

Name	Manish Shashikant Jadhav
UID no.	2023301005

Experiment 1	
AIM :	To perform various Linux Commands.
Discussion & Output:	<p><b>1. pwd:</b> The <b>pwd</b> command is used to display location of the current working directory.</p> <pre>students@CE-Lab4-606-U07:~/Manish/OS_Exp1\$ pwd /home/students/Manish/OS_Exp1 students@CE-Lab4-606-U07:~/Manish/OS_Exp1\$</pre> <p><b>2. mkdir:</b> The <b>mkdir</b> command is used to create a new directory under any directory.</p> <pre>students@CE-Lab4-606-U07:~/Manish/OS_Exp1\$ mkdir Jadhav students@CE-Lab4-606-U07:~/Manish/OS_Exp1\$ ls 1_pwd.png  Jadhav students@CE-Lab4-606-U07:~/Manish/OS_Exp1\$</pre> <p><b>3. rmdir:</b> The <b>rmdir</b> command is used to delete a directory.</p> <pre>students@CE-Lab4-606-U07:~/Manish/OS_Exp1\$ rmdir Jadhav students@CE-Lab4-606-U07:~/Manish/OS_Exp1\$ ls 1_pwd.png  2_mkdir.png students@CE-Lab4-606-U07:~/Manish/OS_Exp1\$</pre> <p><b>4. cat:</b> The <b>cat</b> command is a multi-purpose utility in the Linux system. It can be used to create a file, display content of the file, copy the content of the file to another file, and more.</p> <pre>students@CE-Lab4-606-U07:~\$ cat &gt; sample.txt Heyy!! Myself Manish Jadhav Class: SE Comps-B College: SPIT, Andheri students@CE-Lab4-606-U07:~\$ cat sample.txt Heyy!! Myself Manish Jadhav Class: SE Comps-B College: SPIT, Andheri students@CE-Lab4-606-U07:~\$</pre>

**5. sort:** The **sort** command is used to sort files in alphabetical order.

```
students@CE-Lab4-606-U07:~/Manish/OS_Exp1$ cat > bill.txt
Derma - 350
MamaEarth - 250
Requill - 300
Cetaphil - 700
Garnier - 100
students@CE-Lab4-606-U07:~/Manish/OS_Exp1$ sort bill.txt
Cetaphil - 700
Derma - 350
Garnier - 100
MamaEarth - 250
Requill - 300
students@CE-Lab4-606-U07:~/Manish/OS_Exp1$
```

**6. ip:** The **ip** command is used to assign an IP address, initialize an interface, disable an interface.

```
students@CE-Lab4-606-U07:~/Manish/OS_Exp1$ ip addr
1: lo: <LOOPBACK,UP,LOWER_UP> mtu 65536 qdisc noqueue state UNKNOWN group default qlen 1
    link/loopback 00:00:00:00:00:00 brd 00:00:00:00:00:00
    inet 127.0.0.1/8 scope host lo
        valid_lft forever preferred_lft forever
    inet6 ::1/128 scope host
        valid_lft forever preferred_lft forever
2: enp2s0: <BROADCAST,MULTICAST,UP,LOWER_UP> mtu 1500 qdisc pfifo_fast state UP group default qlen 1000
    link/ether f8:bc:12:a3:60:b9 brd ff:ff:ff:ff:ff:ff
    inet 172.16.30.83/24 brd 172.16.30.255 scope global dynamic enp2s0
        valid_lft 3035sec preferred_lft 3035sec
    inet6 fe80::a388:ea98:7129:9b6a/64 scope link
        valid_lft forever preferred_lft forever
students@CE-Lab4-606-U07:~/Manish/OS_Exp1$
```

**7. ping:** The **ping** command is used to check the connectivity between two nodes, that is whether the server is connected. It is a short form of “Packet Internet Groper”.

```

students@CE-Lab4-606-U07:~/Manish/OS_Exp1$ ping instagram.com
PING instagram.com (157.240.242.174) 56(84) bytes of data.
64 bytes from instagram-p42-shv-01-pnq1.fbcdn.net (157.240.242.174): icmp_seq=1 ttl=42 time=59.8
ms
64 bytes from instagram-p42-shv-01-pnq1.fbcdn.net (157.240.242.174): icmp_seq=2 ttl=42 time=59.7
ms
64 bytes from instagram-p42-shv-01-pnq1.fbcdn.net (157.240.242.174): icmp_seq=3 ttl=42 time=59.8
ms
64 bytes from instagram-p42-shv-01-pnq1.fbcdn.net (157.240.242.174): icmp_seq=4 ttl=42 time=59.7
ms
64 bytes from instagram-p42-shv-01-pnq1.fbcdn.net (157.240.242.174): icmp_seq=5 ttl=42 time=59.7
ms
64 bytes from instagram-p42-shv-01-pnq1.fbcdn.net (157.240.242.174): icmp_seq=6 ttl=42 time=59.7
ms
64 bytes from instagram-p42-shv-01-pnq1.fbcdn.net (157.240.242.174): icmp_seq=7 ttl=42 time=59.8
ms
64 bytes from instagram-p42-shv-01-pnq1.fbcdn.net (157.240.242.174): icmp_seq=8 ttl=42 time=59.8
ms
^C
--- instagram.com ping statistics ---
8 packets transmitted, 8 received, 0% packet loss, time 7961ms
rtt min/avg/max/mdev = 59.733/59.787/59.829/0.214 ms
students@CE-Lab4-606-U07:~/Manish/OS_Exp1$

```

**8. host:** The **host** command is used to display the IP address for given domain name. It performs the DNS lookup for the DNS query.

```

students@CE-Lab4-606-U07:~/Manish/OS_Exp1$ host spit.ac.in
spit.ac.in has address 172.16.10.6
students@CE-Lab4-606-U07:~/Manish/OS_Exp1$

```

**9. grep:** The **grep** command stands for “**Global Regular Expression Print**”. It is useful for searching the content from a file.

```

students@CE-Lab4-606-U07:~/Manish/OS_Exp1$ cat bill.txt | grep Cetaphil
Cetaphil - 700
students@CE-Lab4-606-U07:~/Manish/OS_Exp1$

```

**10. rm:** The **rm** command is used to remove a file.

```

students@CE-Lab4-606-U07:~/Manish/OS_Exp1$ rm bill.txt
students@CE-Lab4-606-U07:~/Manish/OS_Exp1$

```

**CONCLUSION:** Hence, by completing this experiment I understood the functionalities of various Linux Commands and their use in managing the file system, network configuration, and data manipulation.