## LINUX COMMANDS-III

mahipal@Mahipal:~\$ su - root Password: Welcome to Ubuntu 20.04.2 LTS (GNU/Linux 4.4.0-19041-Microsoft x86\_64) \* Documentation: https://help.ubuntu.com \* Management: https://landscape.canonical.com \* Support: https://ubuntu.com/advantage System information as of Sat Jul 23 19:20:05 IST 2022 System load: 0.52 Processes: 14 Usage of /home: unknown Users logged in: 0 Memory usage: 71% IPv4 address for eth2: 192.168.56.1 Swap usage: 1% IPv4 address for wifi0: 192.168.0.187 0 updates can be applied immediately. The list of available updates is more than a week old. To check for new updates run: sudo apt update

This message is shown once a day. To disable it please create the

```
/root/.hushlogin file.
root@Mahipal:~#
root@Mahipal:~#
root@Mahipal:~#
root@Mahipal:~#
root@Mahipal:~# pwd
/root
root@Mahipal:~# ls
''$'\032'
              nohup.out
SWs
              pass.txt
backup.sh
                test.sql
basic_passwords.txt training
kill_slow_log.sh vulnerabilities.csv
kill_slow_log_2.sh y
root@Mahipal:~#
root@Mahipal:~#
root@Mahipal:~# mkdir mytraining
root@Mahipal:~# Is
''$'\032'
              nohup.out
SWs
              pass.txt
backup.sh
                test.sql
basic_passwords.txt training
kill_slow_log.sh vulnerabilities.csv
kill_slow_log_2.sh y
mytraining
root@Mahipal:~# cd mytraining
root@Mahipal:~/mytraining# pwd
```

```
/root/mytraining
root@Mahipal:~/mytraining# cd ..
root@Mahipal:~# pwd
/root
root@Mahipal:~# cd -
/root/mytraining
root@Mahipal:~/mytraining#
root@Mahipal:~/mytraining#
root@Mahipal:~/mytraining#
root@Mahipal:~/mytraining# cd ~
root@Mahipal:~#
root@Mahipal:~# pwd
/root
root@Mahipal:~# cd -
/root/mytraining
root@Mahipal:~/mytraining#
root@Mahipal:~/mytraining#
root@Mahipal:~/mytraining# pwd
/root/mytraining
root@Mahipal:~/mytraining# cd /
root@Mahipal:/# pwd
root@Mahipal:/# Is
bin etc lib libx32 opt run srv usr
boot home lib32 media proc sbin sys var
dev init lib64 mnt root snap tmp
root@Mahipal:/# pwd
```

```
/
root@Mahipal:/# pwd
root@Mahipal:/# cd ~
root@Mahipal:~# pwd
/root
root@Mahipal:~# Is
"$'\032'
              nohup.out
SWs
              pass.txt
backup.sh
                test.sql
basic_passwords.txt training
kill_slow_log.sh vulnerabilities.csv
kill_slow_log_2.sh y
mytraining
root@Mahipal:~# cd mytraining
root@Mahipal:~/mytraining# ls
root@Mahipal:~/mytraining#
root@Mahipal:~/mytraining#
root@Mahipal:~/mytraining# pwd
/root/mytraining
root@Mahipal:~/mytraining# vi test.txt
root@Mahipal:~/mytraining#
root@Mahipal:~/mytraining#
root@Mahipal:~/mytraining# ls
test.txt
root@Mahipal:~/mytraining#
root@Mahipal:~/mytraining#
```

```
root@Mahipal:~/mytraining# vi test.txt
root@Mahipal:~/mytraining#
root@Mahipal:~/mytraining#
root@Mahipal:~/mytraining#
root@Mahipal:~/mytraining# ls
test.txt
root@Mahipal:~/mytraining# cp test.txt test_2.txt
root@Mahipal:~/mytraining# ls
test.txt test_2.txt
root@Mahipal:~/mytraining# mv test_2.txt test_3.tx
root@Mahipal:~/mytraining# ls
test.txt test_3.tx
root@Mahipal:~/mytraining# ls
test.txt test_3.tx
root@Mahipal:~/mytraining# mkdir test123
root@Mahipal:~/mytraining# ls
test.txt test123 test_3.tx
root@Mahipal:~/mytraining# rmdir test123
root@Mahipal:~/mytraining# ls
test.txt test_3.tx
root@Mahipal:~/mytraining# cd /
root@Mahipal:/# Is
bin etc lib libx32 opt run srv usr
boot home lib32 media proc sbin sys var
dev init lib64 mnt root snap tmp
root@Mahipal:/# cd ~
root@Mahipal:~# pwd
```

```
/root
root@Mahipal:~# cd training/
root@Mahipal:~/training# ls
display.txt log.txt myfirstfile.txt test test2
root@Mahipal:~/training# pwd
/root/training
root@Mahipal:~/training# ls
display.txt log.txt myfirstfile.txt test test2
root@Mahipal:~/training# cd ..
root@Mahipal:~# Is
''$'\032'
               nohup.out
SWs
              pass.txt
backup.sh
                 test.sql
basic_passwords.txt training
kill_slow_log.sh vulnerabilities.csv
kill_slow_log_2.sh y
mytraining
root@Mahipal:~# cd mytraining
root@Mahipal:~/mytraining# ls
test.txt test_3.tx
root@Mahipal:~/mytraining# rm -rf test.txt
root@Mahipal:~/mytraining# ls
test_3.tx
root@Mahipal:~/mytraining# rm -rf *
root@Mahipal:~/mytraining# ls
root@Mahipal:~/mytraining#
root@Mahipal:~/mytraining#
```

```
root@Mahipal:~/mytraining# mkdir test
```

root@Mahipal:~/mytraining# ls

test

root@Mahipal:~/mytraining# rm -rf test

root@Mahipal:~/mytraining# ls

root@Mahipal:~/mytraining# ls

root@Mahipal:~/mytraining# vi test.txt

root@Mahipal:~/mytraining#

root@Mahipal:~/mytraining#

root@Mahipal:~/mytraining# vi test\_2.txt

root@Mahipal:~/mytraining# ls

test.txt test\_2.txt

root@Mahipal:~/mytraining# rm -rf te\*

root@Mahipal:~/mytraining#

root@Mahipal:~/mytraining# vi test\_2.txt

root@Mahipal:~/mytraining# vi test\_1.txt

root@Mahipal:~/mytraining#

root@Mahipal:~/mytraining# ls

test\_1.txt test\_2.txt

root@Mahipal:~/mytraining# rm test\_1.txt

root@Mahipal:~/mytraining# man rm

[1]+ Stopped man rm

root@Mahipal:~/mytraining# ls

test\_2.txt

root@Mahipal:~/mytraining#

root@Mahipal:~/mytraining#

```
root@Mahipal:~/mytraining#
root@Mahipal:~/mytraining# history
```

```
root@Mahipal:~/mytraining#

root@Mahipal:~/mytraining#

root@Mahipal:~/mytraining#

root@Mahipal:~/mytraining# ssh

usage: ssh [-46AaCfGgKkMNnqsTtVvXxYy] [-B bind_interface]

[-b bind_address] [-c cipher_spec] [-D [bind_address:]port]

[-E log_file] [-e escape_char] [-F configfile] [-I pkcs11]

[-i identity_file] [-J [user@]host[:port]] [-L address]
```

```
[-Q query_option] [-R address] [-S ctl_path] [-W host:port]
     [-w local_tun[:remote_tun]] destination [command]
root@Mahipal:~/mytraining# zgip
Command 'zgip' not found, did you mean:
command 'zip' from deb zip (3.0-11build1)
command 'gzip' from deb gzip (1.10-0ubuntu4)
command 'gip' from deb gip (1.7.0-1-4build1)
Try: apt install <deb name>
root@Mahipal:~/mytraining# ls
test_2.txt
root@Mahipal:~/mytraining#
root@Mahipal:~/mytraining# ls
test_2.txt
______
-rw-r--r-- 1 Mahipal root 0 Jul 23 19:46 test_2.txt
UGO
644
d rwx r-x r-x 1 root root 4.0K Jul 23 20:06 test
755
chmod 777 test_2.txt
7 7 7
```

[-l login\_name] [-m mac\_spec] [-O ctl\_cmd] [-o option] [-p port]

```
111 111 111
```

U G 0

111=4+2+1=7

(2 pow 0)\*1+(2 pow 1)\*1 + (2 pow 2)\*1

1\*1+2\*1+4\*1

1+2+4=7

234

u=2=010=rwx=write

g=3=011=rwx=write and exe

o=4=100=rwx=read

\_\_\_\_\_

root@Mahipal:~/mytraining# ls -lrth

total 0

-rw-r--r-- 1 root root 0 Jul 23 19:46 test\_2.txt

root@Mahipal:~/mytraining# mkdir test

root@Mahipal:~/mytraining# ls

test\_test\_2.txt

root@Mahipal:~/mytraining# ls -lrth

total 0

-rw-r--r-- 1 root root 0 Jul 23 19:46 test\_2.txt

```
drwxr-xr-x 1 root root 4.0K Jul 23 20:06 test
root@Mahipal:~/mytraining# ls
test_test_2.txt
root@Mahipal:~/mytraining# ls -lrth
total 0
-rw-r--r-- 1 root root 0 Jul 23 19:46 test_2.txt
drwxr-xr-x 1 root root 4.0K Jul 23 20:06 test
root@Mahipal:~/mytraining#
root@Mahipal:~/mytraining# chmod 777 test_2.txt
root@Mahipal:~/mytraining# ls
test_test_2.txt
root@Mahipal:~/mytraining# ls -lrth
total 0
-rwxrwxrwx 1 root root 0 Jul 23 19:46 test_2.txt
drwxr-xr-x 1 root root 4.0K Jul 23 20:06 test
root@Mahipal:~/mytraining# ls
test_test_2.txt
root@Mahipal:~/mytraining# ls -lrth
total 0
-rwxrwxrwx 1 root root 0 Jul 23 19:46 test_2.txt
drwxr-xr-x 1 root root 4.0K Jul 23 20:06 test
root@Mahipal:~/mytraining# vi permission.txt
root@Mahipal:~/mytraining# ls
permission.txt test test_2.txt
root@Mahipal:~/mytraining# ls -lrth
total 0
```

-rwxrwxrwx 1 root root 0 Jul 23 19:46 test\_2.txt

```
drwxr-xr-x 1 root root 4.0K Jul 23 20:06 test
-rw-r--r-- 1 root root 0 Jul 23 21:37 permission.txt
root@Mahipal:~/mytraining# chmod 770 permission.txt
root@Mahipal:~/mytraining#
root@Mahipal:~/mytraining#
root@Mahipal:~/mytraining# ls -lrth
total 0
-rwxrwxrwx 1 root root 0 Jul 23 19:46 test_2.txt
drwxr-xr-x 1 root root 4.0K Jul 23 20:06 test
-rwxrwx--- 1 root root 0 Jul 23 21:37 permission.txt
root@Mahipal:~/mytraining# vi addperm.txt
root@Mahipal:~/mytraining#
root@Mahipal:~/mytraining#
root@Mahipal:~/mytraining#
root@Mahipal:~/mytraining# ls
addperm.txt permission.txt test test_2.txt
```

-rwxrwxrwx 1 root root 0 Jul 23 19:46 test\_2.txt

drwxr-xr-x 1 root root 4.0K Jul 23 20:06 test

root@Mahipal:~/mytraining# ls -lrth

-rwxrwx--- 1 root root 0 Jul 23 21:37 permission.txt

-rw-r--r-- 1 root root 14 Jul 23 21:39 addperm.txt

root@Mahipal:~/mytraining# chmod +x addperm.txt

root@Mahipal:~/mytraining#

root@Mahipal:~/mytraining# ls -lrth

total 0

total 0

-rwxrwxrwx 1 root root 0 Jul 23 19:46 test\_2.txt

drwxr-xr-x 1 root root 4.0K Jul 23 20:06 test

-rwxrwx--- 1 root root 0 Jul 23 21:37 permission.txt

-rwxr-xr-x 1 root root 14 Jul 23 21:39 addperm.txt

root@Mahipal:~/mytraining# chmod -x addperm.txt

root@Mahipal:~/mytraining#

root@Mahipal:~/mytraining#

root@Mahipal:~/mytraining# ls -lrth

total 0

-rwxrwxrwx 1 root root 0 Jul 23 19:46 test\_2.txt

drwxr-xr-x 1 root root 4.0K Jul 23 20:06 test

-rwxrwx--- 1 root root 0 Jul 23 21:37 permission.txt

-rw-r--r-- 1 root root 14 Jul 23 21:39 addperm.txt

root@Mahipal:~/mytraining# ls -lrth

total 0

-rwxrwxrwx 1 root root 0 Jul 23 19:46 test\_2.txt

drwxr-xr-x 1 root root 4.0K Jul 23 20:06 test

-rwxrwx--- 1 root root 0 Jul 23 21:37 permission.txt

-rw-r--r-- 1 root root 14 Jul 23 21:39 addperm.txt

root@Mahipal:~/mytraining# chmod +w addperm.txt

root@Mahipal:~/mytraining# ls -lrth

total 0

-rwxrwxrwx 1 root root 0 Jul 23 19:46 test\_2.txt

drwxr-xr-x 1 root root 4.0K Jul 23 20:06 test

-rwxrwx--- 1 root root 0 Jul 23 21:37 permission.txt

-rw-r--r-- 1 root root 14 Jul 23 21:39 addperm.txt

root@Mahipal:~/mytraining# chmod -w addperm.txt

root@Mahipal:~/mytraining#

```
root@Mahipal:~/mytraining#
root@Mahipal:~/mytraining# ls -lrth
total 0
-rwxrwxrwx 1 root root 0 Jul 23 19:46 test_2.txt
drwxr-xr-x 1 root root 4.0K Jul 23 20:06 test
-rwxrwx--- 1 root root 0 Jul 23 21:37 permission.txt
-r--r-- 1 root root 14 Jul 23 21:39 addperm.txt
root@Mahipal:~/mytraining# chmod +w addperm.txt
root@Mahipal:~/mytraining# ls -lrth
total 0
-rwxrwxrwx 1 root root 0 Jul 23 19:46 test_2.txt
drwxr-xr-x 1 root root 4.0K Jul 23 20:06 test
-rwxrwx--- 1 root root 0 Jul 23 21:37 permission.txt
-rw-r--r-- 1 root root 14 Jul 23 21:39 addperm.txt
root@Mahipal:~/mytraining#
root@Mahipal:~/mytraining# users
root@Mahipal:~/mytraining# groups
root docker
root@Mahipal:~/mytraining# userad krishna
Command 'userad' not found, did you mean:
command 'useradd' from deb passwd (1:4.8.1-1ubuntu5.20.04)
command 'uservd' from deb userv (1.2.0)
```

Try: apt install <deb name>

```
root@Mahipal:~/mytraining# useradd krishna
```

root@Mahipal:~/mytraining# users

root@Mahipal:~/mytraining#

root@Mahipal:~/mytraining#

root@Mahipal:~/mytraining# groupadd krishna

groupadd: group 'krishna' already exists

root@Mahipal:~/mytraining# groups

root docker

root@Mahipal:~/mytraining# groupadd krishna

groupadd: group 'krishna' already exists

root@Mahipal:~/mytraining#

root@Mahipal:~/mytraining#

root@Mahipal:~/mytraining# passwd krishna

New password:

Retype new password:

passwd: password updated successfully

root@Mahipal:~/mytraining#

root@Mahipal:~/mytraining#

root@Mahipal:~/mytraining# ls

addperm.txt permission.txt test test\_2.txt

root@Mahipal:~/mytraining#

root@Mahipal:~/mytraining#

root@Mahipal:~/mytraining# groups

root docker

root@Mahipal:~/mytraining# ls

addperm.txt permission.txt test test\_2.txt

root@Mahipal:~/mytraining# ls -lrth

```
total 0
```

```
-rwxrwxrwx 1 root root 0 Jul 23 19:46 test_2.txt
drwxr-xr-x 1 root root 4.0K Jul 23 20:06 test
-rwxrwx--- 1 root root 0 Jul 23 21:37 permission.txt
-rw-r--r-- 1 root root 14 Jul 23 21:39 addperm.txt
root@Mahipal:~/mytraining# chown mahipal:root addperm.txt
root@Mahipal:~/mytraining#
root@Mahipal:~/mytraining# ls -lrth
total 0
-rwxrwxrwx 1 root root 0 Jul 23 19:46 test_2.txt
drwxr-xr-x 1 root root 4.0K Jul 23 20:06 test
-rwxrwx--- 1 root root 0 Jul 23 21:37 permission.txt
-rw-r--r-- 1 mahipal root 14 Jul 23 21:39 addperm.txt
root@Mahipal:~/mytraining# chown mahipal:docker addperm.txt
root@Mahipal:~/mytraining# ls -lrth
total 0
-rwxrwxrwx 1 root root 0 Jul 23 19:46 test_2.txt
drwxr-xr-x 1 root root 4.0K Jul 23 20:06 test
-rwxrwx--- 1 root root 0 Jul 23 21:37 permission.txt
-rw-r--r-- 1 mahipal docker 14 Jul 23 21:39 addperm.txt
root@Mahipal:~/mytraining# chgrp root addperm.txt
root@Mahipal:~/mytraining#
root@Mahipal:~/mytraining# ls
addperm.txt permission.txt test test_2.txt
root@Mahipal:~/mytraining# ls -lrth
total 0
-rwxrwxrwx 1 root root 0 Jul 23 19:46 test_2.txt
```

drwxr-xr-x 1 root root 4.0K Jul 23 20:06 test

-rwxrwx--- 1 root root 0 Jul 23 21:37 permission.txt

-rw-r--r-- 1 mahipal root 14 Jul 23 21:39 addperm.txt

root@Mahipal:~/mytraining# newgrp krishna

root@Mahipal:~/mytraining# groups

krishna root docker