

# LINUX

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\* TO check current location  
Command - pwd - print working directory

\* How to display name of current logged-in user?

Command - whoami

\* TO check system date or time

command - date

date +%D - for date only

date +%T - For time only

date +%H:%T - for Hours and time.

\* TO display file and directory present in current locations.

command - ls

ls -lt

ls -a - For hidden files

ls -h - Human-readable format

ls -t - Sorts files by modification time, most recently modified first.

ls -s - Sorts files by size.

\* clear to the linux terminal

Command - clear.



# Create Read update and Delete File

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\* To Display content of a file on terminal

command - cat <File>

† How to read a file and search for a word in it.

command - less <File>

\* To view content of a file page by page

command - more <File>

\* To create a file in Linux

command - touch <File-name>

\* How to delete a file in Linux

command - rm <File-name>

\* To edit a file

command - vi <File-name>

nano <File-name>

vi = This command is for creating and editing the file

\* Instead of using touch command we can use vi to create and edit the file

nano - It is an advance version of vi or a simple way

\* To create a directory / Folder

command - mkdir <dir-name>



TO Check IP address  
Command - ifconfig  
or  
ipconfig

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\* TO Remove a directory

Command - rm -r (dir-name)  
rm -rf (dir-name)

\* TO change path or move to another Folder or directory

Command - cd (path)

cd .. = To move back  
one folder,

cd ../.. = To move two  
folder back.

\* Absolute path - The absolute path is a complete and exact address to a file or directory on a computer.

\* It is a path that starts from the root folder.

\* Relative path - describes the location of a file or directory in relation to the current working directory

\* It is a shorter and does not include the full path starting from the root directory

\* To copy and paste a file from one folder to another.

Command = cp (File) path.



\* TO copy content of one file to another file  
command - cp File A File B - file names

\* TO cut and paste a file from one folder to another in Linux

command - mv (File) path

\* TO rename a file  
command - mv File A FileNewName

\* TO read or display top 5 lines from a file in Linux

command - head -5 FileName

\* TO display bottom 5 lines from a file

command - tail -5 File

\* TO sort the content from a file

command - sort File

sort -r File - sorts in  
reverse order

\* TO display unique content from a file

command - sort File | uniq



We can use | pipe operator  
to combine two or many  
commands

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- \* TO search a word and display matching content from a file

Command - grep "word" File

- \* TO search multiple words and display matching content from a file:

command - egrep "word1|word2" File.

- \* TO use wildcards

Command - ls file\*

touch file {1..5}

- \* TO shuffle content of file

command - shuf File

- \* TO count no. of lines in a file

command - wc -l file

- \* TO check two files are identical or not (comparing)

command - ~~diff~~

cmp fileA fileB

- \* TO compare and display difference between two files

command - diff -u fileA fileB

- \* TO find a file

command - find path -name (File)



# Utility Commands

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\* to display previously used commands  
command - history

\* to check syntax and options available for a command.  
command - help

\* to read or get more info about a command  
command - man

\* to check which executable is using for a command  
command - which

\* To use calculator in Linux  
command - bc

\* to check calendar of last year  
command - cal

\* to check How long Server has been running

command - uptime

\* to record your activity on terminal in a file

command - script

\* to print some thing on terminal  
command - echo "Hello"



- \* To create a short-cut of a long command  
command - alias L = "ls -ltr"

↓  
command

alias -P = To check existing  
alias which is created.

- \* It will automatically removed when we layout the server or system.

zip and unzip  
The files and  
folders

- \* To compress a file

command - gzip -k file.

↓  
keep the original  
file

- \* To decompress the file

command - gzip -d file  
gunzip file

- \* To compress a folder

command -

tar -czf myfiles.tar.gz myFiles/

↓  
name of the  
zip file

↓  
File



\* TO decompress a folder,

command -

tar -xzf <FileName>

[extract]

\* TO compress multiple files in one zipped file

command -

zip myFiles.zip file1 file2

\* TO decompress that zipped file which has multiple files in it

command - unzip <FileName>

\* TO check or list files in zipped file

command - unzip -l myFiles.zip

\* TO download file from internet

command - wget URL of file

or

wget -O opt\_File.text URL\_of\_File

\* TO call an API

command - curl APIURL



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command - apt or yum/dnf

- \* to check an application installed or not on Linux

command - rpm -qa | grep app  
dnf list installed

to start / stop a service on linux

command - systemctl start/stop  
service\_name

```
systemctl status servicename
```

4	TO list all services
---	----------------------

command -

```
systemctl list-units --type=service --all
```

- \* to list all existing environment variables

command - printenv



\* To Add new environment variables temporary  
command -

export Java\_Home = " - - - - "

\* To Add a new environment variables permanently

command -

source ~/.bash\_profile

\* To create a permanent env variable  
we have to add that variable in  
.bashrc file with export ex

ex -

export TEST = "ABCD" - \*\*

after adding this on terminal  
we have to do that source  
command ex

ex -

source .bashrc

\* to print specific column from csv  
file.

command -

awk -F , { print \$2 } (File Name)  
                                  |  
                                  column  
                                  NO



- \* To Display starting two characters of all line

Command - ~~cat~~ ~~<file Name>~~

cut -c1-2 <file Name>

- \* To display a specific line from a file

command - sed -n '5p' <File Name>  
line

- \* To change specific word in file

command - sed 's/business /finance' filename

The word      New  
Which want    word  
to change

- \* to convert content to uppercase to lowercase and to delete word and to replace the word.

Command -

tr [:lower:] [:upper:] file

to delete the word or simple or anything → tr -d word or a simple file

tr " / " " & " file  
↳ replace any thing



\* TO extend or shrink size of a file  
command -

truncate -s 100M file.

\* TO change user or login as different user  
in linux

command -

su <user-name>

\* TO exit as current user or close  
terminal

command - exit.

\* IF I am Not root user Then to  
execute admin commands like  
installing new apps?

command - sudo yum install httpd



## Access Remote Servers

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\* TO access remote linux server

Command -

ssh user@hostname



IP address

for accessing the remote server  
we need username, IP address  
and password.

\* TO copy a file to a remote linux server

command -

scp file user@hostname:/tmp/

## Working with permissions

\* Types of permissions

rwX = read, write, executable

rw- = read, write

r-- = read,

etc - - -



- \* To modify permissions of a file  
Command - `chmod atrwx File`  

|  
any permission

t = TO add the permission

- = To remove the permission.

u = for user

$G$  = group

○ = other

$$a = \omega$$

- \* to change ownership of a file  
command - `chown root file.txt`

\* TO change group ownership of a file  
command - chgrp path file

new  
owner



## memory Info

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\* TO check free, RAM space

command - free

free -h - human readable  
format

\* TO check % memory and CPU utilization

command - top

It view the all  
detail like task  
manager

\* TO check disk utilization

command - du

\* TO check file system available and disk  
space allocated

command - df



## System INFO

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- \* To check hostname of Linux Server  
command - hostname
- \* To check cpu / core / thread info of linux server  
command - ls cpu
- \* To check type of architecture of Linux Server  
command - arch
- \* To see list of storage devices disk partition  
command - ls blk
- \* To see OS name of Linux  
command - uname -a



# Process Management

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- \* How to check if a process ex - java is running or not

command - ps -ef | grep java.

~~grep java~~

- \* How to get PID of a process

command - pgrep chron

- \* How to stop a process by PID

command - kill -9 PID

- \* How to stop a process by its name

command - pkill httpd

- \* How to see all the active jobs of terminal.

command - jobs

- \* How to resume a job in background?

command - bg

- \* How to resume a job in foreground

command - fg



4 How to run a script in background  
Command - nohup ./script &



# Networking Info

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- \* To check IP of your machine  
command - ifconfig
- \* To check a server or website is accessible or not  
command - ping www.google.com
- \* To check if a IP:PORT is accessible and open or not  
command - telnet IP Port
- \* To check if port is open or not on our server  
command - netstat -ptan | grep 80
- \* To check all hubs in network path to reach a website  
command - traceroute
- \* Restart Linux Server  
command - reboot
- \* Shutdown  
command - shutdown



## User Creation

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- \* To create new user on Linux server.  
command - useradd
- \* To change password for user  
command - passwd
- \* To create a new group on Linux  
command - groupadd
- \* To check UserID or GroupID of user  
command - id user - name
- \* To delete a user or group  
command - userdel <user>  
groupdel <group>
- \* To add a user in group  
command - usermod -G <group> (user)