

Lab 2:

Basic UNIX Commands

a. date - display date

```
aditya@DESKTOP-0H3QDBV:/mnt/c/Users/adity/Documents/M.Tech/TA/my_folder$ date
Wed Mar 16 22:55:25 IST 2022
```

a. cal - display calendar

```
aditya@DESKTOP-0H3QDBV:/mnt/c/Users/adity/Documents/M.Tech/TA/my_folder$ cal
      March 2022
Su Mo Tu We Th Fr Sa
                1  2  3  4  5
 6  7  8  9 10 11 12
13 14 15 16 17 18 19
20 21 22 23 24 25 26
27 28 29 30 31
```

b. echo - print msg

```
aditya@DESKTOP-0H3QDBV:/mnt/c/Users/adity/Documents/M.Tech/TA/my_folder$ echo "Hello World"
Hello World
```

c. ls - list the files:

1. ls-l provide file statistics
2. ls-t Order by creation time
3. ls-u Sort by access time (or show when last accessed together with -l)
4. ls-s Order by size
5. ls-r Reverse order

a. lp : take printout

b. man :provide manual help on every linux command

```
Enter number of process:3

Enter Burst Time:
p1:10
p2:5
p3:8

Processt      Burst Time      tWaiting TimeTurnaround Time
p2            5            0            5
p3            8            5            13
p1           10           13           23
Burst Time:2
Priority:2

P[3]
Burst Time:14
Priority:1

P[4]
Burst Time:6
Priority:4

Process      Burst Time      Waiting Time      Turnaround Time
P[3]         14            0            14
P[2]         2            14           16
P[1]         6            16           22
P[4]         6            22           28

Average Waiting Time=13
Average Turnaround Time=20
```

c. who & whoami

```
aditya@DESKTOP-0H3QDBV:/mnt/c/Users/adity/Documents/M.Tech/TA/my_folder$ whoami
aditya
```

d. uptime- tells you how long the system has been running.

```
aditya@DESKTOP-0H3QDBV:/mnt/c/Users/adity/Documents/M.Tech/TA/my_folder$ uptime
23:02:34 up 2:05, 0 users, load average: 0.00, 0.00, 0.00
```

e. hostname - displays and set system hostname

```
aditya@DESKTOP-0H3QDBV:/mnt/c/Users/adity/Documents/M.Tech/TA/my_folder$ hostname
DESKTOP-0H3QDBV
```

f. bc - command line calculator

```
aditya@DESKTOP-0H3QDBV:/mnt/c/Users/adity/Documents/M.Tech/TA/my_folder$ echo "12+8" | bc
20
aditya@DESKTOP-0H3QDBV:/mnt/c/Users/adity/Documents/M.Tech/TA/my_folder$ echo "var=10;--var" | bc
9
```

g. cat - create, view and concatenate files.

Creation:
\$cat>filename
Viewing:
\$cat filename
Concatenate:
\$cat file1>>file2

```
aditya@DESKTOP-0H3QDBV:/mnt/c/Users/adity/Documents/M.Tech/TA/my_folder$ cat>file1
hello world
^C
aditya@DESKTOP-0H3QDBV:/mnt/c/Users/adity/Documents/M.Tech/TA/my_folder$ cat>file2
hello mars
^C
aditya@DESKTOP-0H3QDBV:/mnt/c/Users/adity/Documents/M.Tech/TA/my_folder$ cat file2
hello mars
aditya@DESKTOP-0H3QDBV:/mnt/c/Users/adity/Documents/M.Tech/TA/my_folder$ cat file1>>file2
aditya@DESKTOP-0H3QDBV:/mnt/c/Users/adity/Documents/M.Tech/TA/my_folder$ cat file2
hello mars
hello world
```

l. grep - used to search a particular word pattern related to that word from the file.

\$grep search_word file_name

```
aditya@DESKTOP-0H3QDBV:/mnt/c/Users/adity/Documents/M.Tech/TA/my_folder$ grep mars file2
hello mars
```

m. rm - delete a file

n. touch - create a blank file.

o. cp - copies the files or directories
\$cp file1 file2.

```
aditya@DESKTOP-0H3QDBV:/mnt/c/Users/adity/Documents/M.Tech/TA/my_folder$ cp file1 file2
aditya@DESKTOP-0H3QDBV:/mnt/c/Users/adity/Documents/M.Tech/TA/my_folder$ cat file2
hello world
```

p. head - display first 10 lines

q. tail- display last 10 lines

r. chmod : used to change the permissions of file or directory

\$chmod u=rwx,g=rx,o=r myfile
\$chmod 754 myfile

s. wc : counts the number of lines, words, characters

wc -l filename
wc -w filename
wc -c filename

```
aditya@DESKTOP-0H3QDBV:/mnt/c/Users/adity/Documents/M.Tech/TA/my_folder$ cat>file1
this is INDIA's capital
New Delhi
^C
aditya@DESKTOP-0H3QDBV:/mnt/c/Users/adity/Documents/M.Tech/TA/my_folder$ wc -l file1
3 file1
aditya@DESKTOP-0H3QDBV:/mnt/c/Users/adity/Documents/M.Tech/TA/my_folder$ wc -w file1
8 file1
aditya@DESKTOP-0H3QDBV:/mnt/c/Users/adity/Documents/M.Tech/TA/my_folder$ wc -c file1
46 file1
```