# Saurav kumar BCA 3A 23/SCA/BCA/051

### Command: who

```
alan@alan-virtual-machine:~$ who
alan tty2 2024-10-10 13:42 (tty2)
```

### Command: whoami

```
alan@alan-virtual-machine:~$ whoami alan
```

#### Command: man

```
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)
```

### Command: cal

```
alan@alan-virtual-machine:~$ cal 08 2020
August 2020
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
```

### Command: date

```
alan@alan-virtual-machine:~$ date "+%d %m %Y"
10 10 2024
```

## Command: echo

```
alan@alan-virtual-machine:~$ echo "This is the echo command"
This is the echo command
```

### Command: passwd

```
alan@alan-virtual-machine:~$ passwd
Changing password for alan.
Current password:
New password:
Retype new password:
passwd: password updated successfully
```

### Command: cat

```
alan@alan-virtual-machine:~$ cat file1.txt
This is test file
```

### Command: Is

```
alan@alan-virtual-machine:~$ ls
alan1 file1.txt file4.txt.gz Pictures testarchive Videos
alanarchive.tar file1.txt.gz Music proxyshell testdir
Desktop file2.txt.gz name1.txt Public testfile1.txt
Documents file3.txt name2.txt snap testfile2.txt
Downloads file4.txt newshell Templates testfile.txt
```

```
alan@alan-virtual-machine:~$ ls -l
total 136
                        4096 Sep 5 09:13 alan1
drwxrwxr-x 3 alan alan
-rw-rw-r-- 1 alan alan 10240 Sep 5 09:16 alanarchive.tar
drwxr-xr-x 3 alan alan
                        4096 Sep
                                 5 09:18 Desktop
drwxr-xr-x 2 alan alan
                        4096 Aug 4 17:23 Documents
                                 5 09:24 Downloads
drwxr-xr-x 2 alan alan
                        4096 Sep
-rw-rw-r-- 1 alan alan
                          18 Sep 26 08:34 file1.txt
-rwxrw-rw- 1 alan alan
                          50 Aug 29 08:36 file1.txt.gz
-rw-rw-r-- 1 alan alan
                          52 Aug 29 08:37
                          39 Aug 29 08:39 file3.txt
-r--r--r-- 1 alan alan
-rw-rw-r-- 1 alan alan
                          57 Sep 26 08:35 file4.txt
-rw-rw-r-- 1 alan alan
                          63 Aug 29 08:40 file4.txt.gz
drwxr-xr-x 2 alan alan
                        4096 Aug 4 17:23 Music
-rw-rw-r-- 1 alan alan 10240 Sep 12 09:27 name1.txt
-rw-rw-r-- 1 alan alan
                          26 Aug 29 09:16 name2.txt
drwxrwxr-x 2 alan alan
                        4096 Sep 26 09:02 newshell
drwxr-xr-x 2 alan alan
                        4096 Aug 4 17:23 Pictures
drwxrwxr-x 3 alan alan
                        4096 Sep 26 09:21 proxyshell
drwxr-xr-x 2 alan alan 4096 Aug 4 17:23 Public
drwx----- 4 alan alan
                        4096 Aug 29 09:07 snap
drwxr-xr-x 2 alan alan
                        4096 Aug 4 17:23 Templates
-rw-rw-r-- 1 alan alan 20480 Sep 12 09:27 testarchive
drwxrwxr-x 2 alan alan
                        4096 Sep 12 09:22 testdir
-rw-rw-r-- 1 alan alan
                          30 Sep 26 08:38 testfile1.txt
-rw-rw-r-- 1 alan alan
                          23 Sep 26 08:39 testfile2.txt
-rw-rw-r-- 1 alan alan
                          20 Sep 12 09:02 testfile.txt
drwxr-xr-x 2 alan alan
                                  4 17:23 Videos
                        4096 Aua
```

```
alan@alan-virtual-machine:~$\ls -x
alan1 alanarchive.tar Desktop Documents Downloads file1.txt file1.txt.gz
file2.txt.gz file3.txt file4.txt file4.txt.gz Music name1.txt name2.txt
newshell Pictures proxyshell Public snap Templates testarchive
testdir testfile1.txt testfile2.txt testfile.txt Videos
```

```
alan@alan-virtual-machine:~$ ls -R
                              file3.txt
                                                                                   testfile.txt
                                            name1.txt proxyshell testarchive
  anarchive.tar file1.txt
                              file4.txt
                                            name2.txt Public
                file1.txt.gz file4.txt.gz
                                                                    testfile1.txt
                                                                   testfile2.txt
/alan1:
./alan1/alan2:
/alan1/alan2/alan3:
/alan1/alan2/alan3/alan4:
/Desktop:
/Desktop/Cfiles:
/Documents:
/Downloads:
                leapyear.cpp
                                                 pattern3.cpp
                                                                     primeupperlimit.cpp
               'output-onlinefiletools(1).txt'
evenodd.cpp
                                                                     student.cpp
                                                 pattern.cpp
factorial.cpp
              output-onlinefiletools.txt
                                                 primeandeven.cpp
                                                                     sum.cpp
fibonacci.cpp pattern2.cpp
                                                 primenumber.cpp
                                                                     test1.cpp
/Music:
/newshell:
```

### Command: tty

```
alan@alan-virtual-machine:~$ tty
/dev/pts/0
```

#### Command: wc

```
alan@alan-virtual-machine:~$ wc file1.txt
1  4 18 file1.txt
```

## Command: **\$PATH**

alan@alan-virtual-machine:=\$ \$PATH
bash: /usr/local/sbin:/usr/local/bin:/usr/sbin:/sbin:/bin:/usr/games:/usr/local/games:/snap/bin:/snap/bin: No such file or
directory

### Command: cd

#### Command: mkdir

```
alan@alan-virtual-machine:~$ mkdir Alan
alan@alan-virtual-machine:~$ ls
Alan Desktop file1.txt
```

#### Command: rmdir

```
alan@alan-virtual-machine:~$ rmdir Alan
alan@alan-virtual-machine:~$ ls
alan1 Documents file1.txt.gz
```

## Command: pwd

```
alan@alan-virtual-machine:~$ pwd
/home/alan
```

### Command: \$HOME

```
alan@alan-virtual-machine:~$ $HOME bash: /home/alan: Is a directory
```

```
Command: cmp
```

```
alan@alan-virtual-machine:~$ cmp name1.txt name2.txt name1.txt name2.txt differ: byte 15, line 3
```

## Command: comm

```
alan@alan-virtual-machine:~$ comm name1.txt name2.txt
Apple
Google
Microsoft
Oppo
Samsung
Xiaomi
```

#### Command: diff

```
alan@alan-virtual-machine:~$ diff name1.txt name2.txt
3,4c3,4
< Microsoft
< Samsung
---
> Oppo
> Xiaomi
```

## Command: chown

```
alan@alan-virtual-machine:~$ sudo chown alan:sarthak file1.txt
alan@alan-virtual-machine:~$ ll file1.txt
-rw-rw-rw- 1 alan sarthak 23 Aug 29 08:36 file1.txt
```

## Command: chgrp

```
alan@alan-virtual-machine:~$ sudo groupadd class
alan@alan-virtual-machine:~$ sudo chgrp class file1.txt
alan@alan-virtual-machine:~$ ll file1.txt
-rw-rw-rw- 1 alan class 23 Aug 29 08:36 file1.txt
```

### Command: chmod

```
alan@alan-virtual-machine:~$ ll file3.txt
-rw-rw-r-- 1 alan alan 39 Aug 29 08:39 file3.txt
alan@alan-virtual-machine:~$ chmod u+x file3.txt
alan@alan-virtual-machine:~$ ll file3.txt
-rwxrw-r-- 1 alan alan 39 Aug 29 08:39 file3.txt*
```

```
alan@alan-virtual-machine:~$ chmod 444 file3.txt
alan@alan-virtual-machine:~$ ll file3.txt
-r--r-- 1 alan alan 39 Aug 29 08:39 file3.txt
```

## Command: gzip and gunzip

```
alan@alan-virtual-machine:~$ ls
                               file3.txt
                                             name1.txt Public
               file1.txt.gz
                                             name2.txt snap
                                                                  testfile.txt
alan@alan-virtual-machine:~$ gzip file3.txt
alan@alan-virtual-machine:~$ ls
alanarchive.tar Downloads
Desktop file1.txt.
                                             name1.txt Public
                                                                  testfile.txt
                file1.txt.gz
                                             name2.txt snap
alan@alan-virtual-machine:~$ gunzip file3.txt.gz
alan@alan-virtual-machine:~$ ls
                               file3.txt
                                             name1.txt Public
                 file1.txt.gz
                                                                  testfile.txt
                                             name2.txt snap
alan@alan-virtual-machine:~$
```

#### Command: tar cf, tar tf, tar xf

```
alan@alan-virtual-machine:~$ tar cf testarchive name1.txt name2.txt
alan@alan-virtual-machine:~S ls
                                                                             testfile.txt
                              file3.txt
                                            name1.txt Public testarchive Videos
                file1.txt.gz
                                            name2.txt snap
alan@alan-virtual-machine:~$ tar tf testarchive
name1.txt
name2.txt
alan@alan-virtual-machine:~$ tar xf testarchive
alan@alan-virtual-machine:~$ ls
                                                                             testfile.txt
                                            name1.txt Public
                              file3.txt
                                                                testarchive Videos
                                            name2.txt snap
alan@alan-virtual-machine:~$
```

### Command: head

```
alan@alan-virtual-machine:~$ head -n 3 name1.txt
Apple
Google
Microsoft
```

### Command: tail

```
alan@alan-virtual-machine:~$ tail -n 2 name1.txt
Microsoft
Samsung
```

## Command: grep

```
alangalan-virtual-machine: $ man rm | grep -i "remove"

rm - remove files or directories

This manual page documents the GNU version of rm. rm removes each specified file. By default, it does not remove direc-
--interactive=always option is given, rm prompts the user for whether to remove the file. If the response is not affir-
Remove (unlink) the FILE(s).

do not remove '/' (default); with 'all', reject any command line argument on a separate device from its parent
remove directories and their contents recursively
remove empty directories

By default, rm does not remove directories. Use the --recursive (-r or -R) option to remove each listed directory, too,
To remove a file whose name starts with a '-', for example '-foo', use one of these commands:
Note that if you use rm to remove a file, it might be possible to recover some of its contents, given sufficient exper-
```

#### Command: sort

```
alan@alan-virtual-machine:~$ cat companies.txt
Google
Xiaomi
Oppo
Apple
alan@alan-virtual-machine:~$ sort companies.txt
Apple
Google
Oppo
Xiaomi
```

```
alan@alan-virtual-machine:~$ cat > numbers.txt
9
4
12
15
3
^Z
[8]+ Stopped cat > numbers.txt
alan@alan-virtual-machine:~$ sort -n numbers.txt
3
4
9
12
```

```
alan@alan-virtual-machine:~$ sort -r name2.txt
Samsung
Microsoft
Google
Apple
```

# Command: cp

```
alan@alan-virtual-machine:~$ cp name1.txt name2.txt
alan@alan-virtual-machine:~$ cat name2.txt
Apple
Google
Microsoft
Samsung
```

Command: mv

```
alan@alan-virtual-machine:~$ mv alan alan_test
alan@alan-virtual-machine:~$ ls alan_test
alan
```