

## SOME BASIC LINUX COMMAND

### FILE AND DIRECTORY OPERATION

1. **LS:** List directory contents

```
(rojesh@kali)-[~]  
$ ls  
Desktop  Documents  Downloads  Music  Pictures  Public  Templates  Videos
```

2. **Touch:** The touch command is used primarily to create new empty files.

```
(rojesh@kali)-[~]  
$ cd Desktop  
  
(rojesh@kali)-[~/Desktop]  
$ touch rojesh.txt  
  
(rojesh@kali)-[~/Desktop]  
$ touch os.ppt
```

3. **RM:** The rm command is used to delete created file.

```
(rojesh@kali)-[~/Desktop]  
$ rm rojesh.txt  
  
(rojesh@kali)-[~/Desktop]  
$ rm os.ppt
```

4. MKDIR: make directory.
5. RMDIR: remove directory.

```
(rojesh@kali) - [~/Desktop]
$ ls

(rrojesh@kali) - [~/Desktop]
$ mkdir rojeshhumagain

(rrojesh@kali) - [~/Desktop]
$ mkdir pravinmagar

(rrojesh@kali) - [~/Desktop]
$ ls
pravinmagar  rojeshhumagain

(rrojesh@kali) - [~/Desktop]
$ rmdir rojeshhumagain

(rrojesh@kali) - [~/Desktop]
$ rmdir pravinmagar
```

6. MV: Move or rename files or directories.

```
(root@kali) - [/home/rojesh/Desktop]
# ls
hello  rn.txt  rojesh.txt

(root@kali) - [/home/rojesh/Desktop]
# mv hello hellorojesh

(root@kali) - [/home/rojesh/Desktop]
# ls
hellorojesh  rn.txt  rojesh.txt
```

7. **FIND**: Search for files in a directory hierarchy.

```
(rojesh@kali)-[~]  
$ find . -name "rn.txt"  
./Desktop/rn.txt
```

8. **ECHO/PRINTF**: To add text to the end of a file, you can use redirection with echo or printf commands.

9. **More**: View file content one screen at a time.

10. **PWD**: Prints the current working directory.

```
(rojesh@kali)-[~/Desktop]  
$ printf "hello i am rojesh humagain\ni am bsccsit student\n" > rojesh.txt  
  
(rojesh@kali)-[~/Desktop]  
$ more rojesh.txt  
hello i am rojesh humagain  
i am bsccsit student  
  
(rojesh@kali)-[~/Desktop]  
$ pwd  
/home/rojesh/Desktop
```

## SYSTEM OPERATION

11.**uname**: Shows system information.

12.**df**: Shows disk space usage.

13.**du**: Displays disk usage of files and directories.

```
(rojesh@kali)-[~/Desktop]
$ uname -a

Linux kali 6.6.15-amd64 #1 SMP PREEMPT_DYNAMIC Kali 6.6.15-2kali1 (2024-05-17) x86_64 GNU/Linux

(rojesh@kali)-[~/Desktop]
$ df -h

Filesystem      Size  Used Avail Use% Mounted on
udev            1.9G   0    1.9G   0% /dev
tmpfs           393M  1.1M  392M   1% /run
/dev/sda1       99G   15G   79G  16% /
tmpfs           2.0G   0    2.0G   0% /dev/shm
tmpfs           5.0M   0    5.0M   0% /run/lock
tmpfs           393M  2.5M  390M   1% /run/user/1000

(rojesh@kali)-[~/Desktop]
$ du -sh hellorojesh
4.0K    hellorojesh
```

## NETWORK OPERATION

14.**Ping**: Checks network connectivity.

```
(rojesh@kali)-[~/Desktop]
$ ping www.google.com
PING www.google.com (142.250.195.228) 56(84) bytes of data:
64 bytes from maa03s43-in-f4.1e100.net (142.250.195.228): icmp_seq=1 ttl=116 time=46.9 ms
64 bytes from maa03s43-in-f4.1e100.net (142.250.195.228): icmp_seq=2 ttl=116 time=41.4 ms
64 bytes from maa03s43-in-f4.1e100.net (142.250.195.228): icmp_seq=3 ttl=116 time=40.9 ms
64 bytes from maa03s43-in-f4.1e100.net (142.250.195.228): icmp_seq=4 ttl=116 time=40.2 ms
64 bytes from maa03s43-in-f4.1e100.net (142.250.195.228): icmp_seq=5 ttl=116 time=40.7 ms
64 bytes from maa03s43-in-f4.1e100.net (142.250.195.228): icmp_seq=6 ttl=116 time=42.9 ms
64 bytes from maa03s43-in-f4.1e100.net (142.250.195.228): icmp_seq=7 ttl=116 time=40.0 ms
^C
— www.google.com ping statistics —
7 packets transmitted, 7 received, 0% packet loss, time 6145ms
rtt min/avg/max/mdev = 39.972/41.841/46.873/2.243 ms
```



15. **IFCONFIG**: The command ifconfig is used in Linux and Unix-like operating systems to configure network interfaces and display their current configuration

```
(rojesh@kali)-[~]
$ ifconfig

eth0: flags=4163<UP,BROADCAST,RUNNING,MULTICAST> mtu 1500
    inet 192.168.0.110 netmask 255.255.255.0 broadcast 192.168.0.255
    inet6 fe80::a00:27ff:fe1b:d2c7 prefixlen 64 scopeid 0x20<link>
    ether 08:00:27:1b:d2:c7 txqueuelen 1000 (Ethernet)
    RX packets 3953 bytes 4546695 (4.3 MiB)
    RX errors 0 dropped 0 overruns 0 frame 0
    TX packets 1279 bytes 204012 (199.2 KiB)
    TX errors 0 dropped 0 overruns 0 carrier 0 collisions 0

lo: flags=73<UP,LOOPBACK,RUNNING> mtu 65536
    inet 127.0.0.1 netmask 255.0.0.0
    inet6 ::1 prefixlen 128 scopeid 0x10<host>
    loop txqueuelen 1000 (Local Loopback)
    RX packets 8 bytes 480 (480.0 B)
    RX errors 0 dropped 0 overruns 0 frame 0
    TX packets 8 bytes 480 (480.0 B)
    TX errors 0 dropped 0 overruns 0 carrier 0 collisions 0
```

## Package management

16. **apt-get**: Manages packages.

```
(rojesh@kali)-[~/Desktop]
$ sudo apt-get update
[sudo] password for rojesh:
Get:1 http://kali.download/kali kali-rolling InRelease [41.5 kB]
Get:2 http://kali.download/kali kali-rolling/main amd64 Packages [19.9 MB]
Get:3 http://kali.download/kali kali-rolling/main amd64 Contents (deb) [47.1 MB]
Get:4 http://kali.download/kali kali-rolling/contrib amd64 Packages [110 kB]
Get:5 http://kali.download/kali kali-rolling/contrib amd64 Contents (deb) [267 kB]
Get:6 http://kali.download/kali kali-rolling/non-free amd64 Packages [193 kB]
Get:7 http://kali.download/kali kali-rolling/non-free amd64 Contents (deb) [863 kB]
Get:8 http://kali.download/kali kali-rolling/non-free-firmware amd64 Packages [33.1 kB]
Get:9 http://kali.download/kali kali-rolling/non-free-firmware amd64 Contents (deb) [16.9 kB]
Fetched 68.5 MB in 12s (5747 kB/s)
Reading package lists ... Done

(rojesh@kali)-[~/Desktop]
$ sudo apt-get install -f

Reading package lists ... Done
Building dependency tree ... Done
Reading state information ... Done
0 upgraded, 0 newly installed, 0 to remove and 642 not upgraded.
```