

Common Shell Commands

① whoami :-

→ It displays the username of the current user.

Ex :- \$whoami

O/P sonali

② Uname :-

→ Displays the information about the system.

Syntax :- Uname [option]

① Ex :- \$Uname -a → It prints all the system info.
Ex:- kernel name, kernel release date etc.

② \$Uname -s → It prints the kernel name.

③ \$Uname -n → Prints the current computer name.

④ \$Uname -r → Prints the kernel release date.

⑤ \$Uname -v → Prints the version of the current kernel.

⑥ \$Uname -m → Prints the machine hardware name.

⑦ \$Uname -p → Prints the type of the processor.

⑧ \$Uname -o → Prints the name of the operating system.

③ Id :- use to find out the current User ID or any other user in the server.

Syntax :- `Id [option]... [user]`

Options :-

① `id -u master` :- Prints the user ID.

② `id -g master` :- Prints the group ID.

③ `id -n master` :- Prints name instead of number.

④ PS :- PS command is used to list the current running processes and their PID's along with some other information depending on option.

Syntax :- `PS [option]`

Options :-

① `-A`, `-e` :- View all the running process.

⑤ TOP :- This command shows the summary information of the system and the list of processes or threads which are currently managed by the Linux Kernel.

Eg :- `top -n 10`.

Note :- Press `q` to exit.

df :- The df command is used to display information related to file system about total space and available space.

Syntax :- `df [option]... [file]..`

↳ Path of the file

man :- It is used to display the user manual of any command we can even run on the terminal.

Syntax :- `$ man [Command Name]`

Eg :- `$ man printf`

date :- It is used to display (or) set the date and time of the system.

Syntax :- `$ date`

Eg :- `$ date --date = "2 months ago"`

O/P → Thu Aug 10 23:54:51 PDT 2017

working with files:-

CP:- stands for copy. It is used to copy files (or) directories.

Syntax:- `cp [option] source Destination`
`cp [option] source Directory`

It is used to \leftarrow `cp [option] source1 source2 sourceN directory`
copy multiple files to directory.

(Eg:- Suppose a directory named xyz having a txt file a.txt.

`$ls`

`o/p a.txt`

`$cp a.txt b.txt`

`$ls`

`a.txt b.txt`

(2) MV:- It is used to move one or more files or directories from one place to another.

Syntax: `mv [option] source destination`

\rightarrow mv is also used for renaming the file.

Example.

```
$ ls o/p a.txt b.txt c.txt d.txt
```

```
$ mv a.txt sonali.txt
```

```
$ ls
```

```
b.txt c.txt d.txt sonali.txt
```

rm :- Removes files or directories. Once you delete the files then you are not able to recover the content of file or directories.

Syntax :- `rm [option] ... file...`

Eg :-

```
$ ls
```

```
a.txt b.txt c.txt d.txt
```

```
$ rm a.txt
```

```
b.txt c.txt d.txt
```

touch :- It is used to create a file without any content. The file created using touch command is empty.

Syntax :- `touch file-name`

Cat :- It is used to create file with content

```
$ cat filename.
```

O/P → It will show content of given file name.

To create a file.

\$cat >newfile.

O/P → will create and a file named newfile

chmod :- It is used to change the access mode of a file.

change — chmod. — Mode.

Syntax :- chmod [reference] [operator] [mode] file.

References :-

u

user

owner

g

group

o

others

a

all.

Operators :-

+

add the specified modes to the specified classes.

-

Removes the specified modes from the specified classes.

= The mode specified are to be made the exact modes for the specified classes.

mode (permission) :-

r - Read
w - Write
x - Execute.

wc :- Get count of line, words, characters in a file.

Syntax :- `wc [option] ... [file]..`

Options :-
- l → Number of lines
- w → Number of words
- c → Count of bytes present in the file.

grep :- Return lines in file matching pattern.

Syntax :- `grep [options] pattern [files]`

Navigating and working with directories.

① ls :- List the files and directories.

② find :- It can be used to find files and directories.

Eg:- \$ find ./C4F -name sample.txt.

It will search for sample.txt in C4F directory.

O/P → ./C4F/demo2/sample.txt.

③ Pwd :-

P W D.
Print ← ↓ → Directory.
 working

Pwd -L: Prints the symbolic path.

Pwd -P: Prints the actual path.

④ mkdir :- Make Directory.

Syntax: mkdir [options] [directories...]

⑤ cd :- Change Directory.

Syntax: cd [directory]

To move inside a subdirectory

\$ cd [directory-name].

⑥ rm -rf :- It is used to removed the empty directory.

For printing file and string content :-

more :- Prints the page content page by page.

Replace the pattern with any string that you want to find in the text file

Syntax :- more [option] [-num] [+pattern] [+linenum]

[file_name]

From where you want to display text content.
No. of lines you want to display per screen
{ -d, -l, -f, -P, -C, -S, -u }

Head :- without any option, it displays only the first 10 lines of the file specified.

Syntax :- \$head [file-name]

Tail :- It is a complementary of head command. By default it will print the last 10 lines of the specified file.

Syntax :- \$tail [file-name]

echo :- It is used to display line of text that are ~~us~~ passed as an argument.

Syntax :- \$echo [string]

Eg:- \$ echo "Hello"

o/p → Hello

options :- (1) \n → New line.

```
$ echo "Hello\n Good Morning"
```

O/p → Hello
Good Morning.

(2) \t → tab space.

```
$ echo "Hello\t Good Morning"
```

O/p → Hello Good Morning.

Note :- echo * work as is command.

Compression and archiving Commands -

(1) for :- for command in linux is used to repeatedly execute set of command for every element present in the list.

Syntax :- for Name [in words...];
do
Commands;
done.

Example :-

```
$ for i in 0 1 2 3 4
do
echo $i
done
```

O/p → 0
1
2
3
4

② Zip :- Zip is used to compress the files to reduce file size also used as file package Utility.

To compress a file with zip command.

```
$zip zipfile file-name
```

lets create a file file1.doc using touch command.

```
$touch file1.doc
```

Now we are going to zip it to files.zip.

```
$zip files.zip file1.doc
```

To verify the creation of the zipped file use the ls command.

```
ls -l.
```

③ Unzip :- If the unzip command isn't installed on your system, then run

```
sudo apt-get install unzip
```

After installing the unzip utility, if you want to extract the file

```
unzip file.zip -d destination-folder
```

If the source and destination and destination directories are the same.

```
Unzip file.zip
```

Networking Commands :-

① Hostname :- It is used to obtain the DNS name (Or) Network Information system domain name.

Syntax : `hostname`.

② Ifconfig :- It is used to configure the kernel resident network interfaces. It is used at the boot time to set up the interface.

→ After that it is needed during debugging.

→ Also this command is used for assigning IP address to interface.

Syntax : `System% ifconfig [option] interface`

③ Ping :- It is used to check the network connectivity b/w host and server.

To get the ping version installed on system.

```
sudo ping -v
```

```
ping www.abc.org.
```

To stop ping use `ctrl+C`

④ Curl :- curl is a command line tool to transfer data to or from a server
→ curl can transfer multiple files at a time.

Syntax :- curl [option]

⑤ wget :- It is used to download files from the server even when the user has not logged on to the system. and it can work in the background without hindering the current process.

Syntax :- wget [option] [url]

Ex:- To simply download a webpage

~~wget [option] [url]~~

wget http://example.com/sample.php