalprajapati@lt-vishalp1:~/assignment_solution$ touch file.txt
vishalprajapati@lt-vishalp1:~/assignment_solution$ touch .hidden_file
vishalprajapati@lt-vishalp1:~/assignment_solution$ sudo chown root:vishalprajapati .hidden_file
[sudo] password for vishalprajapati:
vishalprajapati@lt-vishalp1:~/assignment_solution$ ll
total 8
drwxrwxr-x  2 vishalprajapati vishalprajapati 4096 Apr 10 18:28 ./
drwxr-xr-x 25 vishalprajapati vishalprajapati 4096 Apr 10 18:27 ../
-rw-rw-r--  1 vishalprajapati vishalprajapati  0 Apr 10 18:28 file.txt
-rw-rw-r--  1 root            vishalprajapati  0 Apr 10 18:28 .hidden_file
vishalprajapati@lt-vishalp1:~/assignment_solution$ sudo chmod 200 .hidden_file
vishalprajapati@lt-vishalp1:~/assignment_solution$ ll
total 8
drwxrwxr-x  2 vishalprajapati vishalprajapati 4096 Apr 10 18:28 ./
drwxr-xr-x 25 vishalprajapati vishalprajapati 4096 Apr 10 18:27 ../
-rw-rw-r--  1 vishalprajapati vishalprajapati  0 Apr 10 18:28 file.txt
--w-----  1 root            vishalprajapati  0 Apr 10 18:28 .hidden_file
vishalprajapati@lt-vishalp1:~/assignment_solution$ mv .hidden_file ../Desktop/
vishalprajapati@lt-vishalp1:~/assignment_solution$ ls -a ../Desktop/
. .. .hidden .hidden_file scp.txt
vishalprajapati@lt-vishalp1:~/assignment_solution$ mkdir folder
vishalprajapati@lt-vishalp1:~/assignment_solution$ touch folder/files{1..3}.txt
vishalprajapati@lt-vishalp1:~/assignment_solution$ ls folder
```

```
Activities Terminal Apr 10 19:08
vishalprajapati@lt-vishalp1: ~/assignment_solution

vishalprajapati@lt-vishalp1:~/assignment_solution$ rm -r folder
vishalprajapati@lt-vishalp1:~/assignment_solution$ ls
file.txt
vishalprajapati@lt-vishalp1:~/assignment_solution$ groupadd NewGroup
groupadd: Permission denied.
groupadd: cannot lock /etc/group; try again later.
vishalprajapati@lt-vishalp1:~/assignment_solution$ ln -s file.txt softlink
vishalprajapati@lt-vishalp1:~/assignment_solution$ ls
file.txt softlink
vishalprajapati@lt-vishalp1:~/assignment_solution$ ln -s file.txt ../Desktop/softlink
vishalprajapati@lt-vishalp1:~/assignment_solution$ ls ../Desktop/
scp.txt softlink
vishalprajapati@lt-vishalp1:~/assignment_solution$ scp lt-sakshish@172.28.1.87:/home/lt-sakshish/scp.txt /home/vishalprajapati/Program
lt-sakshish@172.28.1.87's password:
scp.txt 100% 5 0.1KB/s 00:00
vishalprajapati@lt-vishalp1:~/assignment_solution$ ps aux | grep firefox
vishalp+ 41502 4.2 0.9 3351204 324800 ? SL 18:53 0:04 /usr/lib/firefox/firefox
vishalp+ 41571 0.0 0.1 208620 44132 ? SL 18:53 0:00 /usr/lib/firefox/firefox -contentproc -parent
BuildID 20230321111920 -prefsLen 26037 -prefMapSize 231453 -appDir /usr/lib/firefox/browser {acee60cd-3c84-4b9a-97b8-d0314360f03d} 41502 true socket
vishalp+ 41590 1.3 0.3 2437840 123052 ? SL 18:53 0:01 /usr/lib/firefox/firefox -contentproc -childI
D 1 -isForBrowser -prefsLen 26178 -prefMapSize 231453 -jsInitLen 246560 -parentBuildID 20230321111920 -appDir /u
sr/lib/firefox/browser {d28f13ae-cac3-43b9-b892-961f6ffc80b8} 41502 true tab
```

```
Activities Terminal Apr 10 19:09
vishalprajapati@lt-vishalp1: ~/assignment_solution

vishalprajapati@lt-vishalp1: ~/assignment_solution
vishalprajapati@lt-vishalp1: ~/Desktop

97b8-d0314360f03d} 41502 true socket
vishalp+ 41590 1.3 0.3 2437840 123052 ? SL 18:53 0:01 /usr/lib/firefox/firefox -contentproc -childI
D 1 -isForBrowser -prefsLen 26178 -prefMapSize 231453 -jsInitLen 246560 -parentBuildID 20230321111920 -appDir /u
sr/lib/firefox/browser {d28f13ae-cac3-43b9-b892-961f6ffc80b8} 41502 true tab
vishalp+ 41643 0.3 0.3 2442940 103152 ? SL 18:53 0:00 /usr/lib/firefox/firefox -contentproc -childI
D 2 -isForBrowser -prefsLen 31576 -prefMapSize 231453 -jsInitLen 246560 -parentBuildID 20230321111920 -appDir /u
sr/lib/firefox/browser {d7eb79d5-758f-4d24-aac6-a143208b763c} 41502 true tab
vishalp+ 41696 0.0 0.1 206276 38932 ? SL 18:53 0:00 /usr/lib/firefox/firefox -contentproc -parent
BuildID 20230321111920 -sandboxingKind 0 -prefsLen 31576 -prefMapSize 231453 -appDir /usr/lib/firefox/browser {0
272e65b-cf54-49d4-9110-ddbdfdddecf08} 41502 true utility
vishalp+ 41705 0.1 0.2 2407388 76824 ? SL 18:53 0:00 /usr/lib/firefox/firefox -contentproc -childI
D 3 -isForBrowser -prefsLen 28812 -prefMapSize 231453 -jsInitLen 246560 -parentBuildID 20230321111920 -appDir /u
sr/lib/firefox/browser {00c7b393-da13-4b58-a4c7-524e2d9f9dd2} 41502 true tab
vishalp+ 41708 0.1 0.2 2407388 76344 ? SL 18:53 0:00 /usr/lib/firefox/firefox -contentproc -childI
D 4 -isForBrowser -prefsLen 28812 -prefMapSize 231453 -jsInitLen 246560 -parentBuildID 20230321111920 -appDir /u
sr/lib/firefox/browser {16da52d7-5352-4b0b-a994-09966cc7e538} 41502 true tab
vishalp+ 41712 0.1 0.2 2407388 76796 ? SL 18:53 0:00 /usr/lib/firefox/firefox -contentproc -childI
D 5 -isForBrowser -prefsLen 28812 -prefMapSize 231453 -jsInitLen 246560 -parentBuildID 20230321111920 -appDir /u
sr/lib/firefox/browser {9e20c292-43b5-42f0-ab16-32aa6a6faf56} 41502 true tab
vishalp+ 41891 0.0 0.0 9040 724 pts/0 S+ 18:55 0:00 grep --color=auto firefox
vishalprajapati@lt-vishalp1:~/assignment_solution$ kill 41502
vishalprajapati@lt-vishalp1:~/assignment_solution$ ps aux | grep firefox
vishalp+ 41919 0.0 0.0 9040 652 pts/0 S+ 18:56 0:00 grep --color=auto firefox
vishalprajapati@lt-vishalp1:~/assignment_solution$
```

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Activities Terminal Apr 10 19:13
vishalprajapati@lt-vishalp1: ~/Desktop

vishalprajapati@lt-vishalp1: ~/assignment_solution
vishalprajapati@lt-vishalp1: ~/Desktop

vishalprajapati@lt-vishalp1:~/Desktop$ ssh lt-sakshis@172.28.1.87
lt-sakshis@172.28.1.87's password:
Welcome to Ubuntu 20.04.6 LTS (GNU/Linux 5.14.0-1032-oem x86_64)

 * Documentation:  https://help.ubuntu.com
 * Management:    https://landscape.canonical.com
 * Support:       https://ubuntu.com/advantage

 * Introducing Expanded Security Maintenance for Applications.
   Receive updates to over 25,000 software packages with your
   Ubuntu Pro subscription. Free for personal use.

   https://ubuntu.com/pro

Expanded Security Maintenance for Applications is not enabled.

0 updates can be applied immediately.

Enable ESM Apps to receive additional future security updates.
See https://ubuntu.com/esm or run: sudo pro status

Your Hardware Enablement Stack (HWE) is supported until April 2025.
*** System restart required ***
Last login: Mon Apr 10 16:26:06 2023 from 172.28.1.93
lt-sakshis@lt-sakshis:~$ ls
```

```
lt-sakshis@lt-sakshis:~$ ls
a          b          Desktop    f          js          Music      pqr.txt    scp.txt    text.txt
abcd.txt   c          Documents  hellosoft  k          new.txt    pq.txt     snap       Videos
abc.txt    dep.sh     Downloads  jk.txt     link.txt   Pictures   Public     Templates

lt-sakshis@lt-sakshis:~$ cat abc.txt
lt-sakshis@lt-sakshis:~$ echo "hi" >> abc.txt
lt-sakshis@lt-sakshis:~$ cat abc.txt
hi
lt-sakshis@lt-sakshis:~$ exit
logout
Connection to 172.28.1.87 closed.
vishalprajapati@lt-vishalp1:~/Desktop$ /home/vishalprajapati/B
```

```
root@tryit-stirred:~# groupadd NewGroup
root@tryit-stirred:~# useradd -g NewGroup -d /root/newuser/ newuser
root@tryit-stirred:~# groups newuser
newuser : NewGroup
root@tryit-stirred:~#
```

1. Create a directory
2. Switch to this directory
3. Create a normal text file
4. Create a hidden text file
5. Modify the access of the hidden text file so that it can be edited only by root user.
6. Move the hidden file to a your desktop.
7. Create a directory, add 3 files into it and then remove the whole directory.
8. Create a new user group.
9. Create a new user and assign a new user home and the previously created usergroup to the user.
10. Create a symbolic link in a different location for the file created in step 3.
11. Open google chrome or any other web browser, see its memory usage using top command and end the process using the ps and grep commands.
12. Use ssh and scp commands to download and modify files on an external machine.

Solution:

1st

```
mkdir assignment_solution
```

2nd

```
cd assignment_solution
```

3rd

```
touch file.txt
```

4th

```
touch .hidden_file
```

5th

```
sudo chown root:vishalprajapati .hidden_file
```

```
sudo chmod 200 .hidden_file
```

6th

```
mv .hidden_file ./Desktop/
```

7th

```
mkdir folder
```

```
touch file{1..3}.txt
```

```
cd ..
```

```
rmdir folder
```

8th

```
groupadd NewGroup
```

9th

```
useradd -g NewGroup -d /root/newuser/ newuser
```

10th

```
ln -s file.txt ../Desktop/softlink/
```