Bc:- For using basic calculator.

```
ayushmaan@ASJ:~/Music$ 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'.
2+6
8
```

Cat:- open the file.

```
ayushmaan@ASJ:~/Music/asj$ cat asj
Ayushmaan SIngh Jamwal 2021A1R052
ayushmaan@ASJ:~/Music/asj$
```

Cat -e :- Put \$ at the end of line.

```
ayushmaan@ASJ:~/Music$ cat -e b.txt
Hello$
good morning$
ayushmaan@ASJ:~/Music$
```

Cat 1filename>2filename:- To copy paste the file.

```
ayushmaan@ASJ:~/Music$ cat b.txt>c.txt
ayushmaan@ASJ:~/Music$ cat b.txt
ayush
ayush
ayushmaan@ASJ:~/Music$ cat c.txt
ayush
```

Cat 1filename>>2filename:- Add the content of 1 file in the 2 file.

```
ayushmaan@ASJ:~/Music$ cat b.txt>>c.txt
ayushmaan@ASJ:~/Music$ cat c.txt
ayush

Hello
ayushmaan@ASJ:~/Music$
```

Cat –n:-To show the number of lines.

```
ayushmaan@ASJ:~/Music$ cat -n b.txt

1 Hello
2 good morning
```

Cat >> filename:- It helps to write the content and then add that content with the previous content of the file.

```
ayushmaan@ASJ:~/Music$ cat >>b.txt
good morning
ayushmaan@ASJ:~/Music$ cat b.txt
Hello
good morning
ayushmaan@ASJ:~/Music$
```

Cd <path>:- open a particular directory using path

```
ayushmaan@ASJ:~$ cd Music/asj
ayushmaan@ASJ:~/Music/asj$
```

Cd:- To go to home directory

```
ayushmaan@ASJ:~/Music$ cd
ayushmaan@ASJ:~$
```

#### Cp:- For copy and paste

```
ayushmaan@ASJ:~/Music$ cat b.txt
jnn
ayushmaan@ASJ:~/Music$ cat c.txt
okpl
ayushmaan@ASJ:~/Music$ cp b.txt c.txt
ayushmaan@ASJ:~/Music$ cat b.txt
jnn
ayushmaan@ASJ:~/Music$ cat c.txt
jnn
ayushmaan@ASJ:~/Music$ cat c.txt
```

## Cp –b 1filename 2filename:- To create a backup file

```
ayushmaan@ASJ:~/Music$ cp -b b.txt c.txt
ayushmaan@ASJ:~/Music$ ls
asj b.txt c.txt c.txt~
ayushmaan@ASJ:~/Music$
```

Cp -I :- To ask for the overwrite permission.

```
ayushmaan@ASJ:~/Music$ cp -i b.txt c.txt cp: overwrite 'c.txt'? y
```

Cp –v 1filename 2filename:- To print the path

```
ayushmaan@ASJ:~/Music$ cp -v b.txt c.txt
'b.txt' -> 'c.txt'
```

```
Grep -B1 "word" "filename":- To print lower line.
```

```
ayushmaan@ASJ:~/Mustc$ grep -B1 "welcome" "a.txt"
hello
```

Grep -c word filename:- Display the number of lines in which the given word is found ayushmaan@ASJ:~/Music\$ grep -c miet a.txt

Grep –v word filename:- Delete the line containing the word

```
ayushmaan@ASJ:~/Music$ grep -v miet a.txt
hello
welcome
to
ayushmaan@ASJ:~/Music$
```

Mkdir –help:- To display the help related information.

```
sj$ mkdir --help
Usage: mkdir [OPTION]... DIRECTORY...
Create the DIRECTORY(ies), if they do not already exist.
Mandatory arguments to long options are mandatory for short options too.
 -m, --mode=MODE set file mode (as in chmod), not a=rwx - umask
                     no error if existing, make parent directories as needed
  -p, --parents
                      print a message for each created directory
  -v, --verbose
                         set SELinux security context of each created directory
                           to the default type
      --context[=CTX] like -Z, or if CTX is specified then set the SELinux or SMACK security context to CTX
      --help
                 display this help and exit
      --version output version information and exit
GNU coreutils online help: <https://www.gnu.org/software/coreutils/>
Full documentation <https://www.gnu.org/software/coreutils/mkdir>
or available locally via: info '(coreutils) mkdir invocation'
```

### Mv –b :- For creating a backup also

```
ayushmaan@ASJ:~/Music/asj$ mv -b asj ~/Music/asj/jammu
ayushmaan@ASJ:~/Music/asj$ ls
ayushmaan b <mark>ja</mark>mmu
ayushmaan@ASJ:~/Music/asj$ cd jammu
ayushmaan@ASJ:~/Music/asj/jammu$ ls
a2
   a3 a4 asj
```

#### Mv- n:- check changes before running command

```
ayushmaan@ASJ:~/Music/asj$ mv -n a4 ~/Music/asj/jammu
ayushmaan@ASJ:~/Music/asj$ ls
asj ayushmaan b <mark>jammu</mark>
ayushmaan@ASJ:~/Music/asj$
```

Mv:- to rename a file or directory.

```
ayushmaan@ASJ:~/Music/asj$ ls
a1 a2 a3 a4 asj ayushmaan
ayushmaan@ASJ:~/Music/asj$ mv a1 b
ayushmaan@ASJ:~/Music/asj$ ls
a2 a3 a4
           asj ayushmaan b
ayushmaan@ASJ:~/Music/asj$
```

Nano:- To write content in a file.

```
ayushmaan@ASJ:~/Music/asj$ nano asj
ayushmaan@ASJ:~/Music/asj$
 GNU nano 6.2
                                          asj *
Ayushmaan SIngh Jamwal 2021A1R052
             ^O Write Out <sup>^W</sup> Where Is
^R Read File ^\ Replace
                                       ^K Cut
^U Past
                                                      ^T Execute
                                                                   ^C Location
```

Rm \*.extension:- To delete the files with a particular extension

```
ayushmaan@ASJ:~/Music$ rm *.txt
ayushmaan@ASJ:~/Music$ ls
asj c.txt~
```

Justify

Go To Line

Ls:- To display all the folders

Exit

Rm -I \*.extension:- Ask for the permission to delete the files with a particular extension.

```
ayushmaan@ASJ:~/Music$ rm -i *.txt
rm: remove regular empty file 'a.txt'? y
ayushmaan@ASJ:~/Music$
```

Tac 1filename 2filename: Print the content of both the files in reverse order

```
ayushmaan@ASJ:~/Music$ tac b.txt c.txt
ayush
ayush
```

```
ayushmaan@ASJ:~/Music/asj$ touch ayushmaan
ayushmaan@ASJ:~/Music/asj$ ls
ayushmaan
ayushmaan@ASJ:~/Music/asj$
```

Touch:- To create a file.

Touch filename{from..to}:- To create multiple files.

```
ayushmaan@ASJ:~/Music/asj$ touch a{1..4}
ayushmaan@ASJ:~/Music/asj$ ls
              ayushmaan
a1 a2
       a3
           a4
```

Whoami:- print the username.

```
ayushmaan@ASJ:~$ whoami
ayushmaan
```

```
ayushmaan@ASJ:~/Music$ rm a.txt
                        ayushmaan@ASJ:~/Music$ ls
                        asj b.txt c.txt
Rm filename:- To delete the file. ayushmaan@ASJ:~/Music$
```

Pwd:- Print the current working directory

```
ayushmaan@ASJ:~$ pwd
/home/ayushmaan
```

Cd..:- To move back to previous directory.

```
ayushmaan@ASJ:~/Music/asj$ cd ...
ayushmaan@ASJ:~/Music$
```

Cd:- To navigate between various directory.

```
ayushmaan@ASJ:~$ cd Music
ayushmaan@ASJ:~/Music$
```

Mkdir:- To create a directory.

```
ayushmaan@ASJ:~/Music/asj$ mkdir Ayushmaan
ayushmaan@ASJ:~/Music/asj$ ls
a1 a2 a3 a4 asj ayushmaan Ayushmaan
ayushmaan@ASJ:~/Music/asj$
```

Mv –I:- Ask for the permission to overwrite.

```
ayushmaan@ASJ:~/Music/asj$ ls
a2 a3 a4 asj ayushmaan b jammu
ayushmaan@ASJ:~/Music/asj$ mv -i a2 ~/Music/asj/jammu
ayushmaan@ASJ:~/Music/asj$ cd jammu
ayushmaan@ASJ:~/Music/asj/jammu$ ls
a2
ayushmaan@ASJ:~/Music/asj/jammu$
```

Ls-la:- Show all the files including the hidden files also.

```
total 80
drwxr-x--- 16 ayushmaan ayushmaan 4096 Sep 22 13:34 .
drwxr-xr-x 3 root root 4096 Sep 8 13:59 .
-rw------ 1 ayushmaan ayushmaan 441 Sep 22 14:25 .bash_history
-rw-r--r-- 1 ayushmaan ayushmaan 220 Sep 8 13:59 .bash_logout
-rw-r--r-- 1 ayushmaan ayushmaan 4096 Sep 22 13:10 .cache
drwx----- 10 ayushmaan ayushmaan 4096 Sep 22 13:25 .config
drwxr-xr-x 2 ayushmaan ayushmaan 4096 Sep 8 19:54 Desktop
drwxr-xr-x 2 ayushmaan ayushmaan 4096 Sep 8 19:54 Documents
drwxr-xr-x 2 ayushmaan ayushmaan 4096 Sep 22 13:29 Downloads
drwx----- 2 ayushmaan ayushmaan 4096 Sep 27 22:23 .gnupg
drwxr-xr-x 2 ayushmaan ayushmaan 4096 Sep 8 19:54 .local
drwxr-xr-x 2 ayushmaan ayushmaan 4096 Sep 8 19:54 .local
drwxr-xr-x 2 ayushmaan ayushmaan 4096 Sep 8 19:54 .local
drwxr-xr-x 2 ayushmaan ayushmaan 4096 Sep 8 19:54 .local
drwxr-xr-x 2 ayushmaan ayushmaan 4096 Sep 8 19:54 .local
drwxr-xr-x 2 ayushmaan ayushmaan 4096 Sep 8 19:54 .local
drwxr-xr-x 2 ayushmaan ayushmaan 4096 Sep 8 19:54 .local
drwxr-xr-x 2 ayushmaan ayushmaan 4096 Sep 8 19:54 .local
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drwxr-xr-x 2 ayushmaan ayushmaan 4096 Sep 8 19:54 .local
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drwxr-xr-x 2 ayushmaan ayushmaan 4096 Sep 8 19:54 .local
drwxr-xr-x 2 ayushmaan ayushmaan 4096 Sep 8 19:54 .local
drwxr-xr-x 2 ayushmaan ayushmaan 4096 Sep 8 19:54 .local
drwx----- 2 ayushmaan ayushmaan 4096 Sep 8 19:54 .local
drwx----- 2 ayushmaan ayushmaan 4096 Sep 8 19:54 .local
drwx----- 2 ayushmaan ayushmaan 4096 Sep 8 19:54 .local
```

Grep word filename:- To highlight a word in the file.

```
ayushmaan@ASJ:~/Music$ grep miet a.txt
miet
ayushmaan@ASJ:~/Music$
```

Hostname:- Print the name of the host.

```
ayushmaan@ASJ:~$ hostname
ASJ
```

#### Rmdir:- To delete the directory

```
ayushmaan@ASJ:~/Music/asj/Ayushmaan/Ayushmaan/Asj$ rmdir 52
ayushmaan@ASJ:~/Music/asj/Ayushmaan/Ayushmaan/Asj$ ls
ayushmaan@ASJ:~/Music/asj/Ayushmaan/Ayushmaan/Asj$
```

# Grep -A1 "word" "filename":- To Print the upper line

```
ayushmaan@ASJ:~/Music$ grep -A1 "welcome" "a.txt"
welcome
to
```

## Grep –C1 "word" "filename":- To print both upper and lower line.

```
ayushmaan@ASJ:~/Music$ grep -C1 "welcome" "a.txt"
hello
welcome
to
```

## Date:- Display day, date ,month , time and timezone.

```
ayushmaan@ASJ:~/Music$ date
Wednesday 28 September 2022 09:40:20 PM IST
```