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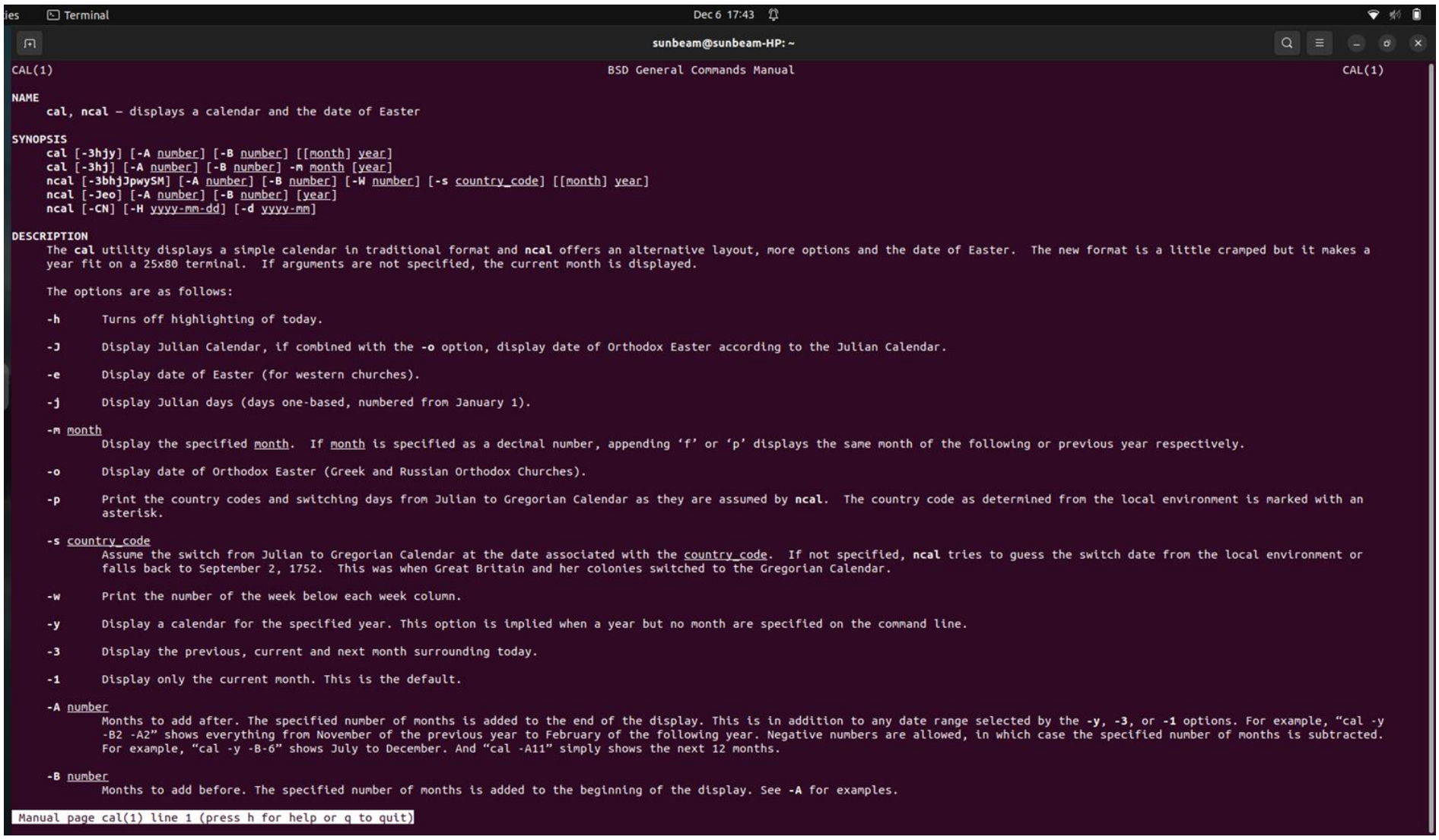
Assignment No:-1

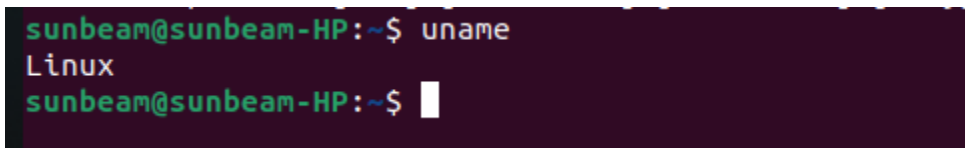
1)man:-

Command:- man cal(Command to get help about commands).



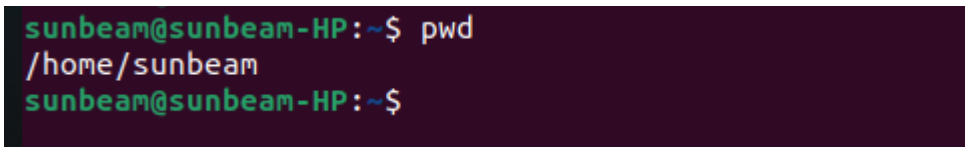
2)uname:-

command:-uname(Print System information).



3)pwd:-

command:-pwd(Print current directory).



4)hostname:-

command:-hostname(Print IP address and hostname of the machine)

```
sunbeam@sunbeam-HP:~$ hostname
sunbeam-HP
sunbeam@sunbeam-HP:~$
```

5)date:-

command:-date(Find today's date)

```
sunbeam@sunbeam-HP:~$ echo $SHELL
/bin/bash
sunbeam@sunbeam-HP:~$ date
Wednesday 06 December 2023 05:30:50 PM IST
```

6)cal:-

command:-cal(Print calendar for current year)

```
sunbeam@sunbeam-HP:~$ cal
   December 2023
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
```

7)ls, dir:-

commnad:-ls,dir(See directory structure)

```
sunbeam@sunbeam-HP-Notebook:~$ ls
 ADS_230940820004                    OOP_230940020004.zip
 commends                            OOP_230940820004
 cpp.txt                             OOP_230940820004_REEXAM
 cprogramming_80109                  OOP_230940820004_REEXAM.zip
 cprogramming_80109.zip              package.json
'dbt gogle notes.pdf'                package-lock.json
 Desktop                             Pictures
 Documents                           Public
 Downloads                           Servers
```

```
sunbeam@sunbeam-HP-Notebook:~$ dir
ADS_230940820004        Documents                           NodeJS_Demo                 package.json       Untitled\ Document\ 1
commends                Downloads                           node_modules                package-lock.json  Videos
cpp.txt                 GD_BollyWood_Today_KD3.odt          OOP_230940020004            Pictures           WPT_ASSIGNMENT
cprogramming_80109      google-chrome-stable_current_amd64.deb  OOP_230940020004.zip        Public             WPT_DEMO
cprogramming_80109.zip  Hacathon1                          OOP_230940820004            Servers            zoom_amd64.deb
dbt\ gogle\ notes.pdf   Music                               OOP_230940820004_REEXAM     snap
Desktop                 mysql                               OOP_230940820004_REEXAM.zip  Templates
```

8)cat:-

command:-cat>Test.txt(create file)

```
sunbeam@sunbeam-HP:~$ cat>Test.txt
Welcome To Sunbeam
This is Test Filesunbeam@sunbeam-HP:~$ cat Test.txt
Welcome To Sunbeam
This is Test Filesunbeam@sunbeam-HP:~$
```

9)cat >>:-

command:- cat>>Test.txt(Append some text into existing file)

```
sunbeam@sunbeam-HP:~$ cat>Test.txt
Welcome To Sunbeam
This is Test Filesunbeam@sunbeam-HP:~$ cat Test.txt
Welcome To Sunbeam
This is Test Filesunbeam@sunbeam-HP:~$ cat>>Test.txt
Welcome To Karad.sunbeam@sunbeam-HP:~$ cat Test.txt
Welcome To Sunbeam
This is Test FileWelcome To Karad.sunbeam@sunbeam-HP:~$ cat>>Test.txt
Hiiii from Karad.....sunbeam@sunbeam-HP:~$ cat Test.txt
Welcome To Sunbeam
This is Test FileWelcome To Karad.Hiiii from Karad.....sunbeam@sunbeam-HP:~$
```

10)cp:-

command:-(Copy a file, Copy a directory)

Copy a file:-

```
sunbeam@sunbeam-HP:~$ cp Test.txt copy.txt
sunbeam@sunbeam-HP:~$ cat copy.txt
Welcome To Sunbeam
This is Test FileWelcome To Karad.Hiiii from Karad.....sunbeam@sunbeam-HP:~$
```

Copy a directory:-

```
sunbeam@sunbeam-HP:~$ cp Test.txt OSC
sunbeam@sunbeam-HP:~$ ls OSC
Test.txt
sunbeam@sunbeam-HP:~$
```

11)mv:-

command:- mv Test.txt new.txt-->for rename
mv new.txt OSC(Move the files)

```
sunbeam@sunbeam-HP-Notebook:~$ mkdir OSC
sunbeam@sunbeam-HP-Notebook:~$ cat > new.txt
AKASH KAKAD 80109
sunbeam@sunbeam-HP-Notebook:~$ cat  new.txt
AKASH KAKAD 80109
sunbeam@sunbeam-HP-Notebook:~$ mv  new.txt OSC
sunbeam@sunbeam-HP-Notebook:~$ ls
 ADS_230940820004          Documents                          NodeJS_Demo                 OSC                  Templates
 commends                  Downloads                          node_modules                package.json        'Untitled Document 1'
 cpp.txt                   GD_BollyWood_Today_KD3.odt         OOP_230940020004            package-lock.json    Videos
 cprogramming_80109        google-chrome-stable_current_amd64.deb OOP_230940020004.zip    Pictures             WPT_ASSIGNMENT
 cprogramming_80109.zip    Hacathon1                          OOP_230940820004            Public               WPT_DEMO
'dbt gogle notes.pdf'      Music                              OOP_230940820004_REEXAM     Servers              zoom_amd64.deb
 Desktop                   mysql                              OOP_230940820004_REEXAM.zip snap
```

```
sunbeam@sunbeam-HP:~$ mv Test.txt new.txt
sunbeam@sunbeam-HP:~$ ls new
ls: cannot access 'new': No such file or directory
sunbeam@sunbeam-HP:~$ ls Test
ls: cannot access 'Test': No such file or directory
sunbeam@sunbeam-HP:~$ ls new.txt
new.txt
sunbeam@sunbeam-HP:~$ mv new.txt OSC
sunbeam@sunbeam-HP:~$ ls
 ass1_1              'Assignments 1-5dbt'   cpp                  Documents          Exercise                  java_practicde   node_modules        Pictures
 Assignment14_Q1      AssignmentSQL         cpp_80136            Downloads          GD_BollyWood_Today_KD3.odt LabExam         OSC                 prn
 Assignment2          AssSQL                cpp_80136.zip        Dsa                hack                       Music           package.json        Public
 Assignment3_4_5.zip  bookdetails           cprogramming_80136   DSA_230940820041   hello.c                    mygitdata       package-lock.json   Question2
 Assignment6          c                     cprogramming_80136.zip DSAlabTest       hs_err_pid6793.log        'new token'      PGDAC               resumeeeeerutu
 Assignment7          copy.txt              Desktop              DSApractice        Intro                      NodeJS          Photos              rutuDocuments
sunbeam@sunbeam-HP:~$ ls OSC
new.txt  Test.txt
```

12)mv(Rename a file):-

13)tac, rev(Print the file in reverse order, Reverse each line in the file):-

tac:-

```
sunbeam@sunbeam-HP:~$ tac copy.txt
This is Test FileWelcome To Karad.Hiiii from Karad.........Welcome To Sunbeam
sunbeam@sunbeam-HP:~$
```

rev:-

```
sunbeam@sunbeam-HP:~$ rev copy.txt
maebnuS oT emocleW
.........daraK morf iiiiH.daraK oT emocleWeliF tseT si sihTsunbeam@sunbeam-HP:~$
```

14)mkdir:-(Create directory)

```
sunbeam@sunbeam-HP:~$ mkdir OSC
sunbeam@sunbeam-HP:~$ ls
 ass1_1              'Assignments 1-5dbt'   cpp                  Documents          Exercise                  java_practicde   node_modules        Pictures
 Assignment14_Q1      AssignmentSQL         cpp_80136            Downloads          GD_BollyWood_Today_KD3.odt LabExam         OSC                 prn
 Assignment2          AssSQL                cpp_80136.zip        Dsa                hack                       Music           package.json        Public
 Assignment3_4_5.zip  bookdetails           cprogramming_80136   DSA_230940820041   hello.c                    mygitdata       package-lock.json   Question2
 Assignment6          c                     cprogramming_80136.zip DSAlabTest       hs_err_pid6793.log        'new token'      PGDAC               resumeeeeerutu
 Assignment7          copy.txt              Desktop              DSApractice        Intro                      NodeJS          Photos              rutuDocuments
```

15)wc:-(Count the words, characters and lines in a file)

```
sunbeam@sunbeam-HP:~$ wc copy.txt
 1 11 79 copy.txt
sunbeam@sunbeam-HP:~$
```

16)cd(Change current directory):-

```
sunbeam@sunbeam-HP:~$ cd OSC
sunbeam@sunbeam-HP:~/OSC$
```

17)rm(Remove a file, remove a directory (with -R)):-

```
sunbeam@sunbeam-HP:~/OSC$ mkdir OS JAVA PYTHON DSA
sunbeam@sunbeam-HP:~/OSC$ ls
DSA  file08.txt  file0.txt  file1.txt  file2.txt  file3.txt  file9.txt  JAVA  new.txt  OS  PYTHON  Test.txt
sunbeam@sunbeam-HP:~/OSC$ rm -r java
rm: cannot remove 'java': No such file or directory
sunbeam@sunbeam-HP:~/OSC$ rm -R OS
sunbeam@sunbeam-HP:~/OSC$ ls
DSA  file08.txt  file0.txt  file1.txt  file2.txt  file3.txt  file9.txt  JAVA  new.txt  PYTHON  Test.txt
sunbeam@sunbeam-HP:~/OSC$
```

```
sunbeam@sunbeam-HP-Notebook:~$ touch ABC1 ABC2 ABC3 ABC4
sunbeam@sunbeam-HP-Notebook:~$ rm -r ABC1
sunbeam@sunbeam-HP-Notebook:~$ ls
 ABC2                    'dbt gogle notes.pdf'                          mysql                        OSC
 ABC3                     Desktop                                       NodeJS_Demo                  package.json
 ABC4                     Documents                                     node_modules                 package-lock.json
 ADS_230940820004         Downloads                                     OOP_230940020004             Pictures
 commends                 GD_BollyWood_Today_KD3.odt                    OOP_230940020004.zip         Public
 cpp.txt                  google-chrome-stable_current_amd64.deb        OOP_230940820004             Servers
 cprogramming_80109       Hacathon1                                     OOP_230940820004_REEXAM      snap
 cprogramming_80109.zip   Music                                         OOP_230940820004_REEXAM.zip  Templates
```

18)rmdir(remove empty directory):-

```
sunbeam@sunbeam-HP:~/OSC$ mkdir java
sunbeam@sunbeam-HP:~/OSC$ ls
java  new.txt  Test.txt
sunbeam@sunbeam-HP:~/OSC$ rmdir java
sunbeam@sunbeam-HP:~/OSC$ ls
new.txt  Test.txt
sunbeam@sunbeam-HP:~/OSC$
```

19)touch(change the modification time , Create Multiple empty files at once):-

```
sunbeam@sunbeam-HP:~/OSC$ touch file1.txt file2.txt file3.txt
sunbeam@sunbeam-HP:~/OSC$ ls
file1.txt  file2.txt  file3.txt  new.txt  Test.txt
sunbeam@sunbeam-HP:~/OSC$
```

20)sort(Sort file.):-

```
sunbeam@sunbeam-HP-Notebook:~$ cat > file5.txt
VIRAT
AKASH
DHONI
MESSI
CHHETRI
sunbeam@sunbeam-HP-Notebook:~$ sort file5.txt
AKASH
CHHETRI
DHONI
MESSI
VIRAT
sunbeam@sunbeam-HP-Notebook:~$
```

21)uniq(Avoid repetition in a file.):-

```
sunbeam@sunbeam-HP:~/OSC$ cat>file0.txt
I love Music.
I love Music.
I love Music.

I love Dancing.
I love Dancing.
sunbeam@sunbeam-HP:~/OSC$ uniq file0.txt
I love Music.

I love Dancing.
sunbeam@sunbeam-HP:~/OSC$
```

22)head(Print the specified number of lines from top in the file.):-

```
sunbeam@sunbeam-HP:~/OSC$ cat>file08.txt
Rutuja
Sammed
Rutika
Bhumika
Chaitrali
Surbhi
Akash
Chalana
Ganga
Sapana
Ranjana
Seema
Anita
sunbeam@sunbeam-HP:~/OSC$ head file08.txt
Rutuja
Sammed
Rutika
Bhumika
Chaitrali
Surbhi
Akash
Chalana
Ganga
Sapana
sunbeam@sunbeam-HP:~/OSC$
```

23)tail(Print the specified number of lines from bottom in the file.):-

```
sunbeam@sunbeam-HP:~/OSC$ head file08.txt
Rutuja
Sammed
Rutika
Bhumika
Chaitrali
Surbhi
Akash
Chalana
Ganga
Sapana
sunbeam@sunbeam-HP:~/OSC$ tail file08.txt
Bhumika
Chaitrali
Surbhi
Akash
Chalana
Ganga
Sapana
Ranjana
Seema
Anita
sunbeam@sunbeam-HP:~/OSC$
```

24)factor(Find the factors of a number):-

```
sunbeam@sunbeam-HP:~/OSC$ factor 100
100: 2 2 5 5
sunbeam@sunbeam-HP:~/OSC$
```

25)alias(Create command shortcut):-

```
sunbeam@sunbeam-HP:~$ alias list="ls -l"
sunbeam@sunbeam-HP:~$ list
total 183860
-rw-rw-r--   1 sunbeam sunbeam      1456 Sep 24 16:20  ass1_1
drwxr-xr-x   5 sunbeam sunbeam      4096 Oct 22 18:01  Assignment14_Q1
drwxr-xr-x   5 sunbeam sunbeam      4096 Oct  7 16:07  Assignment2
-rw-r--r--   1 sunbeam sunbeam     82305 Nov  4 18:57  Assignment3_4_5.zip
drwxrwxr-x   5 sunbeam sunbeam      4096 Oct 12 23:53  Assignment6
drwxrwxr-x   5 sunbeam sunbeam      4096 Oct 15 17:26  Assignment7
drwxr-xr-x   3 sunbeam sunbeam      4096 Sep 10 21:57 'Assignments 1-5dbt'
drwxrwxr-x   2 sunbeam sunbeam      4096 Sep 10 17:25  AssignmentSQL
drwxrwxr-x   2 sunbeam sunbeam      4096 Sep 11 17:01  AssSQL
drwxr-xr-x   2 sunbeam sunbeam      4096 Oct 17 18:12  bookdetails
drwxrwxr-x   2 sunbeam sunbeam      4096 Sep 21 14:25  c
-rw-rw-r--   1 sunbeam sunbeam        79 Dec  6 18:20  copy.txt
drwxrwxr-x   3 sunbeam sunbeam      4096 Oct  7 14:35  cpp
drwxrwxr-x   3 sunbeam sunbeam      4096 Oct  7 22:39  cpp_80136
-rw-rw-r--   1 sunbeam sunbeam     13168 Oct  7 22:41  cpp_80136.zip
drwxrwxr-x   4 sunbeam sunbeam      4096 Sep  9 16:29  cprogramming_80136
-rw-rw-r--   1 sunbeam sunbeam     28348 Sep  9 16:46  cprogramming_80136.zip
drwxr-xr-x   5 sunbeam sunbeam      4096 Nov 19 11:20  Desktop
drwxr-xr-x   5 sunbeam sunbeam      4096 Dec  7 16:44  Documents
drwxr-xr-x  20 sunbeam sunbeam     12288 Dec  6 18:44  Downloads
drwxr-xr-x   2 sunbeam sunbeam      4096 Nov  2 15:00  Dsa
drwxrwxr-x   7 sunbeam sunbeam      4096 Nov 17 12:39  DSA_230940820041
drwxrwxr-x  20 sunbeam sunbeam      4096 Nov  9 00:23  DSAlabTest
drwxrwxr-x  46 sunbeam sunbeam      4096 Nov  4 20:41  DSApractice
drwxrwxr-x   2 sunbeam sunbeam      4096 Sep 11 22:34  Exercise
-rw-rw-r--   1 sunbeam sunbeam     46973 Oct 13 16:57  GD_BollyWood_Today_KD3.odt
-rw-rw-r--   1 sunbeam sunbeam     19092 Nov 17 15:02  hack
-rw-rw-r--   1 sunbeam sunbeam        48 Sep  8 16:36  hello.c
-rw-rw-r--   1 sunbeam sunbeam    287667 Nov  9 11:51  hs_err_pid6793.log
drwxrwxr-x   2 sunbeam sunbeam      4096 Nov 26 17:43  Intro
drwxrwxr-x  60 sunbeam sunbeam      4096 Oct 25 08:08  java_practicde
```

26)unalias(remove the command shortcut):-

```
sunbeam@sunbeam-HP:~$ unalias list
sunbeam@sunbeam-HP:~$ list
Command 'list' not found, did you mean:
  command 'mist' from snap mist (master)
  command 'klist' from deb krb5-user (1.19.2-2ubuntu0.2)
  command 'klist' from deb heimdal-clients (7.7.0+dfsg-3ubuntu1)
  command 'gist' from deb yorick (2.2.04+dfsg1-12)
  command 'last' from deb util-linux (2.37.2-4ubuntu3)
  command 'flist' from deb mmh (0.4-4)
  command 'flist' from deb nmh (1.7.1-11)
  command 'dist' from deb mmh (0.4-4)
  command 'dist' from deb nmh (1.7.1-11)
  command 'lift' from deb lift (2.6.0-1)
  command 'hist' from deb loki (2.4.7.4-10)
  command 'mlist' from deb mblaze (1.1-1)
See 'snap info <snapname>' for additional versions.
sunbeam@sunbeam-HP:~$
```

27)echo(Print environment variables individually):-

```
sunbeam@sunbeam-HP:~$ echo "Rutuja Rajendra Hatgine"
Rutuja Rajendra Hatgine
sunbeam@sunbeam-HP:~$
```

28)ps(Print current processes):-

```
sunbeam@sunbeam-HP:~/OSC$ ps
    PID TTY          TIME CMD
   8596 pts/0    00:00:00 bash
  21852 pts/0    00:00:00 ps
sunbeam@sunbeam-HP:~/OSC$ ps -e
    PID TTY          TIME CMD
      1 ?        00:00:01 systemd
      2 ?        00:00:00 kthreadd
      3 ?        00:00:00 rcu_gp
      4 ?        00:00:00 rcu_par_gp
      5 ?        00:00:00 slub_flushwq
      6 ?        00:00:00 netns
      8 ?        00:00:00 kworker/0:0H-events_highpri
     10 ?        00:00:00 mm_percpu_wq
     11 ?        00:00:00 rcu_tasks_kthread
```

29)kill(Kill the process):-

```
sunbeam@sunbeam-HP:~/OSC$ kill
kill: usage: kill [-s sigspec | -n signum | -sigspec] pid | jobspec ... or kill -l [sigspec]
sunbeam@sunbeam-HP:~/OSC$
```

30)env(Print environment variables):-

```
sunbeam@sunbeam-HP:~/OSC$ env
SHELL=/bin/bash
SESSION_MANAGER=local/sunbeam-HP:@/tmp/.ICE-unix/1719,unix/sunbeam-HP:/tmp/.ICE-unix/1719
QT_ACCESSIBILITY=1
COLORTERM=truecolor
XDG_CONFIG_DIRS=/etc/xdg/xdg-ubuntu:/etc/xdg
SSH_AGENT_LAUNCHER=gnome-keyring
XDG_MENU_PREFIX=gnome-
GNOME_DESKTOP_SESSION_ID=this-is-deprecated
LANGUAGE=en_IN:en
GNOME_SHELL_SESSION_MODE=ubuntu
SSH_AUTH_SOCK=/run/user/1000/keyring/ssh
XMODIFIERS=@im=ibus
DESKTOP_SESSION=ubuntu
GTK_MODULES=gail:atk-bridge
PWD=/home/sunbeam/OSC
LOGNAME=sunbeam
XDG_SESSION_DESKTOP=ubuntu
XDG_SESSION_TYPE=wayland
SYSTEMD_EXEC_PID=1746
XAUTHORITY=/run/user/1000/.mutter-Xwaylandauth.ZJFLF2
HOME=/home/sunbeam
USERNAME=sunbeam
IM_CONFIG_PHASE=1
LANG=en_IN
LS_COLORS=rs=0:di=01;34:ln=01;36:mh=00:pi=40;33:so=01;35:do=01;35:bd=40;33;01:cd=40;33;01:or=40;31;01:mi=00:su=37;41:sg=30;43:ca=30;41:tw=30;42:ow=34;42:st=37;44:ex=01;32:*.tar=01;31:*.tgz=01;31:*.arc=01;
31:*.arj=01;31:*.taz=01;31:*.lha=01;31:*.lz4=01;31:*.lzh=01;31:*.lzma=01;31:*.tlz=01;31:*.txz=01;31:*.tzo=01;31:*.t7z=01;31:*.zip=01;31:*.z=01;31:*.dz=01;31:*.gz=01;31:*.lrz=01;31:*.lz=01;31:*.lzo=01;31:*
.xz=01;31:*.zst=01;31:*.tzst=01;31:*.bz2=01;31:*.bz=01;31:*.tbz=01;31:*.tbz2=01;31:*.tz=01;31:*.deb=01;31:*.rpm=01;31:*.jar=01;31:*.war=01;31:*.ear=01;31:*.sar=01;31:*.rar=01;31:*.alz=01;31:*.ace=01;31:*.
zoo=01;31:*.cpio=01;31:*.7z=01;31:*.rz=01;31:*.cab=01;31:*.wim=01;31:*.swm=01;31:*.dwm=01;31:*.esd=01;31:*.jpg=01;35:*.jpeg=01;35:*.mjpg=01;35:*.mjpeg=01;35:*.gif=01;35:*.bmp=01;35:*.pbm=01;35:*.pgm=01;35
:*.ppm=01;35:*.tga=01;35:*.xbm=01;35:*.xpm=01;35:*.tif=01;35:*.tiff=01;35:*.png=01;35:*.svg=01;35:*.svgz=01;35:*.mng=01;35:*.pcx=01;35:*.mov=01;35:*.mpg=01;35:*.mpeg=01;35:*.m2v=01;35:*.mkv=01;35:*.webm=0
1;35:*.webp=01;35:*.ogm=01;35:*.mp4=01;35:*.m4v=01;35:*.mp4v=01;35:*.vob=01;35:*.qt=01;35:*.nuv=01;35:*.wmv=01;35:*.asf=01;35:*.rm=01;35:*.rmvb=01;35:*.flc=01;35:*.avi=01;35:*.fli=01;35:*.flv=01;35:*.gl=0
1;35:*.dl=01;35:*.xcf=01;35:*.xwd=01;35:*.yuv=01;35:*.cgm=01;35:*.emf=01;35:*.ogv=01;35:*.ogx=01;35:*.aac=00;36:*.au=00;36:*.flac=00;36:*.m4a=00;36:*.mid=00;36:*.midi=00;36:*.mka=00;36:*.mp3=00;36:*.mpc=0
0;36:*.ogg=00;36:*.ra=00;36:*.wav=00;36:*.oga=00;36:*.opus=00;36:*.spx=00;36:*.xspf=00;36:
XDG_CURRENT_DESKTOP=ubuntu:GNOME
VTE_VERSION=6800
WAYLAND_DISPLAY=wayland-0
GNOME_TERMINAL_SCREEN=/org/gnome/Terminal/screen/114bea10_466c_4164_be23_4db873cbd2c0
GNOME_SETUP_DISPLAY=:1
LESSCLOSE=/usr/bin/lesspipe %s %s
XDG_SESSION_CLASS=user
TERM=xterm-256color
LESSOPEN=| /usr/bin/lesspipe %s
USER=sunbeam
GNOME_TERMINAL_SERVICE=:1.237
DISPLAY=:0
SHLVL=1
QT_IM_MODULE=ibus
XDG_RUNTIME_DIR=/run/user/1000
XDG_DATA_DIRS=/usr/share/ubuntu:/usr/local/share/:/usr/share/:/var/lib/snapd/desktop
PATH=/usr/local/sbin:/usr/local/bin:/usr/sbin:/usr/bin:/sbin:/bin:/usr/games:/usr/local/games:/snap/bin:/snap/bin
GDMSESSION=ubuntu
DBUS_SESSION_BUS_ADDRESS=unix:path=/run/user/1000/bus
_=/usr/bin/env
OLDPWD=/home/sunbeam
sunbeam@sunbeam-HP:~/OSC$
```