

Experiment No :7**DATE:20/03/2023****Aim: Familiarisation of Linux Commands****Co2: Perform system administration Task****Procedure :**

1. **Expr** The expr command is used to evaluate a given expression and display its output
\$expr 12 - 8
Output:

```
student@t2:~$ expr 12 - 8
4
student@t2:~$ expr 12 \* 4
48
student@t2:~$ expr 12 / 4
3
student@t2:~$ expr 12 + 4
16
student@t2:~$
```

2. **Df** -to display the disk space used in the file system. The 'df' stands for "disk filesystem."
\$df
Output:

3. **Du**- Command du stands for Disk Usage. It is used to check the information of disk usage of files and directories on a system
\$du s=Desktop
Output:

```
student@t2:~$ du Desktop
4      Desktop/20-03-22
308    Desktop/me/nwe
492    Desktop/me
520    Desktop
student@t2:~$
```

4. **Sudo useradd** -The useradd command creates a new user account
\$sudo useradd sobin
Output:

```
mca@t2:~$ sudo useradd sobin
[sudo] password for mca:
mca@t2:~$ sudo useradd sobin
useradd: user 'sobin' already exists
mca@t2:~$
```

5. **Sudo Passwd** - The passwd command changes passwords for user accounts.

\$sudo passwd sobin

Output:

```
mca@t2:~$ sudo passwd sobin
New password:
Retype new password:
passwd: password updated successfully
mca@t2:~$
```

6. **Sudo groupadd** - groupadd command creates a new group account

\$sudo groupadd -g 788 mcastudent

Output:

```
mca@t2:~$ sudo groupadd -g 788 mcastudent
mca@t2:~$
```

7. **Usermod -G** – Adding a existing user to group

\$sudo usermod -G mcastudent sobin

Output:

```
mca@t2:~$ sudo usermod -G mcastudent sobin
mca@t2:~$ id sobin
uid=1004(sobin) gid=1005(sobin) groups=1005(sobin),788(mcastudent)
mca@t2:~$
```

8. **Id** - id command in Linux is used to find out user and group names and numeric ID's (UID or group ID) of the current user or any other user

\$id sobin

Output:

```
mca@t2:~$ id sobin
uid=1004(sobin) gid=1005(sobin) groups=1005(sobin),788(mcastudent)
mca@t2:~$
```

9. **Compugen -g** - The compgen command is a Linux utility command that is used to list all the commands that can be executed in a Linux terminal, and when used with a **-u** flag we can simply print all the users present on Linux.

\$compugen -g

Output:

```
mca@t2:~$ compgen -g
root
daemon
bin
sys
adm
tty
disk
lp
mail
news
uucp
man
proxy
kmem
dialout
fax
voice
cdrom
floppy
tape
sudo
audio
dip
www-data
backun
```

10. **Chmod** - Linux chmod command is used to change the access permissions of files and directories. It stands for change mode.

\$chmod -wx file1.txt

Output:

```
mca@t2:~$ cd Desktop
mca@t2:~/Desktop$ cat >file1.txt
hello

mca@t2:~/Desktop$ chmod -wx file1.txt
mca@t2:~/Desktop$ cat >> file1.txt
bash: file1.txt: Permission denied
mca@t2:~/Desktop$
```

\$chmod +wre file1.txt

Output:

```
mca@t2:~/Desktop$ chmod +wrx file1.txt
mca@t2:~/Desktop$ cat >> file1.txt
new content
added
mca@t2:~/Desktop$ cat file1.txt
hello

new content
added
mca@t2:~/Desktop$
```

- 11. Chown** - Linux chown command is used to change a file's ownership, directory, or symbolic link for a user or group. The chown stands for change owner.

\$sudo chown sobin file1.txt

Output:

```
mca@t2:~/Desktop$ sudo chown sobin file1.txt
[sudo] password for mca:
mca@t2:~/Desktop$ ls -l file1.txt
-rwxrwxr-x 1 sobin mca 25 Mar 20 11:59 file1.txt
mca@t2:~/Desktop$ chmod +wrx file1.txt
chmod: changing permissions of 'file1.txt': Operation not permitted
mca@t2:~/Desktop$
```

- 12. Userdel** - userdel command in Linux system is used to delete a user account and related files.

\$sudo userdel sobin

Output:

```
mca@t2:~/Desktop$ sudo userdel sobin
mca@t2:~/Desktop$ sudo userdel sobin
userdel: user 'sobin' does not exist
mca@t2:~/Desktop$
```

- 13. Groupdel** - groupdel command is used to delete a existing group.

\$sudo groupdel mcastudent

Output:

```
mca@t2:~/Desktop$ sudo groupdel mcastudent
mca@t2:~/Desktop$ sudo groupdel mcastudent
groupdel: group 'mcastudent' does not exist
mca@t2:~/Desktop$
```