Lab Assignment -3

1)logname – Displays the name of the current user
        iiitd@iiitd-HP-406-MT:~$ logname
        logname: no login name

2)pwd – Present working directory
        iiitd@iiitd-HP-406-MT:~$ pwd
        /home/iiitd

3)date – Displays the current date
        iiitd@iiitd-HP-406-MT:~$ date
        Wed Sep 5 15:27:02 IST 2018
   Options-
   (-u) – Displays date in coordinated Universal time format
        Wed Sep 5 08:27:02 UTC 2018

3)cal – Displays calendar of the current month
        iiitd@iiitd-HP-406-MT:~$ cal
        September 2018
        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
   Options-
    (year) – Prints calendar for that particular year
    (month) (year) – Prints calendar for the particular month of that
year

4)who – Displays information of those users who have logged onto the system
        iiitd@iiitd-HP-406-MT:~$ who
        iiitd   tty7   2018-09-05 15:29 (:0)

5)whoami – Displays the name of the current user profile
        ubuntu@ubuntu:~$ whoami
        ubuntu

5)Uptime – Displays how long the system has been running for and displays the average number of fucntions running or waiting to use the CPU

        iiitd@iiitd-HP-406-MT:~$ uptime
        15:30:50 up 32 min, 1 user, load average: 0.31, 0.27, 0.30

     Options –
         (-p) – Displays in a much prettier format
        ubuntu@ubuntu:~$ uptime -p
         up 5 minutes

6)tty – Displays terminal position
      iiitd@iiitd-HP-406-MT:~$ tty
      /dev/pts/2

7)df – Displays storage available on disk
    Options -
       (-h) – Display in human readable i.e in the form of kB and mB
         ubuntu@ubuntu:~$ df -h

Filesystem	Size	Used	Avail	Use%	Mounted on
udev	482M	0	482M	0%	/dev
tmpfs	100M	6.4M	93M	7%	/run
/dev/sr0	1.5G	1.5G	0	100%	/cdrom
/dev/loop0	1.4G	1.4G	0	100%	/rofs
/cow	496M	36M	460M	8%	/
tmpfs	496M	152K	496M	1%	/dev/shm
tmpfs	5.0M	4.0K	5.0M	1%	/run/lock
tmpfs	496M	0	496M	0%	/sys/fs/cgroup
tmpfs	496M	452K	496M	1%	/tmp
tmpfs	100M	112K	100M	1%	/run/user/999

8)du – Displays Disk Usage Information

9)clear – Inserts new lines so that it appears that we are starting over from a new page.
        iiitd@iiitd-HP-406-MT:~$ clear

10)ls – List command displays all files and folders in the present working directory
       ubuntu@ubuntu:~$ ls
       Desktop Documents Downloads Music Pictures

Options –
(-a) – Displays all hidden files and directories
(-h) – Displays in a more organised form
ubuntu@ubuntu:~$ ls -ha

       .   .cache   Downloads   .local   .profile Videos
      ..   .config   .gconf   .mozilla Public   .Xauthority

.bash_logout Desktop .gnupg   Music   SM   .xsession-errors
    .bashrc   Documents .ICEauthority Pictures Templates

11) mkdir – It is used to create directories or folders
   Options –
       (-v) – Displays a line of text for clarity
      ubuntu@ubuntu:~$ mkdir -v SM
       mkdir: created directory 'SM'

12) cd – this command is used to navigate between directories
     (.. stores the previous working directory while . stores the pwd)
      ubuntu@ubuntu:~$ cd SM
      ubuntu@ubuntu:~/SM$ rm SM

13) cat – Concatenate is used to create files or append data into existing ones
     Options – Creating a file- cat > (file)
            Reading a file – cat < (file)
            Append data to a existing file – cat >> (file)

          ubuntu@ubuntu:~$ cat > test
          Hello world!!

          ubuntu@ubuntu:~$ cat < test
          Hello world!!

14) touch – It is used to create multiple files at once
         ubuntu@ubuntu:~$ touch a b c

15) cp – Copy command
   Options- (-v) – Displays actions for ease
        (-i) – Prompts the user before executing
        ubuntu@ubuntu:~$ cp -iv a SM
         cp: overwrite 'SM/a'? y
         'a' -> 'SM/a'

(-r) – Recursively – used to copy directories
(-f) – Forcefully copies

16)mv – Moves the given file to desired location
    (-f) – Forcefully moves
    (-v) – Displays actions for ease
    (-i) – Prompts the user before executing
    ubuntu@ubuntu:~$ mv -v b SM
    'b' -> 'SM/b'

17)rm – Deletes the selected file
    (-f) – Forcefully deletes
    (-d) - removes empty directories
    (-r) – Reclusively deletes i.e deletes directories
    (-v) – Displays actions for ease
    ubuntu@ubuntu:~/SM$ rm -vi a
    rm: remove regular empty file 'a'? y
    removed 'a'

18)file – Displays the type of file
    ubuntu@ubuntu:~/SM$ file aa
    aa: empty

Meta Characters or Wild Card Characters

1) * - is equivalent to zero or more characters in a given file. Can be used with many commands like rm, cp, ls, etc.

    ubuntu@ubuntu:~/SM$ ls *a   #ends with a
    aa
    ubuntu@ubuntu:~/SM$ ls a*   #starts with a
    aa abcd
    ubuntu@ubuntu:~/SM$ ls a*d   #starts with a and ends
with d
    abcd