## **National University of Modern Languages**



## Assignment#01

**Roll # 2340** 

**Class: BSCS 5B Morning** 

**Subject: Operating System(Lab)** 

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## Implement any 10 Different Commands in Linux.

**CP:** The Linux cp command is used for copying files and directories to another location.

```
farhan@DESKTOP-JJ3BRM1: ~/OS

farhan@DESKTOP-JJ3BRM1:~$ cd OS

farhan@DESKTOP-JJ3BRM1:~/OS$ cd os1

farhan@DESKTOP-JJ3BRM1:~/OS/os1$ ls

A lab01

farhan@DESKTOP-JJ3BRM1:~/OS/os1$ cp A /home/farhan/OS/

farhan@DESKTOP-JJ3BRM1:~/OS/os1$ cd ...

farhan@DESKTOP-JJ3BRM1:~/OS$ ls

A lab01 op os1

farhan@DESKTOP-JJ3BRM1:~/OS$
```

**MV:** my command is used to move existing file or directory from one location to another. It is also used to rename a file or directory.

```
farhan@DESKTOP-JJ3BRM1:~/OS$ ls
A lab01 op os1
farhan@DESKTOP-JJ3BRM1:~/OS$ mv A b
farhan@DESKTOP-JJ3BRM1:~/OS$ ls
b lab01 op os1
farhan@DESKTOP-JJ3BRM1:~/OS$ mv b /home/farhan/OS/os1
farhan@DESKTOP-JJ3BRM1:~/OS$ ls
lab01 op os1
farhan@DESKTOP-JJ3BRM1:~/OS$ cd os1
farhan@DESKTOP-JJ3BRM1:~/OS/os1$ ls
A b lab01
```

**DF:** The **df** command is used to display information related to file systems about total space and available space.

```
arhan@DESKTOP-JJ3BRM1:~/OS$ df lab01
               1K-blocks
                             Used Available Use% Mounted on
ilesvstem
/dev/sdb
               263174212 2034208 247701848
                                               1% /
 arhan@DESKTOP-JJ3BRM1:~/OS$ df
ilesystem
               1K-blocks Used Available 263174212 2034208 247701848
                              Used Available Use% Mounted on
/dev/sdb
                                                1% /
                 1951996
                                4 1951992
                                                1% /mnt/wsl
none
tools
                203392992 78863892 124529100
                                                39% /init
                                                0% /dev
                 1949916
                               0 1949916
none
                                 0 1951996
                 1951996
                                                0% /run
none
none
                  1951996
                                 0
                                      1951996
                                                0% /run/lock
                 1951996
                                 0 1951996
                                                0% /run/shm
none
                                               0% /run/user
0% /sys/fs/cgroup
39% /usr/lib/wsl/drivers
                 1951996
                                 0
                                      1951996
none
                 1951996
                                      1951996
tmpfs
                                 0
drivers
                203392992 78863892 124529100
                                               39% /usr/lib/wsl/lib
39% /mnt/c
lib
                203392992 78863892 124529100
drvfs
                203392992 78863892 124529100
                295306236 58788296 236517940
drvfs
                                               20% /mnt/d
```

**Ping:** It is a simple, widely used, cross-platform networking utility for testing if a host is reachable on an **IP** network.

```
farhan@DESKTOP-JJ3BRM1:~/OS$ ping google.com
PING google.com (142.250.185.46) 56(84) bytes of data.
64 bytes from mct01s19-in-f14.1e100.net (142.250.185.46): icmp_seq=1 ttl=113 time=43.5 ms
64 bytes from mct01s19-in-f14.1e100.net (142.250.185.46): icmp_seq=2 ttl=113 time=42.0 ms
64 bytes from mct01s19-in-f14.1e100.net (142.250.185.46): icmp_seq=3 ttl=113 time=42.2 ms
64 bytes from mct01s19-in-f14.1e100.net (142.250.185.46): icmp_seq=4 ttl=113 time=43.0 ms
64 bytes from mct01s19-in-f14.1e100.net (142.250.185.46): icmp_seq=5 ttl=113 time=41.7 ms
^C
--- google.com ping statistics ---
5 packets transmitted, 5 received, 0% packet loss, time 4006ms
rtt min/avg/max/mdev = 41.665/42.488/43.532/0.673 ms
```

**Touch:** The touch command is used to create empty files. We can create multiple empty files by executing it once.

```
farhan@DESKTOP-JJ3BRM1:~/OS$ ls
lab01 op os1
farhan@DESKTOP-JJ3BRM1:~/OS$ touch A B C
farhan@DESKTOP-JJ3BRM1:~/OS$ ls
A B C lab01 op os1
farhan@DESKTOP-JJ3BRM1:~/OS$
```

**SU:** It provides administrative access to another user. In other words, it allows access of the Linux shell to another user.

```
    farhan@DESKTOP-JJ3BRM1: ~/OS

farhan@DESKTOP-JJ3BRM1: ~/OS$ su farhan
Password:
```

farhan@DESKTOP-JJ3BRM1:~/OS\$ su ahmwd su: user ahmwd does not exist farhan@DESKTOP-JJ3BRM1:~/OS\$

WC: It is used to count the lines, words, and characters in a file.

```
farhan@DESKTOP-JJ3BRM1:~/OS$ cat lab01
#!/bin/bash
echo "ENTER NUMBER"
x='NUML'
echo $x
exit 0;
farhan@DESKTOP-JJ3BRM1:~/OS$ wc lab01
5 9 62 lab01
farhan@DESKTOP-JJ3BRM1:~/OS$
```

**Head:** It is used to display the content of a file. It displays the first 10 lines of a file.

```
farhan@DESKTOP-JJ3BRM1:~/OS$ cat op

1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16farhan@DESKTOP-JJ3BRM1:~/OS$ head op
1
2
3
4
5
6
7
8
9
10
farhan@DESKTOP-JJ3BRM1:~/OS$
```

**Tail:** It displays the last ten lines of the file content. It is useful for reading the error message.

```
farhan@DESKTOP-JJ3BRM1:~/OS$ tail op
7
8
9
10
11
12
13
14
15
```

**Time:** It is command is used to display the time to execute a command.

```
farhan@DESKTOP-JJ3BRM1:~/OS$ time

real 0m0.000s

user 0m0.000s

sys 0m0.000s
```