

Module:-COSA(Concept Of Operating System And Administration)

Date:- 20/10/2022

Assignment :- 01(Basic Cent OS Command)

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1.ls

Content present working directory. "ls" command is used to see the folders and files of the folder.

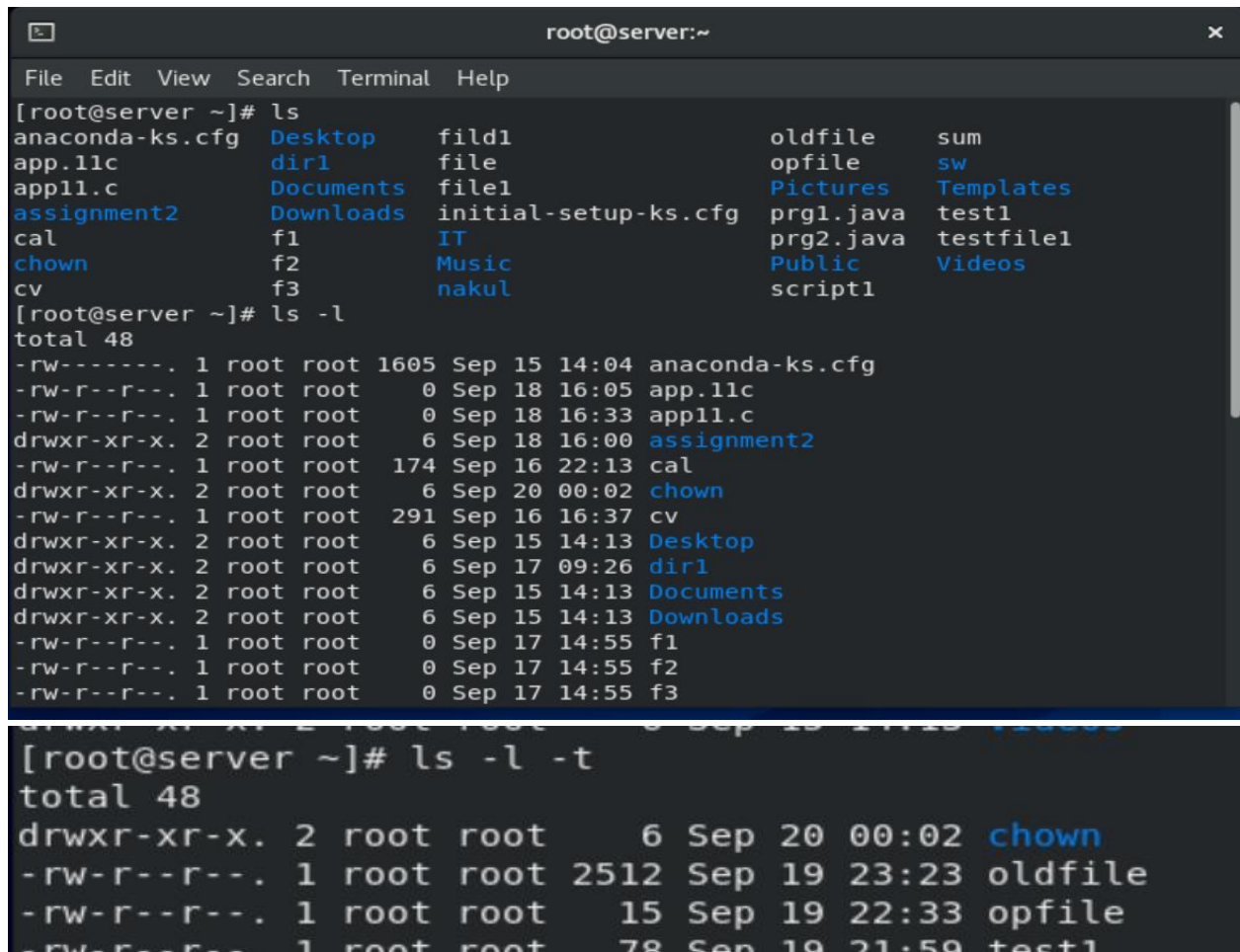
Cmd:-

ls

ls -l

ls -l -t

ls -a



```
root@server:~  
File Edit View Search Terminal Help  
[root@server ~]# ls  
anaconda-ks.cfg Desktop fild1 oldfile sum  
app.11c dir1 file opfile sw  
app11.c Documents file1 Pictures Templates  
assignment2 Downloads initial-setup-ks.cfg prg1.java test1  
cal f1 IT prg2.java testfile1  
chown f2 Music Public Videos  
cv f3 nakul script1  
[root@server ~]# ls -l  
total 48  
-rw-r--r--. 1 root root 1605 Sep 15 14:04 anaconda-ks.cfg  
-rw-r--r--. 1 root root 0 Sep 18 16:05 app.11c  
-rw-r--r--. 1 root root 0 Sep 18 16:33 app11.c  
drwxr-xr-x. 2 root root 6 Sep 18 16:00 assignment2  
-rw-r--r--. 1 root root 174 Sep 16 22:13 cal  
drwxr-xr-x. 2 root root 6 Sep 20 00:02 chown  
-rw-r--r--. 1 root root 291 Sep 16 16:37 cv  
drwxr-xr-x. 2 root root 6 Sep 15 14:13 Desktop  
drwxr-xr-x. 2 root root 6 Sep 17 09:26 dir1  
drwxr-xr-x. 2 root root 6 Sep 15 14:13 Documents  
drwxr-xr-x. 2 root root 6 Sep 15 14:13 Downloads  
-rw-r--r--. 1 root root 0 Sep 17 14:55 f1  
-rw-r--r--. 1 root root 0 Sep 17 14:55 f2  
-rw-r--r--. 1 root root 0 Sep 17 14:55 f3  
[root@server ~]# ls -l -t  
total 48  
drwxr-xr-x. 2 root root 6 Sep 20 00:02 chown  
-rw-r--r--. 1 root root 2512 Sep 19 23:23 oldfile  
-rw-r--r--. 1 root root 15 Sep 19 22:33 opfile  
-rw-r--r--. 1 root root 78 Sep 19 21:59 test1
```

```

[root@server ~]# man ls
[root@server ~]# ls -a
.          .bashrc  dir1      file1      opfile      sw
..         .cache  Documents .file.swp  Pictures    .swp
anaconda-ks.cfg  cal     Downloads .ICEauthority .pki        .tcshrc
app.11c        chown   .esd_auth initial-setup-ks.cfg prg1.java   Templates
app11.c        .config f1         IT          prg2.java   test1
assignment2    .cshrc  f2         .local      Public      testfile1
.bash_history  cv      f3         Music       script1     Videos
.bash_logout  .dbus   fild1      nakul
.bash_profile .Desktop file        oldfile     sum
[root@server ~]#

```

2. CP:-

Copy one folder to another folder

Cmd:-

cp s.f d.f

cp -r s.f/ d.f/

cd file name

cd .. (go to previous directory)

mv s.f d.f

```

root@server:~/nakul
File Edit View Search Terminal Help
root@server nakul]# cd ..
root@server ~]# ls
anaconda-ks.cfg  Desktop    fild1      oldfile     sum
pp.11c          dir1       file       opfile      sw
pp11.c          Documents  file1      Pictures    Templates
assignment2     Downloads  initial-setup-ks.cfg prg1.java   test1
al              f1         IT          prg2.java   testfile1
hown           f2         Music       Public      Videos
v              f3         nakul      script1
root@server ~]# cp opfile nakul
root@server ~]# cd nakul
root@server nakul]# ls
ldfile opfile
root@server nakul]# cd ..
root@server ~]# cp -r Pictures nakul/
root@server ~]# cd nakul
root@server nakul]# ls
ldfile opfile Pictures
root@server nakul]#

```

```
File Edit View Search Terminal Help
[root@server nakul]# cd ..
[root@server ~]# ls
anaconda-ks.cfg Desktop fild1 oldfile sum
app.11c dir1 file opfile sw
app11.c Documents file1 Pictures Templates
assignment2 Downloads initial-setup-ks.cfg prg1.java test1
cal f1 IT prg2.java testfile1
chown f2 Music Public Videos
cv f3 nakul script1
[root@server ~]# mv Music nakul
[root@server ~]# cd nakul
[root@server nakul]# ls
Music oldfile opfile Pictures
[root@server nakul]#
```

3.lpr

It is used for printing purpose

4.gedit

Editor in linux

Cmd:-

gedit file_name

5.sort

To sort the content of file

Cmd:-

sort file_name (ascending order)

sort -r file_name (descending order)

6.grep

It is used for pattern searching (matching content)

Cmd:-

grep -i file_content file_name

```
root@server:~  
File Edit View Search Terminal Help  
[root@server ~]# gedit prithviraj  
[root@server ~]# cat prithviraj  
1.ved  
2.nitya  
3.chandrakant  
4.manisha  
5.rekha  
[root@server ~]# sort -r prithviraj  
5.rekha  
4.manisha  
3.chandrakant  
2.nitya  
1.ved  
[root@server ~]# grep prithviraj  
[root@server ~]# grep ha  
[root@server ~]# grep ved  
[root@server ~]# grep -i ved prithviraj  
1.ved  
[root@server ~]#
```

7. cat

Show the content of file

Cmd :-

cat file_name

8.tac

To show content of file in reverse order

Cmd:-

tac file_name

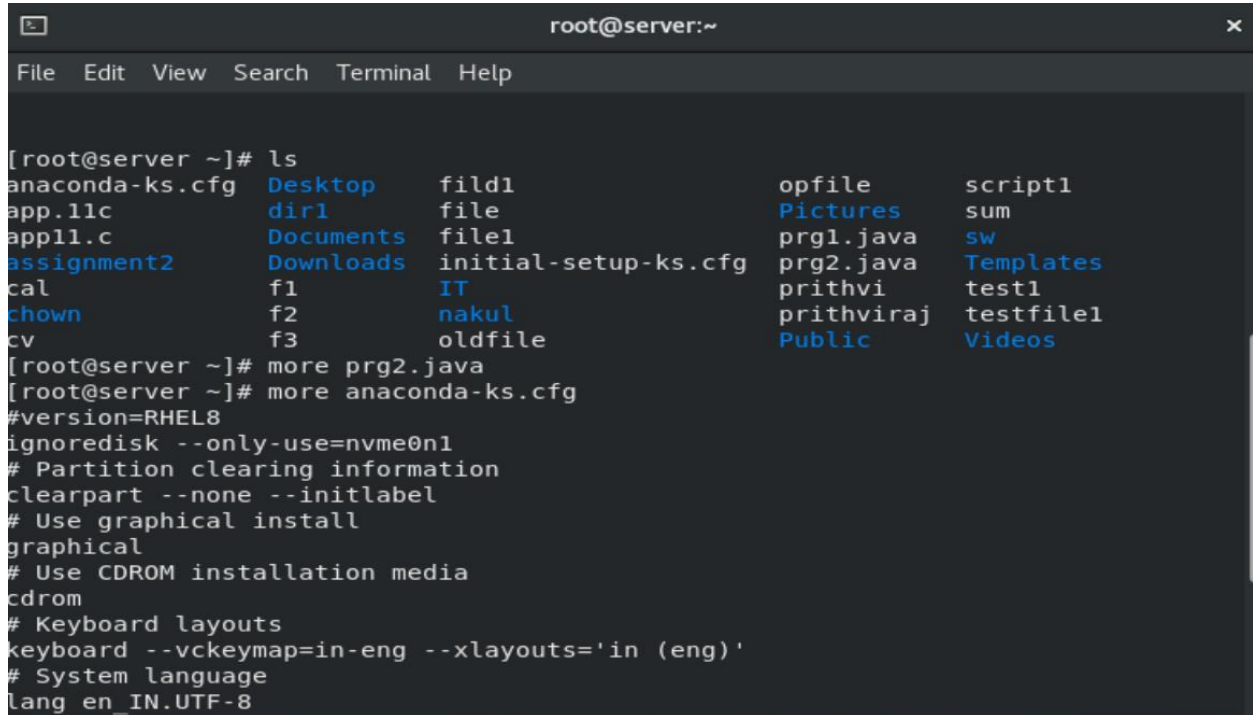
```
root@server:~  
File Edit View Search Terminal Help  
[root@server ~]# cat prithviraj  
1.ved  
2.nitya  
3.chandrakant  
4.manisha  
5.rekha  
[root@server ~]# tac prithviraj  
5.rekha  
4.manisha  
3.chandrakant  
2.nitya  
1.ved  
[root@server ~]#
```

9.more

Show content file but page by page

Cmd:-

more file_name



```
root@server:~  
File Edit View Search Terminal Help  
[root@server ~]# ls  
anaconda-ks.cfg Desktop fild1 opfile script1  
app.11c dirl file Pictures sum  
app11.c Documents file1 prg1.java sw  
assignment2 Downloads initial-setup-ks.cfg prg2.java Templates  
cal f1 IT prithvi test1  
chown f2 nakul prithviraj testfile1  
cv f3 oldfile Public Videos  
[root@server ~]# more prg2.java  
[root@server ~]# more anaconda-ks.cfg  
#version=RHEL8  
ignoredisk --only-use=nvme0n1  
# Partition clearing information  
clearpart --none --initlabel  
# Use graphical install  
graphical  
# Use CDRom installation media  
cdrom  
# Keyboard layouts  
keyboard --vckeymap=in-eng --xlayouts='in (eng)'  
# System language  
lang en_IN.UTF-8
```

10.ps

It show current running process on shell

Cmd:-

Ps -e -a -f

```
root@server:~  
File Edit View Search Terminal Help  
[root@server ~]# ls  
anaconda-ks.cfg Desktop filed1 opfile script1  
app.11c dir1 file Pictures sum  
appl1.c Documents file1 prg1.java sw  
assignment2 Downloads initial-setup-ks.cfg prg2.java Templates  
cal f1 IT prithvi test1  
chown f2 nakul prithviraj testfile1  
cv f3 oldfile Public Videos  
[root@server ~]# ps  
  PID TTY          TIME CMD  
 3077 pts/0    00:00:00 bash  
 4092 pts/0    00:00:00 ps  
[root@server ~]# ps -e -a -f  
UID          PID    PPID  C STIME TTY          TIME CMD  
root           1        0  0  0ct20 ?          00:00:06 /usr/lib/systemd/systemd --s  
root           2        0  0  0ct20 ?          00:00:00 [kthreadd]  
root           3        2  0  0ct20 ?          00:00:00 [rcu_gp]  
root           4        2  0  0ct20 ?          00:00:00 [rcu_par_gp]  
root           6        2  0  0ct20 ?          00:00:00 [kworker/0:0H-kblockd]  
root           8        2  0  0ct20 ?          00:00:00 [mm_percpu_wq]  
root           9        2  0  0ct20 ?          00:00:00 [ksoftirqd/0]  
root          10        2  0  0ct20 ?          00:00:00 [rcu_sched]  
root          11        2  0  0ct20 ?          00:00:00 [migration/0]
```

11.head

Show me the heading of file(10 line)

Cmd:-

head file_name (first 10 line)

tail file_name (last 10 line)

head -n 3 file_name

tail -n 2 file_name

```
root@server:~  
File Edit View Search Terminal Help  
[root@server ~]# head prithviraj  
1.ved  
2.nitya  
3.chandrakant  
4.manisha  
5.rekha  
[root@server ~]# tail prithviraj  
1.ved  
2.nitya  
3.chandrakant  
4.manisha  
5.rekha  
[root@server ~]# head -n 3 prithviraj  
1.ved  
2.nitya  
3.chandrakant  
[root@server ~]# tail -n 2 prithviraj  
4.manisha  
5.rekha  
[root@server ~]#
```

12.man

Show the manual of any command

Cmd:-

man type_any_cmd

```
root@server:~  
File Edit View Search Terminal Help  
LS(1) User Commands LS(1)  
  
NAME  
    ls - list directory contents  
  
SYNOPSIS  
    ls [OPTION]... [FILE]...  
  
DESCRIPTION  
    List information about the FILES (the current directory by default).  
    Sort entries alphabetically if none of -cftuvSUX nor --sort is speci-  
    fied.  
  
    Mandatory arguments to long options are mandatory for short options  
    too.  
  
    -a, --all  
        do not ignore entries starting with .  
  
    -A, --almost-all  
        do not list implied . and ..  
  
    --author  
  
Manual page ls(1) line 1 (press h for help or q to quit)
```

13. whatis

Give the sort discription of command

Cmd:-

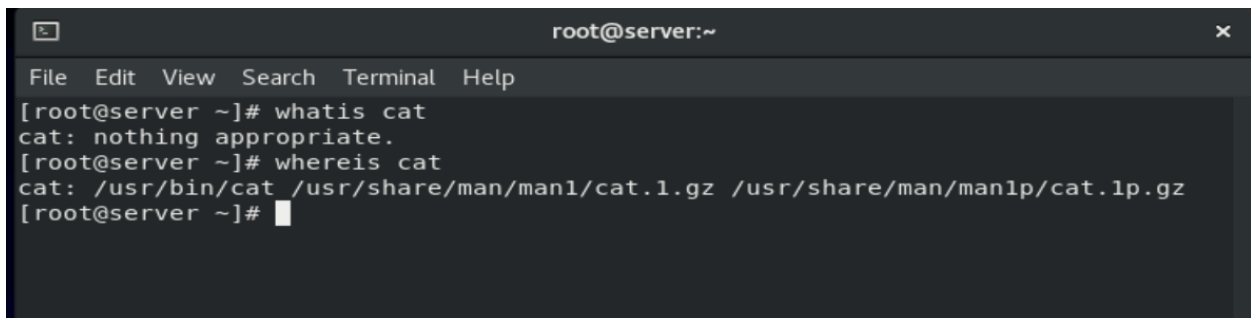
whatis type_any _cmd

14. whereis

Where is the location of command

Cmd:-

whereis type_any _cmd

A terminal window titled 'root@server:~' with a menu bar (File, Edit, View, Search, Terminal, Help). The terminal shows the following commands and output:

```
[root@server ~]# whatis cat
cat: nothing appropriate.
[root@server ~]# whereis cat
cat: /usr/bin/cat /usr/share/man/man1/cat.1.gz /usr/share/man/man1p/cat.1p.gz
[root@server ~]#
```

15. find

Find file or folder

Cmd:-

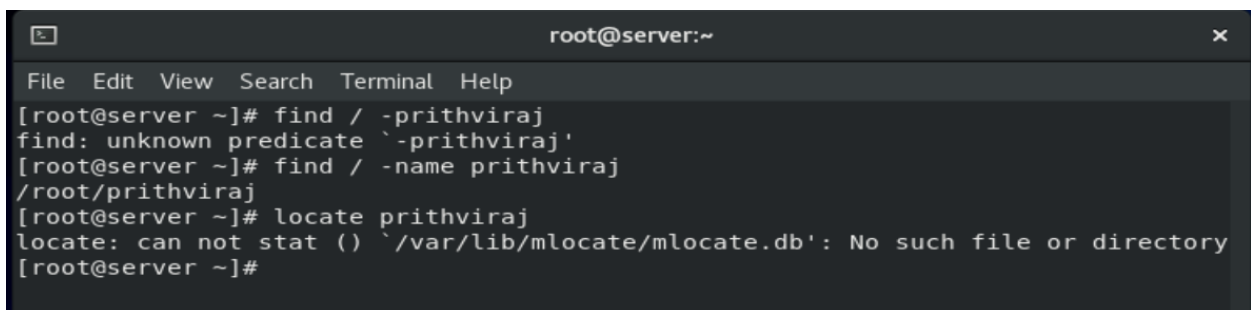
find / -name file_name

16. locate

Try to find out inside the file name locate the pattern matching

Cmd:-

locate file_name

A terminal window titled 'root@server:~' with a menu bar (File, Edit, View, Search, Terminal, Help). The terminal shows the following commands and output:

```
[root@server ~]# find / -prithviraj
find: unknown predicate '-prithviraj'
[root@server ~]# find / -name prithviraj
/root/prithviraj
[root@server ~]# locate prithviraj
locate: can not stat () `/var/lib/mlocate/mlocate.db': No such file or directory
[root@server ~]#
```


17. diff

It is used to find difference between two files

Cmd:-

diff file_name1 file_name2

```
[root@server ~]# diff test1 prithviraj
1,11c1,5
< cat
< caterpillar
< cattiger
< man
< hat
< bat
< sat
< fat
< I said hello
< Hello how are you?
<
---
> 1.ved
> 2.nitya
> 3.chandrakant
```

18.file

Cmd:-

file type_of_file_name

19. jobs

How many jobs are running in current shell

Cmd:-

jobs

```
root@server:~
File Edit View Search Terminal Help
[root@server ~]# file prithviraj
prithviraj: ASCII text
[root@server ~]# jobs
[root@server ~]#
```

20.rm

Delete something

Cmd :-

rm file_name (choose yes or no)

rm -r folder_name/

rm -r -f folder_name/ (force fully)

```

[root@server ~]# rm file1
rm: remove regular file 'file1'? y
[root@server ~]# rm -r sw
rm: descend into directory 'sw'? y
rm: descend into directory 'sw/Accounttingsw,database'? y
rm: remove directory 'sw/Accounttingsw,database/oracle}'? y
rm: remove directory 'sw/Accounttingsw,database'? y
rm: remove directory 'sw'? y
[root@server ~]# rm -r -f nakul
[root@server ~]# rm -r -f opfile
[root@server ~]# rm -r -f prithviraj
[root@server ~]# ls
anaconda-ks.cfg  Desktop      f3          prg1.java    Templates
app.11c          dir1        file        prg2.java    test1
appl1.c         Documents   initial-setup-ks.cfg  prithvi      testfile1
assignment2      Downloads   IT          Public       Videos
cal             f1         oldfile     script1
cv              f2         Pictures    sum
[root@server ~]#

```

21. mkdir

To create empty directory

Cmd:-

mkdir file_name

22.touch

To create empty file

Cmd:-

touch file_name

23.rmdir

Remove directory

Cmd:-

rmdir file_name

24.cd

Changed directory

Cmd:-

cd file_name

25.pwd

Show me present working directory

Cmd:-

pwd

26. ln

To create links

Cmd :-

ln actual_file_name_of_the_link

27. gzip

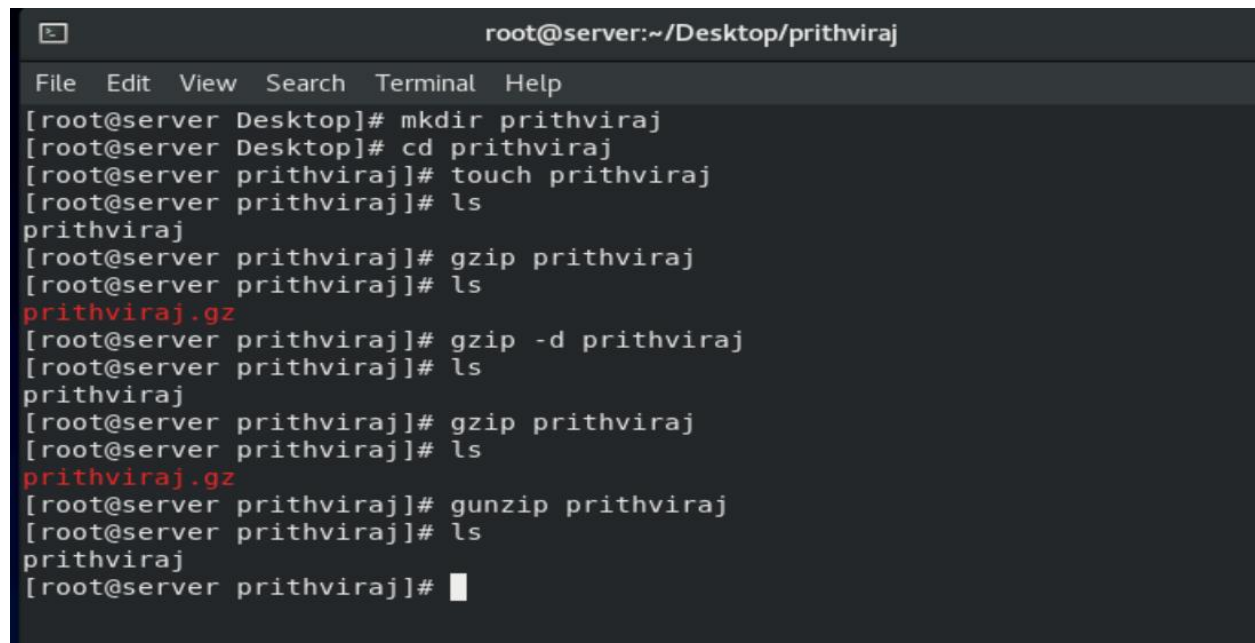
To create zip file and compress it

Cmd:-

gzip file_name

gzip -d file_name (uncompress file)

gunzip file_name (decompress file)



```
root@server:~/Desktop/prithviraj
File Edit View Search Terminal Help
[root@server Desktop]# mkdir prithviraj
[root@server Desktop]# cd prithviraj
[root@server prithviraj]# touch prithviraj
[root@server prithviraj]# ls
prithviraj
[root@server prithviraj]# gzip prithviraj
[root@server prithviraj]# ls
prithviraj.gz
[root@server prithviraj]# gzip -d prithviraj
[root@server prithviraj]# ls
prithviraj
[root@server prithviraj]# gzip prithviraj
[root@server prithviraj]# ls
prithviraj.gz
[root@server prithviraj]# gunzip prithviraj
[root@server prithviraj]# ls
prithviraj
[root@server prithviraj]#
```

```
root@server:~/Desktop
File Edit View Search Terminal Help
[root@server ~]# ls
anaconda-ks.cfg Desktop f3 prg1.java Templates
app.11c dir1 file prg2.java test1
app11.c Documents initial-setup-ks.cfg prithvi testfile1
assignment2 Downloads IT Public Videos
cal f1 oldfile script1
cv f2 Pictures sum
[root@server ~]# cd Desktop
[root@server Desktop]# pwd
/root/Desktop
[root@server Desktop]#
```

28. tar

It is used for archile file(many file keep into the single file)

Cmd:-

`tar -cf file_name.tar f1 f2 f3.....`

*how to see content of archile file

`tar -tf file_name.tar`

*extract the archile file content

`tar -xf file_name.tar`

*create archile file as zip

`tar -czf file_name.tar.zip f1 f2 f3`

*how to see content of archile zip file

`tar -tzf file_name.tar.gz`

* extract the archile zip file content

`tar -xzf file_name.tar.gz`

```
root@server:~
File Edit View Search Terminal Help
[root@server ~]# touch
touch: missing file operand
Try 'touch --help' for more information.
[root@server ~]# touch 1
[root@server ~]# touch 2
[root@server ~]# touch 3
[root@server ~]# ls
1          cal          f2          prg1.java  test1
2          cv           f3          prg2.java  testfile1
3          Desktop      file        prithvi    Videos
anaconda-ks.cfg  dir1         initial-setup-ks.cfg  Public
app.11c         Documents    IT          script1
app11.c         Downloads    oldfile     sum
assignment2     f1          Pictures     Templates
[root@server ~]# tar -cf prithviraj.tar 1 2 3
[root@server ~]# ls
1          cal          f2          prg1.java  Templates
2          cv           f3          prg2.java  test1
3          Desktop      file        prithvi    testfile1
anaconda-ks.cfg  dir1         initial-setup-ks.cfg  prithviraj.tar  Videos
app.11c         Documents    IT          Public
app11.c         Downloads    oldfile     script1
assignment2     f1          Pictures     sum
[root@server ~]#
```

```
root@server:~
File Edit View Search Terminal Help
[root@server ~]# tar -tf prithviraj.tar
1
2
3
[root@server ~]# tar -xf prithviraj.tar
[root@server ~]# ls
1          cal          f2          prg1.java  Templates
2          cv           f3          prg2.java  test1
3          Desktop      file        prithvi    testfile1
anaconda-ks.cfg  dir1         initial-setup-ks.cfg  prithviraj.tar  Videos
app.11c         Documents    IT          Public
app11.c         Downloads    oldfile     script1
assignment2     f1          Pictures     sum
[root@server ~]# tar -czf prithviraj.zip 1 2 3
[root@server ~]# ls
1          cal          f2          prg1.java  sum
2          cv           f3          prg2.java  Templates
3          Desktop      file        prithvi    test1
anaconda-ks.cfg  dir1         initial-setup-ks.cfg  prithviraj.tar  testfile1
app.11c         Documents    IT          prithviraj.zip  Videos
app11.c         Downloads    oldfile     Public
assignment2     f1          Pictures     script1
[root@server ~]# tar -tzf prithviraj.tar.gz
tar (child): prithviraj.tar.gz: Cannot open: No such file or directory
```

29.whoami:-

Show current login username on to the shell

Cmd:-

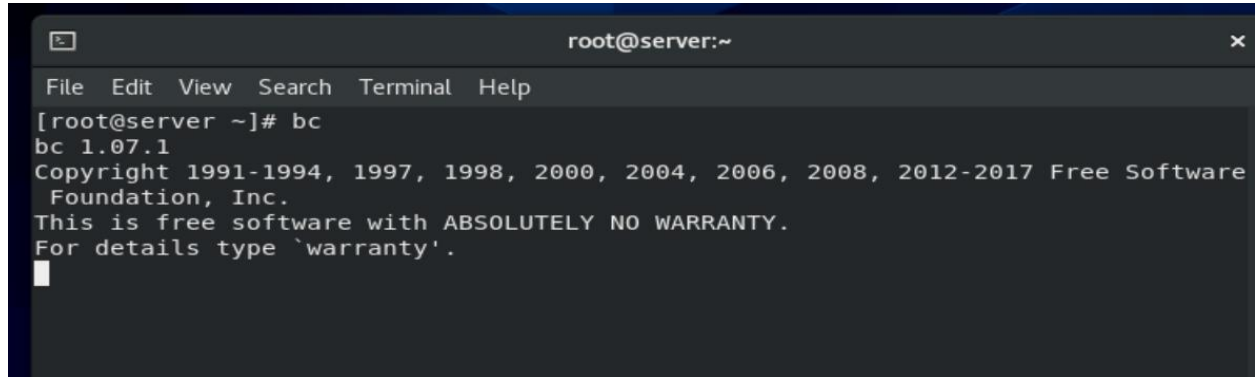
whoami

32.bc

For calculation

Cmd:-

bc

A terminal window titled 'root@server:~' with a menu bar (File, Edit, View, Search, Terminal, Help). The command '[root@server ~]# bc' has been entered. The output shows 'bc 1.07.1' followed by copyright information: 'Copyright 1991-1994, 1997, 1998, 2000, 2004, 2006, 2008, 2012-2017 Free Software Foundation, Inc.' and a disclaimer: 'This is free software with ABSOLUTELY NO WARRANTY. For details type `warranty`.' A cursor is visible on the line following the disclaimer.

```
root@server:~  
File Edit View Search Terminal Help  
[root@server ~]# bc  
bc 1.07.1  
Copyright 1991-1994, 1997, 1998, 2000, 2004, 2006, 2008, 2012-2017 Free Software  
Foundation, Inc.  
This is free software with ABSOLUTELY NO WARRANTY.  
For details type `warranty`.  
█
```

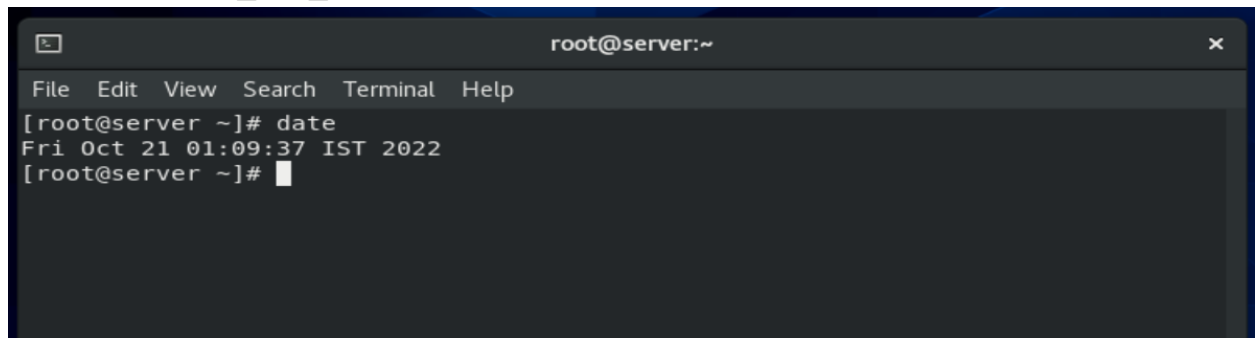
33.date

Show current date and time of system

Cmd:-

date

date -s "date_and_time"

A terminal window titled 'root@server:~' with a menu bar (File, Edit, View, Search, Terminal, Help). The command '[root@server ~]# date' has been entered. The output shows the current date and time: 'Fri Oct 21 01:09:37 IST 2022'. The prompt '[root@server ~]#' is visible again with a cursor.

```
root@server:~  
File Edit View Search Terminal Help  
[root@server ~]# date  
Fri Oct 21 01:09:37 IST 2022  
[root@server ~]# █
```

34.wc

(Word count) how many word and character in file

Cmd:-

wc file_name

wc -l file_name (I want to know only files)

```
root@server:~  
File Edit View Search Terminal Help  
[root@server ~]# ls  
1 cal f2 prg1.java sum  
2 cv f3 prg2.java Templates  
3 Desktop file prithvi test1  
anaconda-ks.cfg dir1 initial-setup-ks.cfg prithviraj.tar testfile1  
app.11c Documents IT prithviraj.zip Videos  
app11.c Downloads oldfile Public  
assignment2 f1 Pictures script1  
[root@server ~]# wc anaconda-ks.cfg  
49 142 1605 anaconda-ks.cfg  
[root@server ~]#
```

35.touch:-

To create empty file

Cmd:-

touch file_name

```
root@server:~  
File Edit View Search Terminal Help  
[root@server ~]# touch ved  
[root@server ~]# ls  
1 cal f1 Pictures script1  
2 cv f2 prg1.java sum  
3 demo1 f3 prg2.java Templates  
anaconda-ks.cfg Desktop file prithvi test1  
app.11c dir1 initial-setup-ks.cfg prithviraj.tar testfile1  
app11.c Documents IT prithviraj.zip ved  
assignment2 Downloads oldfile Public Videos  
[root@server ~]#
```

36.echo

Print something in command line

Cmd:-

echo "message"

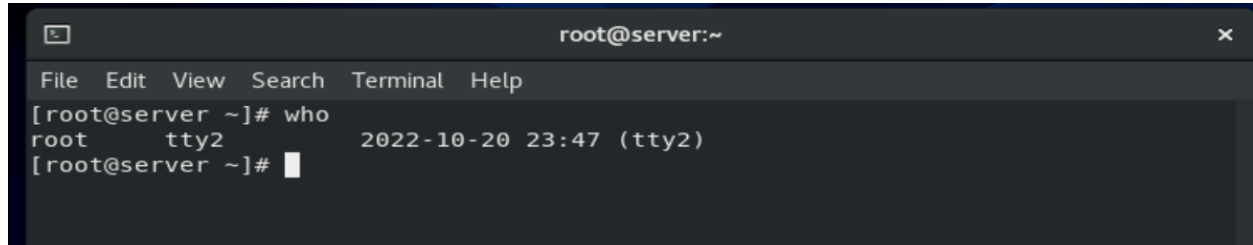
```
root@server:~  
File Edit View Search Terminal Help  
[root@server ~]# echo "i am poem writer"  
i am poem writer  
[root@server ~]#
```


37.who

Show is user login to terminal

Cmd:-

who

A screenshot of a terminal window titled 'root@server:~'. The terminal has a menu bar with 'File', 'Edit', 'View', 'Search', 'Terminal', and 'Help'. The command '[root@server ~]# who' has been entered, and the output is displayed as 'root tty2 2022-10-20 23:47 (tty2)'. The prompt '[root@server ~]#' is shown again with a cursor.

```
root@server:~  
File Edit View Search Terminal Help  
[root@server ~]# who  
root    tty2          2022-10-20 23:47 (tty2)  
[root@server ~]#
```

38.w

Show resources of the system

Cmd:-

w