

## Linux Commands:

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# ----> root user [The '#' symbol shows for root user]

\$ ----> normal user [The '\$' symbol shows for normal user]

cd ---> The cd command in Linux stands for change directory. It is used to change the current directory of the terminal. The terminal, by default, opens the home directory.

#cd .. move to parent directory

#cd / move to root directory

#cd ~ move to home directory

#cd move to home directory

#cd - move to previous working directory

#mkdir ----> The mkdir command in Linux is a command-line utility that allows users to create new directories. mkdir stands for "make directory." With mkdir.

#whoami ----> Displays the username of the current user

#who ----> a tool print information about users who are currently logged in

#date ----> date command is used to display the system date and time

#pwd ----> The "pwd" command prints the full name (the full path) of current/working directory

# cal ----> cal command is a calendar command in Linux which is used to see the calendar of a specific month or a whole year

ex: cal 08 2023

#clear -----> clearing the terminal screen in Linux

## **To get Host Name & Server Name**

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#hostname ----> command displays the name of the current host system.

#hostname -f ----> Fully qualified Hostname

## **To get IP address**

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#hostname -i

#ip a -----> It is used to view, add, and delete network interfaces, routing table entries, and IP addresses

#ifconfig -----> The command ifconfig stands for interface configurator

## **To get Memory Details**

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#free -m

#free -h

#df

#df -h ----> Human readable format

#df -m ----> File system in MB

#du ----> Directory usage

## Process Management

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#ps

#ps -ef

#ps -ef | grep 'java'

#ps -ef | grep 'mysql'

# top -----> The top command is used to show the active Linux processes

## To kill a process:

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#kill <process ID>

#kill -9 <process ID> -----> to kill forcefully

## To kill a process by Name:

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#pkill <pname>

#pkill java

#pkill tomcat

#pkill mysql

## File Management:

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#touch <filename> -----> To create an empty file

# touch file{1..10} -----> to create a multiple files at a time

# cat filename ----> it will display the complete file data

## To List Files:

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ls syntax

\$ ls [options] [file | dir]

### ls command main options:

option	description
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ls -a	<----- list all files including hidden file starting with '.'
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ls --color	<----- colored list (=always/never/auto]
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ls -d	<----- list directories - with '*/'
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ls -F	<----- add one char of */=>@  to entries
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ls -li	<----- list file's inode index number
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ls -l	<----- list with long format - show permissions
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As -la <----- list long format including hidden files

As -lh <----- list long format with readable file size

As -ls <----- list with long format with file size

As -r <----- list in reverse order

ls -R <----- list recursively directory tree

ls -s <----- list file size

ls -S <----- sort by file size

ls -t <----- sort by time & date

ls -x <----- sort by extension name

## Types of Files in Linux:

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File Type		First Character in File Listing Description
Regular file	-	Normal files such as text, data or executable files.
Directory	d	Files that are lists of other files.
Link	l	A shortcut that points to the location to the actual file
Special file	c	Mechanism used for input and output, such as file in /dev
Socket protected	s	A special file that provides inter-process networking by the file system access control

Pipe      p      A special file that allow processes to communicate with each other without using network socket semantics.

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[root@desktop /root] # ls -l
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total 558414

d	rwxr-xr-x	5	root	root	1024	Dec 23 13:48	GNUstep
-	rw-r--r--	1	root	root	331	Feb 11 10:19	Xrootenv.0
-	rw-rw-r--	1	root	root	490	Jan 6 15:07	audio.cddeb
-	rw-r--r--	1	root	root	45254876	Jan 6 15:08	audio.wav
d	rwxr-xr-x	2	root	root	1024	Feb 20 16:41	axhome
-	rw-r--r--	1	root	root	900	Jan 18 20:15	conf
d	rwxr-xr-x	2	root	root	1024	Dec 25 10:03	corel
-	rw-r--r--	1	root	root	915	Jan 18 20:57	firewall
d	rwxrwxr-x	2	root	root	1024	Jan 6 15:42	linux
d	rwx-----	2	root	root	1024	Jan 4 02:19	mail
d	rwxr-xr-x	3	root	root	1024	Jan 4 01:49	mirror
-	rwxr--r--	1	root	root	29	Dec 27 15:07	openn
d	rwxr-xr-x	3	root	root	1024	Dec 26 13:24	scan
d	rwxrwxr-x	3	root	root	1024	Jan 4 02:34	sniff

type

access modes

# of links

owner

group

size (bytes)

modification date and time

name

### Permissions

r --> Read permi.  
w --> Write permi.  
x --> Execute permi.  
- --> no. permission

## To Manage Directories

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#mkdir demodir      --→ To create new directory

#mkdir demodir{1..10}

#cp example demodir/