

Linux Commands frequently used by Linux Sysadmins

Linux Commands frequently used by Linux Sysadmins – Part 1:

1. ip – from Iproute2, a collection of utilities for controlling TCP/IP networking and traffic control in Linux.
2. ls – list directory contents.
3. df – display disk space usage.
4. du – estimate file space usage.
5. free – display memory usage.
6. scp – securely Copy Files Using SCP, with examples.
7. find – locates files based on some user-specified criteria.
8. ncdu – a disk utility for Unix systems.
9. pstree – display a tree of processes.
10. last – show a listing of last logged-in users.
11. w – show a list of currently logged-in user sessions.
12. grep – Search a file for a pattern of characters, then display all matching lines.

::::Linux Commands frequently used by Linux Sysadmins – Part 2:

13. uptime – shows system uptime and load average.
14. top – shows an overall system view.
15. vmstat – shows system memory, processes, interrupts, paging, block I/O, and CPU info.
16. htop – interactive process viewer and manager.

17. dstat – view processes, memory, paging, I/O, CPU, etc., in real-time. All-in-one for vmstat, iostat, netstat, and ifstat.
18. iftop – network traffic viewer.
19. nethogs – network traffic analyzer.
20. iotop – interactive I/O viewer. Get an overview of storage r/w activity.
21. iostat – for storage I/O statistics.
22. netstat – for network statistics.
23. ss – utility to investigate sockets.
24. atop – For Linux server performance analysis.
25. Glances and nmon – htop and top Alternatives:
26. ssh – secure command-line access to remote Linux systems.
27. sudo – execute commands with administrative privilege.
28. cd – directory navigation.
29. pwd – shows your current directory location.
30. cp – copying files and folders.
31. mv – moving files and folders.
32. rm – removing files and folders.
33. mkdir – create or make new directories.
34. touch – used to update the access date and modification date of a computer file or directory.
35. man – for reading system reference manuals.
36. apropos – Search man page names and descriptions.

::::: Linux Commands frequently used by Linux Sysadmins – Part 3:

37. rsync – remote file transfers and syncing.
38. tar – an archiving utility.
39. gzip – file compression and decompression.

- 40. b2zip – similar to gzip. It uses a different compression algorithm.
- 41. zip – for packaging and compressing (to archive) files.
- 42. locate – search files in Linux.
- 43. ps – information about the currently running processes.
- 44. Making use of Bash scripts. Example: ./bashscript.sh
- 45. cron – set up scheduled tasks to run.
- 46. nmcli – network management.
- 47. ping – send ICMP ECHO_REQUEST to network hosts.
- 48. traceroute – check the route packets take to a specified host.
- 49. mtr – network diagnostic tool.
- 50. nslookup – query Internet name servers (NS) interactively.
- 51. host – perform DNS lookups in Linux.
- 52. dig – DNS lookup utility.

:::::Linux Commands frequently used by Linux Sysadmins – Part 4:

- 53. wget – retrieve files over HTTP, HTTPS, FTP, and FTPS.
- 54. curl – transferring data using various network protocols. (supports more protocols than wget)
- 55. dd – convert and copy files.
- 56. fdisk – manipulate the disk partition table.
- 57. parted – for creating and manipulating partition tables.
- 58. blkid – command-line utility to locate/print block device attributes.
- 59. mkfs – build a Linux file system.
- 60. fsck – tool for checking the consistency of a file system.
- 61. whois – client for the whois directory service.
- 62. nc – command-line networking utility. (Also, see 60 Linux Networking commands and scripts.)

- 63. umask – set file mode creation mask.
- 64. chmod – change the access permissions of file system objects.
- 65. chown – change file owner and group.
- 66. chroot – run command or interactive shell with a special root directory.
- 67. useradd – create a new user or update default new user information.
- 68. userdel – used to delete a user account and all related files.
- 69. usermod – used to modify or change any attributes of an existing user account.

:::::Linux Commands frequently used by Linux Sysadmins – Part 5:

- 70. vi – text editor.
- 71. cat – display file contents.
- 72. tac – output file contents, in reverse.
- 73. more – display file contents one screen/page at a time.
- 74. less – similar to the more command with additional features.
- 75. tail – used to display the tail end of a text file or piped data.
- 76. dmesg – prints the message buffer of the kernel ring.
- 77. journalctl – query the systemd journal.
- 78. kill – terminate a process.
- 79. killall – Sends a kill signal to all instances of a process by name.
- 80. sleep – suspends program execution for a specified time.
- 81. wait – Suspend script execution until all jobs running in the background have been terminated.
- 82. nohup – Run Commands in the Background.
- 83. screen – hold a session open on a remote server. (also a full-screen window manager)
- 84. tmux – a terminal multiplexer.
- 85. passwd – change a user's password.

86. chpassword –

87. mount / umount – provides access to an entire filesystem in one directory.

88. systemctl – Managing Services (Daemons).

89. clear – clears the screen of the terminal.

90. env -Run a command in a modified environment.

Practicals:

```
root@Mahipal:~# ip -V
```

```
ip utility, iproute2-ss200127
```

```
root@Mahipal:~# ifconfig
```

```
eth2: flags=4163<UP,BROADCAST,RUNNING,MULTICAST> mtu 1500
```

```
inet 192.168.56.1 netmask 255.255.255.0 broadcast 192.168.56.255
```

```
inet6 fe80::1540:4756:4f8a:16bf prefixlen 64 scopeid 0xfd<compat,link,site,host>
```

```
ether 0a:00:27:00:00:0c (Ethernet)
```

```
RX packets 0 bytes 0 (0.0 B)
```

```
RX errors 0 dropped 0 overruns 0 frame 0
```

```
TX packets 0 bytes 0 (0.0 B)
```

```
TX errors 0 dropped 0 overruns 0 carrier 0 collisions 0
```

```
lo: flags=73<UP,LOOPBACK,RUNNING> mtu 1500
```

```
inet 127.0.0.1 netmask 255.0.0.0
```

```
inet6 ::1 prefixlen 128 scopeid 0xfe<compat,link,site,host>
```

```
loop (Local Loopback)
```

```
RX packets 0 bytes 0 (0.0 B)
```

```
RX errors 0 dropped 0 overruns 0 frame 0
```

```
TX packets 0 bytes 0 (0.0 B)
```

```
TX errors 0 dropped 0 overruns 0 carrier 0 collisions 0
```

```
wifi0: flags=4163<UP,BROADCAST,RUNNING,MULTICAST> mtu 1500
```

```
inet 192.168.0.187 netmask 255.255.255.0 broadcast 192.168.0.255
```

```
inet6 fe80::5dd0:937a:431e:97 prefixlen 64 scopeid 0xfd<compat,link,site,host>
```

```
ether 74:df:bf:8a:ac:1f (Ethernet)
```

RX packets 0 bytes 0 (0.0 B)

RX errors 0 dropped 0 overruns 0 frame 0

TX packets 0 bytes 0 (0.0 B)

TX errors 0 dropped 0 overruns 0 carrier 0 collisions 0

root@Mahipal:~# ls

"\$'\032' file.txt mytraining out3.txt training

SWs kill_slow_log.sh nohup.out pass.txt vulnerabilities.csv

backup.sh kill_slow_log_2.sh out.txt test y

basic_passwords.txt linux out2.txt test.sql

root@Mahipal:~# cd linux/

root@Mahipal:~/linux# ls

root@Mahipal:~/linux# pwd

/root/linux

root@Mahipal:~/linux# df -lh

Filesystem	Size	Used	Avail	Use%	Mounted on
rootfs	200G	162G	39G	81%	/
none	200G	162G	39G	81%	/dev
none	200G	162G	39G	81%	/run
none	200G	162G	39G	81%	/run/lock
none	200G	162G	39G	81%	/run/shm
none	200G	162G	39G	81%	/run/user
tmpfs	200G	162G	39G	81%	/sys/fs/cgroup

root@Mahipal:~/linux# cd ..

root@Mahipal:~# pwd

/root

root@Mahipal:~# ls

```

"$'\032'      file.txt      mytraining out3.txt training
SWs          kill_slow_log.sh  nohup.out pass.txt vulnerabilities.csv
backup.sh     kill_slow_log_2.sh out.txt   test    y
basic_passwords.txt linux          out2.txt test.sql
root@Mahipal:~# du -sh *
4.0K
4.6G  SWs
4.0K  backup.sh
4.0K  basic_passwords.txt
0     file.txt
4.0K  kill_slow_log.sh
4.0K  kill_slow_log_2.sh
0     linux
0     mytraining
0     nohup.out
4.0K  out.txt
0     out2.txt
0     out3.txt
0     pass.txt
4.0K  test
4.0K  test.sql
0     training
1.9M  vulnerabilities.csv
4.0K  y
root@Mahipal:~# free -m

```

	total	used	free	shared	buff/cache	available
Mem:	8107	5876	2007	17	223	2100

Swap: 24576 553 24022

root@Mahipal:~# free -g

	total	used	free	shared	buff/cache	available
Mem:	7	5	1	0	0	2
Swap:	24	0	23			

root@Mahipal:~#

root@Mahipal:~# ls

"\$'\032' file.txt mytraining out3.txt training

SWs kill_slow_log.sh nohup.out pass.txt vulnerabilities.csv

backup.sh kill_slow_log_2.sh out.txt test y

basic_passwords.txt linux out2.txt test.sql

root@Mahipal:~# scp file.txt root@192.168.56.1:/root/linux/

ssh: connect to host 192.168.56.1 port 22: Connection refused

lost connection

root@Mahipal:~# scp file.txt root@127.0.0.1:/root/linux/

ssh: connect to host 127.0.0.1 port 22: Connection refused

lost connection

root@Mahipal:~# scp file.txt /root/linux/

root@Mahipal:~# cd /root/linux/

root@Mahipal:~/linux# ls

file.txt

root@Mahipal:~/linux# scp root@127.0.0.1:/root/linux/file.txt /root/

ssh: connect to host 127.0.0.1 port 22: Connection refused

root@Mahipal:~/linux# scp root@127.0.0.1:/root/linux/file.txt .

ssh: connect to host 127.0.0.1 port 22: Connection refused

root@Mahipal:~/linux# find /root/linux file.txt

/root/linux

```
/root/linux/file.txt
```

```
file.txt
```

```
root@Mahipal:~/linux# find ./root/linux file.txt
```

```
find: './root/linux': No such file or directory
```

```
file.txt
```

```
root@Mahipal:~/linux# find ./root/linux -name file.txt
```

```
find: './root/linux': No such file or directory
```

```
root@Mahipal:~/linux#
```

```
root@Mahipal:~/linux# find /root/linux -name file.txt
```

```
/root/linux/file.txt
```

```
root@Mahipal:~/linux# ncdu
```

Command 'ncdu' not found, but can be installed with:

```
apt install ncdu
```

```
root@Mahipal:~/linux# ncdu
```

```
[2]+ Stopped ncdu
```

```
root@Mahipal:~/linux# last
```

```
wtmp begins Fri Jul 30 12:07:03 2021
```

```
root@Mahipal:~/linux# date
```

```
Fri Jul 29 20:39:58 IST 2022
```

```
root@Mahipal:~/linux# w
```

```
20:41:12 up 8 days, 5:02, 0 users, load average: 0.52, 0.58, 0.59
```

USER	TTY	FROM	LOGIN@	IDLE	JCPU	PCPU	WHAT
------	-----	------	--------	------	------	------	------

```
root@Mahipal:~/linux# vcpu
```

Command 'vcpu' not found, did you mean:

command 'cpu' from deb cpu (1.4.3-12)

Try: apt install <deb name>

```
root@Mahipal:~/linux# lscpu
```

Architecture: x86_64

CPU op-mode(s): 32-bit, 64-bit

Byte Order: Little Endian

Address sizes: 36 bits physical, 48 bits virtual

CPU(s): 4

On-line CPU(s) list: 0-3

Thread(s) per core: 2

Core(s) per socket: 2

Socket(s): 1

Vendor ID: GenuineIntel

CPU family: 6

Model: 61

Model name: Intel(R) Core(TM) i3-5005U CPU @ 2.00GHz

Stepping: 4

CPU MHz: 2000.000

CPU max MHz: 2000.0000

BogoMIPS: 4000.00

Hypervisor vendor: Windows Subsystem for Linux

Virtualization type: container

Flags: fpu vme de pse tsc msr pae mce cx8 apic sep mtrr pge mca cmov pat pse36

top - 21:02:06 up 8 days, 5:23, 0 users, load average: 0.52, 0.58, 0.59

Tasks: 27 total, 1 running, 15 sleeping, 11 stopped, 0 zombie

%Cpu(s): 32.4 us, 15.1 sy, 0.0 ni, 52.0 id, 0.0 wa, 0.5 hi, 0.0 si, 0.0 st

MiB Mem : 8107.4 total, 2071.3 free, 5812.1 used, 224.0 buff/cache

MiB Swap: 24576.0 total, 24004.8 free, 571.2 used. 2164.6 avail Mem

PID	USER	PR	NI	VIRT	RES	SHR	S	%CPU	%MEM	TIME+	COMMAND
-----	------	----	----	------	-----	-----	---	------	------	-------	---------

2000	root	20	0	18920	2164	1528	R	0.3	0.0	0:00.28	top
------	------	----	---	-------	------	------	---	-----	-----	---------	-----

1	root	20	0	8940	188	144	S	0.0	0.0	0:00.64	init
---	------	----	---	------	-----	-----	---	-----	-----	---------	------

788	root	20	0	8940	92	48	S	0.0	0.0	0:00.00	init
-----	------	----	---	------	----	----	---	-----	-----	---------	------

789	mahipal	20	0	18080	1744	1640	S	0.0	0.0	0:00.16	bash
-----	---------	----	---	-------	------	------	---	-----	-----	---------	------

top - 21:02:07 up 8 days, 5:23, 0 users, load average: 0.52, 0.58, 0.59

top - 21:03:46 up 8 days, 5:25, 0 users, load average: 0.52, 0.58, 0.59

Tasks: 27 total, 1 running, 15 sleeping, 11 stopped, 0 zombie

%Cpu(s): 32.1 us, 14.4 sy, 0.0 ni, 52.2 id, 0.0 wa, 1.3 hi, 0.0 si, 0.0 st

MiB Mem : 8107.4 total, 2100.0 free, 5783.4 used, 224.0 buff/cache

MiB Swap: 24576.0 total, 24006.1 free, 569.9 used. 2193.4 avail Mem

PID	USER	PR	NI	VIRT	RES	SHR	S	%CPU	%MEM	TIME+	COMMAND
-----	------	----	----	------	-----	-----	---	------	------	-------	---------

2000	root	20	0	18920	2164	1528	R	0.7	0.0	0:00.44	top
------	------	----	---	-------	------	------	---	-----	-----	---------	-----

root@Mahipal:~/linux# htop

root@Mahipal:~/linux# netstat -antp 80

Active Internet connections (servers and established)

Proto	Recv-Q	Send-Q	Local Address	Foreign Address	State	PID/Program name
-------	--------	--------	---------------	-----------------	-------	------------------

root@Mahipal:~/linux#

```
root@Mahipal:~/linux# netstat -antp | grep 80
```

```
root@Mahipal:~/linux#
```

```
root@Mahipal:~/linux#
```

```
root@Mahipal:~/linux# netstat -antp | grep 22
```

```
root@Mahipal:~/linux#
```

```
root@Mahipal:~/linux#
```

```
root@Mahipal:~/linux# netstat -antp
```

```
Active Internet connections (servers and established)
```

Proto	Recv-Q	Send-Q	Local Address	Foreign Address	State	PID/Program name
-------	--------	--------	---------------	-----------------	-------	------------------

```
root@Mahipal:~/linux#
```

```
root@Mahipal:~/linux#
```

```
root@Mahipal:~/linux# netstat -antp | grep 8080
```

```
root@Mahipal:~/linux# netstat -antp | grep 3306
```

```
root@Mahipal:~/linux#
```

```
root@Mahipal:~/linux# service mysql status
```

```
mysql: unrecognized service
```

```
root@Mahipal:~/linux# ssh root@10.23.5.23 -p22
```

```
fdsjkhk
```

```
ssh: connect to host 10.23.5.23 port 22: Resource temporarily unavailable
```

```
root@Mahipal:~/linux# fdsjkhk
```

```
fdsjkhk: command not found
```

```
root@Mahipal:~/linux# exit
```

```
logout
```

```
There are stopped jobs.
```

```
root@Mahipal:~/linux# exit
```

```
logout
```

```
mahipal@Mahipal:~$
```

```
mahipal@Mahipal:~$ su - root
```

```
Password:
```

```
root@Mahipal:~# pwd
```

```
/root
```

```
root@Mahipal:~# tar
```

```
tar: You must specify one of the '-Acdrux', '--delete' or '--test-label' options
```

```
Try 'tar --help' or 'tar --usage' for more information.
```

```
root@Mahipal:~# ls
```

```
"$\032"      file.txt      mytraining  out3.txt  training
```

```
TAR(1)          GNU TAR Manual          TAR(1)
```

NAME

tar - an archiving utility

SYNOPSIS

Traditional usage

```
tar {A|c|d|r|t|u|x}[GnSkUWOmpsMBiajJzZhPIRvwo] [ARG...]
```

UNIX-style usage

```
tar -A [OPTIONS] ARCHIVE ARCHIVE
```

```
tar -c [-f ARCHIVE] [OPTIONS] [FILE...]
```

```
tar -d [-f ARCHIVE] [OPTIONS] [FILE...]
```

```
tar -t [-f ARCHIVE] [OPTIONS] [MEMBER...]
```

`tar -r [-f ARCHIVE] [OPTIONS] [FILE...]`

`tar -u [-f ARCHIVE] [OPTIONS] [FILE...]`

`tar -x [-f ARCHIVE] [OPTIONS] [MEMBER...]`

GNU-style usage

`tar {--catenate|--concatenate} [OPTIONS] ARCHIVE ARCHIVE`

`tar --create [--file ARCHIVE] [OPTIONS] [FILE...]`

`tar {--diff|--compare} [--file ARCHIVE] [OPTIONS] [FILE...]`

`tar --delete [--file ARCHIVE] [OPTIONS] [MEMBER...]`

`tar --append [-f ARCHIVE] [OPTIONS] [FILE...]`

`tar --list [-f ARCHIVE] [OPTIONS] [MEMBER...]`

`tar --test-label [--file ARCHIVE] [OPTIONS] [LABEL...]`

`tar --update [--file ARCHIVE] [OPTIONS] [FILE...]`

`tar --update [-f ARCHIVE] [OPTIONS] [FILE...]`

`tar {--extract|--get} [-f ARCHIVE] [OPTIONS] [MEMBER...]`

NOTE

This manpage is a short description of GNU tar. For a detailed discussion, including examples and usage recommendations, refer to the GNU Tar Manual available in texinfo format. If the info reader and the tar documentation are properly installed on your system, the command

```
info tar
```

```
tar {--extract|--get} [-f ARCHIVE] [OPTIONS] [MEMBER...]
```

NOTE

This manpage is a short description of GNU tar. For a detailed discussion, including examples and usage recommendations, refer to the GNU Tar Manual available in texinfo format. If the info reader and the tar documentation are properly installed on your system, the command

```
info tar
```

should give you access to the complete manual.

You can also view the manual using the info mode in emacs(1), or find it in various formats online at

```
http://www.gnu.org/software/tar/manual
```

If any discrepancies occur between this manpage and the GNU Tar Manual, the later shall be considered the authoritative source.

DESCRIPTION

GNU tar is an archiving program designed to store multiple files in a single file (an archive), and to manipulate such archives. The archive can be either a regular file or a device (e.g. a tape drive, hence the name of the program, which stands for tape archiver), which can be located either on the local or on a remote machine.

Option styles

Options to GNU tar can be given in three different styles. In traditional style, the first argument is a cluster of option letters and all subsequent arguments supply arguments to those options that require them. The arguments are read in the same order as the option letters. Any command line words that remain after all options has been processed are treated as non-optional arguments: file or archive member names.

For example, the `c` option requires creating the archive, the `v` option requests the verbose operation, and the `f` option takes an argument that sets the name of the archive to operate upon. The following command, written in the traditional style, instructs tar to store all files from the directory `/etc` into the archive file `etc.tar` verbosely listing the files being archived:

```
tar cfv a.tar /etc
```

In UNIX or short-option style, each option letter is prefixed with a single dash, as in other command line utilities. If an option takes argument, the argument follows it, either as a separate command line word, or immediately following the op-

tion. However, if the option takes an optional argument, the argument must follow the option letter without any intervening whitespace, as in `-g/tmp/snar.db`.

Any number of options not taking arguments can be clustered together after a single dash, e.g. `-vkp`. Options that take arguments (whether mandatory or optional), can appear at the end of such a cluster, e.g. `-vkpf a.tar`.

The example command above written in the short-option style could look like:

```
tar -cvf a.tar /etc
```

or

```
tar -c -v -f a.tar /etc
```

In GNU or long-option style, each option begins with two dashes and has a meaningful name, consisting of lower-case letters and dashes. When used, the long option can be abbreviated to its initial letters, provided that this does not create ambiguity. Arguments to long options are supplied either as a separate command line word, immediately following the option, or separated from the option by an equals sign with no intervening whitespace. Optional arguments must always use the latter method.

Here are several ways of writing the example command in this style:

```
tar --create --file a.tar --verbose /etc
```

or (abbreviating some options):

```
tar --cre --file=a.tar --verb /etc
```

The options in all three styles can be intermixed, although doing so with old options is not encouraged.

Operation mode

The options listed in the table below tell GNU tar what operation it is to perform.

Exactly one of them must be given. Meaning of non-optional arguments depends on the operation mode requested.

-A, --catenate, --concatenate

Append archive to the end of another archive. The arguments are treated as the names of archives to append. All archives must be of the same format as the archive they are appended to, otherwise the resulting archive might be unusable with non-GNU implementations of tar. Notice also that when more than one archive is given, the members from archives other than the first one will be accessible in the resulting archive only if using the -i (--ignore-zeros) option.

one will be accessible in the resulting archive only if using the -i (--ignore-zeros) option.

Compressed archives cannot be concatenated.

-c, --create

Create a new archive. Arguments supply the names of the files to be archived. Directories are archived recursively, unless the --no-recursion option is given.

`-d, --diff, --compare`

Find differences between archive and file system. The arguments are optional and specify archive members to compare. If not given, the current working directory is assumed.

`--delete`

Delete from the archive. The arguments supply names of the archive members to be removed. At least one argument must be given.

This option does not operate on compressed archives. There is no short option equivalent.

tion equivalent.

`-r, --append`

Append files to the end of an archive. Arguments have the same meaning as for `-c` (`--create`).

`-t, --list`

List the contents of an archive. Arguments are optional. When given, they specify the names of the members to list.

`--test-label`

Test the archive volume label and exit. When used without arguments, it prints the volume label (if any) and exits with status 0. When one or more command line arguments are given, tar compares the volume label with each argument. It exits with code 0 if a match is found, and with code 1 otherwise. No output is displayed, unless used together with the `-v` (`--verbose`)

option.

There is no short option equivalent for this option.

-u, --update

Append files which are newer than the corresponding copy in the archive.

Arguments have the same meaning as with **-c** and **-r** options. Notice, that newer files don't replace their old archive copies, but instead are appended to the end of archive. The resulting archive can thus contain several members of the same name, corresponding to various versions of the same file.

-x, --extract, --get

Extract files from an archive. Arguments are optional. When given, they specify names of the archive members to be extracted.

--show-defaults

Show built-in defaults for various tar options and exit. No arguments are allowed.

```
SWs          kill_slow_log.sh  nohup.out  pass.txt  vulnerabilities.csv
```

```
backup.sh     kill_slow_log_2.sh  out.txt   test     y
```

```
basic_passwords.txt  linux          out2.txt  test.sql
```

```
root@Mahipal:~# cd linux/
```

```
root@Mahipal:~/linux# ls
```

```
file.txt
```

```
root@Mahipal:~/linux# tar -xf file.txt
```

```
tar: This does not look like a tar archive
```

```
tar: Exiting with failure status due to previous errors
```

```
root@Mahipal:~/linux# man tar
```

```
[1]+  Stopped          man tar
```

```
root@Mahipal:~/linux# tar -c file.txt
```

```
tar: Refusing to write archive contents to terminal (missing -f option?)
```

```
tar: Error is not recoverable: exiting now
```

```
root@Mahipal:~/linux# tar -xzvf file.tar.gz
```

```
tar (child): file.tar.gz: Cannot open: No such file or directory
```

```
tar (child): Error is not recoverable: exiting now
```

```
tar: Child returned status 2
```

```
tar: Error is not recoverable: exiting now
```

```
root@Mahipal:~/linux#
```

```
root@Mahipal:~/linux# gzip file.txt
```

```
root@Mahipal:~/linux# ls
```

```
file.txt.gz
```

```
root@Mahipal:~/linux# ls -lrth
```

```
total 0
```

```
-rw-r--r-- 1 root root 35 Jul 29 20:28 file.txt.gz
```

```
root@Mahipal:~/linux#
```

```
root@Mahipal:~/linux# unzip file.txt.gz
```

```
Archive:  file.txt.gz
```

End-of-central-directory signature not found. Either this file is not a zipfile, or it constitutes one disk of a multi-part archive. In the latter case the central directory and zipfile comment will be found on the last disk(s) of this archive.

unzip: cannot find zipfile directory in one of file.txt.gz or file.txt.gz.zip, and cannot find file.txt.gz.ZIP, period.

```
root@Mahipal:~/linux#
root@Mahipal:~/linux# gunzip file.txt.gz
root@Mahipal:~/linux# ls
file.txt
root@Mahipal:~/linux# ls -lrth
total 0
-rw-r--r-- 1 root root 6 Jul 29 20:28 file.txt
root@Mahipal:~/linux# locate file.txt
/mnt/c/Program Files (x86)/Cyberlink/PowerDVD14/regfile.txt
/mnt/c/ProgramData/HP/HP Welcome/Logs/garagelogfile.txt
/mnt/m/O/My_Dynamatix_Stuff/MAHIPAL/MYSQL-DBA/dump_views_in_each_file.txt
/mnt/m/O/mahipal.tar/mahipal/PYRO/stuff2/hsm/newfile.txt
root@Mahipal:~/linux#
root@Mahipal:~/linux#
root@Mahipal:~/linux# locate my.cnf
/etc/alternatives/my.cnf
/etc/mysql/my.cnf
/etc/mysql/my.cnf.fallback
/mnt/c/Users/HP/Downloads/My_Next_Work/My_Next_Work/DESKTOP/my.cnf.gz
/mnt/c/Users/HP/Downloads/My_Next_Work/My_Next_Work/Grafana/my.cnf.gz
/mnt/c/Users/HP/Downloads/My_Next_Work/My_Next_Work/MySQL/CONFIG/my.cnf.gz
/mnt/c/Users/HP/Downloads/My_Next_Work/My_Next_Work/MySQL/Configuration/PROD/my.cnf
_msr_nlp.gz
/mnt/c/Users/HP/Downloads/My_Next_Work/My_Next_Work/MySQL/Configuration/PROD/my.cnf
_msr_nlp_slave.gz
/mnt/c/Users/HP/Downloads/My_Next_Work/My_Next_Work/MySQL/VARiables/DB_MONITOR_10
162_my.cnf.sh.gz
/mnt/c/Users/HP/Downloads/My_Next_Work/My_Next_Work/MySQL/VARiables/DB_MONITOR_10
162_my.cnf_new.sh.gz
```

/mnt/c/Users/HP/Downloads/My_Next_Work/My_Next_Work/MySQL/VARiables/my.cnf.gz

/mnt/f/Next Education/DESKTOP/my.cnf.gz

/mnt/f/Next Education/Grafana/my.cnf.gz

/mnt/f/Next Education/MySQL/CONFIG/my.cnf.gz

/mnt/f/Next Education/MySQL/Configuration/PROD/my.cnf_msr_nlp

/mnt/f/Next Education/MySQL/Configuration/PROD/my.cnf_msr_nlp.gz

/mnt/f/Next Education/MySQL/Configuration/PROD/my.cnf_msr_nlp_slave

/mnt/f/Next Education/MySQL/Configuration/PROD/my.cnf_msr_nlp_slave.gz

/mnt/f/Next Education/MySQL/VARiables/DB_MONITOR_10162_my.cnf.sh.gz

/mnt/f/Next Education/MySQL/VARiables/DB_MONITOR_10162_my.cnf_new.sh.gz

/mnt/f/Next Education/MySQL/VARiables/my.cnf.gz

/mnt/m/Next_WORK/My_Next_Work/DESKTOP/my.cnf

/mnt/m/Next_WORK/My_Next_Work/Grafana/my.cnf

/mnt/m/Next_WORK/My_Next_Work/MySQL/CONFIG/my.cnf

/mnt/m/Next_WORK/My_Next_Work/MySQL/Configuration/PROD/my.cnf_msr_nlp

/mnt/m/Next_WORK/My_Next_Work/MySQL/Configuration/PROD/my.cnf_msr_nlp_slave

/mnt/m/Next_WORK/My_Next_Work/MySQL/VARiables/DB_MONITOR_10162_my.cnf.sh

/mnt/m/Next_WORK/My_Next_Work/MySQL/VARiables/DB_MONITOR_10162_my.cnf_new.sh

/mnt/m/Next_WORK/My_Next_Work/MySQL/VARiables/my.cnf

/mnt/m/O/My_Dynamatix_Stuff/MAHIPAL/GDPR/my.cnf.txt

/mnt/m/O/My_Dynamatix_Stuff/MAHIPAL/MYSQL-
DBA/mysql_working_installation_config_and_my.cnf.txt

/mnt/m/O/My_Dynamatix_Stuff/MAHIPAL2/scripts/my.cnf

/mnt/m/T/My_Next_Work/DESKTOP/my.cnf.gz

/mnt/m/T/My_Next_Work/Grafana/my.cnf.gz

/mnt/m/T/My_Next_Work/MySQL/CONFIG/my.cnf.gz

/mnt/m/T/My_Next_Work/MySQL/Configuration/PROD/my.cnf_msr_nlp.gz

/mnt/m/T/My_Next_Work/MySQL/Configuration/PROD/my.cnf_msr_nlp_slave.gz

/mnt/m/T/My_Next_Work/MySQL/VARiables/DB_MONITOR_10162_my.cnf.sh.gz

/mnt/m/T/My_Next_Work/MySQL/VARiables/DB_MONITOR_10162_my.cnf_new.sh.gz

/mnt/m/T/My_Next_Work/MySQL/VARiables/my.cnf.gz

/var/lib/dpkg/alternatives/my.cnf

root@Mahipal:~/linux#

root@Mahipal:~/linux#

root@Mahipal:~/linux# ps

PID	TTY	TIME	CMD
1504	tty2	00:00:00	init
1986	tty2	00:00:00	ncdu
2024	tty2	00:00:00	su
2025	tty2	00:00:00	bash
2056	tty2	00:00:00	man
2068	tty2	00:00:00	pager
2085	tty2	00:00:00	ps

root@Mahipal:~/linux# tty

/dev/tty2

root@Mahipal:~/linux# ps

PID	TTY	TIME	CMD
1504	tty2	00:00:00	init
1986	tty2	00:00:00	ncdu
2024	tty2	00:00:00	su
2025	tty2	00:00:00	bash
2056	tty2	00:00:00	man
2068	tty2	00:00:00	pager
2089	tty2	00:00:00	ps

root@Mahipal:~/linux#

```
root@Mahipal:~/linux#
```

```
root@Mahipal:~/linux# ps -ef
```

UID	PID	PPID	C	STIME	TTY	TIME	CMD
root	1	0	0	Jul21	?	00:00:00	/init
root	788	1	0	Jul27	tty1	00:00:00	/init
mahipal	789	788	0	Jul27	tty1	00:00:00	-bash
root	851	789	0	Jul27	tty1	00:00:00	su - root
root	852	851	0	Jul27	tty1	00:00:01	-bash
root	997	852	0	Jul27	tty1	00:00:00	vi file_search.txt
root	1014	852	0	Jul27	tty1	00:00:00	man grep
root	1026	1014	0	Jul27	tty1	00:00:00	pager
root	1044	852	0	Jul27	tty1	00:00:00	man grep
root	1056	1044	0	Jul27	tty1	00:00:00	pager
root	1121	852	0	Jul27	tty1	00:00:00	man awk
root	1133	1121	0	Jul27	tty1	00:00:00	pager
root	1504	1	0	19:40	tty2	00:00:00	/init
mahipal	1505	1504	0	19:40	tty2	00:00:00	-bash
mahipal	1575	1505	0	19:52	tty2	00:00:00	htop
root	1691	1	0	19:55	?	00:00:00	SCREEN -S Test
root	1692	1691	0	19:55	pts/0	00:00:00	/bin/bash
root	1793	1	0	20:37	tty3	00:00:00	/init
mahipal	1794	1793	0	20:37	tty3	00:00:00	-bash
root	1807	1794	0	20:37	tty3	00:00:00	su - root
root	1808	1807	0	20:37	tty3	00:00:00	-bash
root	1986	1	0	20:38	tty2	00:00:00	ncdu
root	2024	1505	0	21:39	tty2	00:00:00	su - root
root	2025	2024	0	21:39	tty2	00:00:00	-bash

```
root  2056 2025 0 21:41 tty2  00:00:00 man tar
```

```
root  2068 2056 0 21:41 tty2  00:00:00 pager
```

```
root  2088 1808 0 21:51 tty3  00:00:00 top
```

```
root  2090 2025 0 21:52 tty2  00:00:00 ps -ef
```

```
root@Mahipal:~/linux# ps -ef | grep pager
```

```
root  1026 1014 0 Jul27 tty1  00:00:00 pager
```

```
root  1056 1044 0 Jul27 tty1  00:00:00 pager
```

```
root  1133 1121 0 Jul27 tty1  00:00:00 pager
```

```
root  2068 2056 0 21:41 tty2  00:00:00 pager
```

```
root  2092 2025 0 21:53 tty2  00:00:00 grep --color=auto pager
```

```
root@Mahipal:~/linux# ps -ef | grep mysql
```

```
root  2094 2025 0 21:55 tty2  00:00:00 grep --color=auto mysql
```

```
root@Mahipal:~/linux# ping google.com
```

```
PING google.com (142.250.182.78) 56(84) bytes of data.
```

```
64 bytes from maa05s20-in-f14.1e100.net (142.250.182.78): icmp_seq=1 ttl=119 time=17.1 ms
```

```
64 bytes from maa05s20-in-f14.1e100.net (142.250.182.78): icmp_seq=2 ttl=119 time=16.4 ms
```

```
64 bytes from maa05s20-in-f14.1e100.net (142.250.182.78): icmp_seq=3 ttl=119 time=19.9 ms
```

```
64 bytes from maa05s20-in-f14.1e100.net (142.250.182.78): icmp_seq=4 ttl=119 time=16.9 ms
```

```
64 bytes from maa05s20-in-f14.1e100.net (142.250.182.78): icmp_seq=5 ttl=119 time=18.6 ms
```

```
64 bytes from maa05s20-in-f14.1e100.net (142.250.182.78): icmp_seq=6 ttl=119 time=16.8 ms
```

```
64 bytes from maa05s20-in-f14.1e100.net (142.250.182.78): icmp_seq=7 ttl=119 time=17.6 ms
```

```
64 bytes from maa05s20-in-f14.1e100.net (142.250.182.78): icmp_seq=8 ttl=119 time=17.1 ms
```

```
64 bytes from maa05s20-in-f14.1e100.net (142.250.182.78): icmp_seq=9 ttl=119 time=20.1 ms
```

```
64 bytes from maa05s20-in-f14.1e100.net (142.250.182.78): icmp_seq=10 ttl=119 time=16.6 ms
```

```
64 bytes from maa05s20-in-f14.1e100.net (142.250.182.78): icmp_seq=11 ttl=119 time=16.3 ms
```

```
64 bytes from maa05s20-in-f14.1e100.net (142.250.182.78): icmp_seq=12 ttl=119 time=16.2 ms
```

```
^C64 bytes from maa05s20-in-f14.1e100.net (142.250.182.78): icmp_seq=13 ttl=119 time=2244 ms
```

--- google.com ping statistics ---

13 packets transmitted, 13 received, 0% packet loss, time 12022ms

rtt min/avg/max/mdev = 16.249/188.717/2243.734/593.233 ms

root@Mahipal:~/linux#

root@Mahipal:~/linux# host

Usage: host [-aCdilrTvVw] [-c class] [-N ndots] [-t type] [-W time]

[-R number] [-m flag] hostname [server]

-a is equivalent to -v -t ANY

-A is like -a but omits RRSIG, NSEC, NSEC3

-c specifies query class for non-IN data

-C compares SOA records on authoritative nameservers

-d is equivalent to -v

-l lists all hosts in a domain, using AXFR

-m set memory debugging flag (trace|record|usage)

-N changes the number of dots allowed before root lookup is done

-r disables recursive processing

-R specifies number of retries for UDP packets

-s a SERVFAIL response should stop query

-t specifies the query type

-T enables TCP/IP mode

-U enables UDP mode

-v enables verbose output

-V print version number and exit

-w specifies to wait forever for a reply

-W specifies how long to wait for a reply

-4 use IPv4 query transport only

-6 use IPv6 query transport only

```
root@Mahipal:~/linux# hostname
```

Mahipal

```
root@Mahipal:~/linux# ls
```

file.txt

```
root@Mahipal:~/linux# wget https://dev.mysql.com/get/Downloads/MySQL-8.0/mysql-8.0.30-  
winx64.zip
```

```
--2022-07-29 22:01:03-- https://dev.mysql.com/get/Downloads/MySQL-8.0/mysql-8.0.30-  
winx64.zip
```

```
Resolving dev.mysql.com (dev.mysql.com)... 23.9.116.144, 2600:140f:9:18a::2e31,  
2600:140f:9:195::2e31
```

```
Connecting to dev.mysql.com (dev.mysql.com)|23.9.116.144|:443... connected.
```

```
HTTP request sent, awaiting response... 302 Moved Temporarily
```

```
Location: https://cdn.mysql.com//Downloads/MySQL-8.0/mysql-8.0.30-winx64.zip [following]
```

```
--2022-07-29 22:01:03-- https://cdn.mysql.com//Downloads/MySQL-8.0/mysql-8.0.30-winx64.zip
```

```
Resolving cdn.mysql.com (cdn.mysql.com)... 104.120.171.24
```

```
Connecting to cdn.mysql.com (cdn.mysql.com)|104.120.171.24|:443... connected.
```

```
HTTP request sent, awaiting response... 200 OK
```

```
Length: 226363319 (216M) [application/zip]
```

```
Saving to: 'mysql-8.0.30-winx64.zip'
```

```
mysql-8.0.30-winx64.zip 100%[=====>] 215.88M 5.41MB/s in 56s
```

```
2022-07-29 22:01:59 (3.87 MB/s) - 'mysql-8.0.30-winx64.zip' saved [226363319/226363319]
```

```
root@Mahipal:~/linux# ls
```

file.txt mysql-8.0.30-winx64.zip

```
root@Mahipal:~/linux# whois
```

Command 'whois' not found, but can be installed with:

apt install whois

```
root@Mahipal:~/linux# apt install whois
```

Reading package lists... Done

Get:1 http://archive.ubuntu.com/ubuntu focal/main amd64 whois amd64 5.5.6 [44.7 kB]

Fetch: 44.7 kB in 1s (42.5 kB/s)

N: Ignoring file 'percona-toolkit_3.3.1-1.focal_amd64.deb' in directory '/etc/apt/sources.list.d/' as it has an invalid filename extension

Selecting previously unselected package whois.

(Reading database ... 33862 files and directories currently installed.)

Preparing to unpack .../archives/whois_5.5.6_amd64.deb ...

Unpacking whois (5.5.6) ...

Setting up whois (5.5.6) ...

Processing triggers for man-db (2.9.1-1) ...

N: Ignoring file 'percona-toolkit_3.3.1-1.focal_amd64.deb' in directory '/etc/apt/sources.list.d/' as it has an invalid filename extension

```
root@Mahipal:~/linux# whois
```

Usage: whois [OPTION]... OBJECT...

-h HOST, --host HOST connect to server HOST

-p PORT, --port PORT connect to PORT

-l query whois.iana.org and follow its referral

-H hide legal disclaimers

--verbose explain what is being done

--help display this help and exit

--version output version information and exit

These flags are supported by whois.ripe.net and some RIPE-like servers:

- l find the one level less specific match
- L find all levels less specific matches
- m find all one level more specific matches
- M find all levels of more specific matches
- c find the smallest match containing a mnt-irt attribute
- x exact match
- b return brief IP address ranges with abuse contact
- B turn off object filtering (show email addresses)
- G turn off grouping of associated objects
- d return DNS reverse delegation objects too
- i ATTR[,ATTR]... do an inverse look-up for specified ATTRibutes
- T TYPE[,TYPE]... only look for objects of TYPE
- K only primary keys are returned
- r turn off recursive look-ups for contact information
- R force to show local copy of the domain object even
if it contains referral
- a also search all the mirrored databases
- s SOURCE[,SOURCE]... search the database mirrored from SOURCE
- g SOURCE:FIRST-LAST find updates from SOURCE from serial FIRST to LAST
- t TYPE request template for object of TYPE
- v TYPE request verbose template for object of TYPE
- q [version|sources|types] query specified server info

```
root@Mahipal:~/linux# useradd krishna
```

```
useradd: user 'krishna' already exists
```

```
root@Mahipal:~/linux# useradd obul
```

```
root@Mahipal:~/linux# useradd jani
```

```
root@Mahipal:~/linux# ls
```

```
file.txt  mysql-8.0.30-winx64.zip
```

```
root@Mahipal:~/linux# users
```

```
root@Mahipal:~/linux#
```

```
root@Mahipal:~/linux# ps -ef
```

UID	PID	PPID	C	STIME	TTY	TIME	CMD
root	1	0	0	Jul21	?	00:00:00	/init
root	788	1	0	Jul27	tty1	00:00:00	/init
mahipal	789	788	0	Jul27	tty1	00:00:00	-bash
root	851	789	0	Jul27	tty1	00:00:00	su - root
root	852	851	0	Jul27	tty1	00:00:01	-bash
root	997	852	0	Jul27	tty1	00:00:00	vi file_search.txt
root	1014	852	0	Jul27	tty1	00:00:00	man grep
root	1026	1014	0	Jul27	tty1	00:00:00	pager
root	1044	852	0	Jul27	tty1	00:00:00	man grep
root	1056	1044	0	Jul27	tty1	00:00:00	pager
root	1121	852	0	Jul27	tty1	00:00:00	man awk
root	1133	1121	0	Jul27	tty1	00:00:00	pager
root	1504	1	0	19:40	tty2	00:00:00	/init
mahipal	1505	1504	0	19:40	tty2	00:00:00	-bash
mahipal	1575	1505	0	19:52	tty2	00:00:00	htop
root	1691	1	0	19:55	?	00:00:00	SCREEN -S Test
root	1692	1691	0	19:55	pts/0	00:00:00	/bin/bash
root	1793	1	0	20:37	tty3	00:00:00	/init
mahipal	1794	1793	0	20:37	tty3	00:00:00	-bash
root	1807	1794	0	20:37	tty3	00:00:00	su - root


```
root 1808 1807 0 20:37 tty3 00:00:00 -bash
root 1986 1 0 20:38 tty2 00:00:00 ncdu
root 2024 1505 0 21:39 tty2 00:00:00 su - root
root 2025 2024 0 21:39 tty2 00:00:00 -bash
root 2056 2025 0 21:41 tty2 00:00:00 man tar
root 2068 2056 0 21:41 tty2 00:00:00 pager
root 2088 1808 0 21:51 tty3 00:00:01 top
root 2299 2025 0 22:05 tty2 00:00:00 ps -ef
```

```
root@Mahipal:~/linux# kill 1691
```

```
root@Mahipal:~/linux# ps -ef
```

UID	PID	PPID	C	STIME	TTY	TIME	CMD
root	1	0	0	Jul21	?	00:00:00	/init
root	788	1	0	Jul27	tty1	00:00:00	/init
mahipal	789	788	0	Jul27	tty1	00:00:00	-bash
root	851	789	0	Jul27	tty1	00:00:00	su - root
root	852	851	0	Jul27	tty1	00:00:01	-bash
root	997	852	0	Jul27	tty1	00:00:00	vi file_search.txt
root	1014	852	0	Jul27	tty1	00:00:00	man grep
root	1026	1014	0	Jul27	tty1	00:00:00	pager
root	1044	852	0	Jul27	tty1	00:00:00	man grep
root	1056	1044	0	Jul27	tty1	00:00:00	pager
root	1121	852	0	Jul27	tty1	00:00:00	man awk
root	1133	1121	0	Jul27	tty1	00:00:00	pager
root	1504	1	0	19:40	tty2	00:00:00	/init
mahipal	1505	1504	0	19:40	tty2	00:00:00	-bash
mahipal	1575	1505	0	19:52	tty2	00:00:00	htop
root	1793	1	0	20:37	tty3	00:00:00	/init

```
mahipal 1794 1793 0 20:37 tty3 00:00:00 -bash
root 1807 1794 0 20:37 tty3 00:00:00 su - root
root 1808 1807 0 20:37 tty3 00:00:00 -bash
root 1986 1 0 20:38 tty2 00:00:00 ncdu
root 2024 1505 0 21:39 tty2 00:00:00 su - root
root 2025 2024 0 21:39 tty2 00:00:00 -bash
root 2056 2025 0 21:41 tty2 00:00:00 man tar
root 2068 2056 0 21:41 tty2 00:00:00 pager
root 2088 1808 0 21:51 tty3 00:00:01 top
root 2300 2025 0 22:07 tty2 00:00:00 ps -ef
```

```
root@Mahipal:~/linux# kill -9 2088
```

```
root@Mahipal:~/linux# ps -ef
```

UID	PID	PPID	C	STIME	TTY	TIME	CMD
root	1	0	0	Jul21 ?		00:00:00	/init
root	788	1	0	Jul27	tty1	00:00:00	/init
mahipal	789	788	0	Jul27	tty1	00:00:00	-bash
root	851	789	0	Jul27	tty1	00:00:00	su - root
root	852	851	0	Jul27	tty1	00:00:01	-bash
root	997	852	0	Jul27	tty1	00:00:00	vi file_search.txt
root	1014	852	0	Jul27	tty1	00:00:00	man grep
root	1026	1014	0	Jul27	tty1	00:00:00	pager
root	1044	852	0	Jul27	tty1	00:00:00	man grep
root	1056	1044	0	Jul27	tty1	00:00:00	pager
root	1121	852	0	Jul27	tty1	00:00:00	man awk
root	1133	1121	0	Jul27	tty1	00:00:00	pager
root	1504	1	0	19:40	tty2	00:00:00	/init
mahipal	1505	1504	0	19:40	tty2	00:00:00	-bash

```
mahipal 1575 1505 0 19:52 tty2 00:00:00 htop
root 1793 1 0 20:37 tty3 00:00:00 /init
mahipal 1794 1793 0 20:37 tty3 00:00:00 -bash
root 1807 1794 0 20:37 tty3 00:00:00 su - root
root 1808 1807 0 20:37 tty3 00:00:00 -bash
root 1986 1 0 20:38 tty2 00:00:00 ncdu
root 2024 1505 0 21:39 tty2 00:00:00 su - root
root 2025 2024 0 21:39 tty2 00:00:00 -bash
root 2056 2025 0 21:41 tty2 00:00:00 man tar
root 2068 2056 0 21:41 tty2 00:00:00 pager
root 2301 2025 3 22:08 tty2 00:00:00 ps -ef
root@Mahipal:~/linux# sleep(100)
-bash: syntax error near unexpected token `100'
root@Mahipal:~/linux# sleep (100)
-bash: syntax error near unexpected token `100'
root@Mahipal:~/linux# sleep 10
```

```
root@Mahipal:~/linux#
root@Mahipal:~/linux# nohup top
nohup: ignoring input and appending output to 'nohup.out'
root@Mahipal:~/linux# ps -ef
```

UID	PID	PPID	C	STIME	TTY	TIME	CMD
root	1	0	0	Jul21 ?		00:00:00	/init
root	788	1	0	Jul27 tty1		00:00:00	/init
mahipal	789	788	0	Jul27 tty1		00:00:00	-bash
root	851	789	0	Jul27 tty1		00:00:00	su - root
root	852	851	0	Jul27 tty1		00:00:01	-bash

root 997 852 0 Jul27 tty1 00:00:00 vi file_search.txt

root 1014 852 0 Jul27 tty1 00:00:00 man grep

root 1026 1014 0 Jul27 tty1 00:00:00 pager

root 1044 852 0 Jul27 tty1 00:00:00 man grep

root 1056 1044 0 Jul27 tty1 00:00:00 pager

root 1121 852 0 Jul27 tty1 00:00:00 man awk

root 1133 1121 0 Jul27 tty1 00:00:00 pager

root 1504 1 0 19:40 tty2 00:00:00 /init

mahipal 1505 1504 0 19:40 tty2 00:00:00 -bash

mahipal 1575 1505 0 19:52 tty2 00:00:00 htop

root 1793 1 0 20:37 tty3 00:00:00 /init

mahipal 1794 1793 0 20:37 tty3 00:00:00 -bash

root@Mahipal:~/linux#

root 1807 1794 0 20:37 tty3 00:00:00 su - root

root 1808 1807 0 20:37 tty3 00:00:00 -bash

root@Mahipal:~/linux#

root 1986 1 0 20:38 tty2 00:00:00 ncd

root 2024 1505 0 21:39 tty2 00:00:00 su - root

root@Mahipal:~/linux#

root 2025 2024 0 21:39 tty2 00:00:01 -bash

root 2056 2025 0 21:41 tty2 00:00:00 man tar

root 2068 2056 0 21:41 tty2 00:00:00 pager

root 2304 2025 0 22:10 tty2 00:00:00 ps -ef

root@Mahipal:~/linux#

root@Mahipal:~/linux#

root@Mahipal:~/linux# tty

/dev/tty2

```
root@Mahipal:~/linux# screen -S test
```

```
[detached from 2307.test]
```

```
root@Mahipal:~/linux# screen -S test2
```

```
[detached from 2316.test2]
```

```
root@Mahipal:~/linux# screen -r test
```

```
[detached from 2307.test]
```

```
root@Mahipal:~/linux#
```

```
root@Mahipal:~/linux#
```

```
root@Mahipal:~/linux# env
```

```
SHELL=/bin/bash
```

```
PWD=/root/linux
```

```
LOGNAME=root
```

```
HOME=/root
```

```
LANG=C.UTF-8
```

```
LS_COLORS=rs=0:di=01;34:ln=01;36:mh=00:pi=40;33:so=01;35:do=01;35:bd=40;33;01:cd=40;33;01:or=40;31;01:mi=00:su=37;41:sg=30;43:ca=30;41:tw=30;42:ow=34;42:st=37;44:ex=01;32:*.tar=01;31:*.tgz=01;31:*.arc=01;31:*.arj=01;31:*.taz=01;31:*.lha=01;31:*.lz4=01;31:*.lzh=01;31:*.lzma=01;31:*.tlz=01;31:*.txz=01;31:*.tzo=01;31:*.t7z=01;31:*.zip=01;31:*.z=01;31:*.dz=01;31:*.gz=01;31:*.lrz=01;31:*.lz=01;31:*.lzo=01;31:*.xz=01;31:*.zst=01;31:*.tzst=01;31:*.bz2=01;31:*.bz=01;31:*.tbz=01;31:*.tbz2=01;31:*.tz=01;31:*.deb=01;31:*.rpm=01;31:*.jar=01;31:*.war=01;31:*.ear=01;31:*.sar=01;31:*.rar=01;31:*.alz=01;31:*.ace=01;31:*.zoo=01;31:*.cpio=01;31:*.7z=01;31:*.rz=01;31:*.cab=01;31:*.wim=01;31:*.swm=01;31:*.dwm=01;31:*.esd=01;31:*.jpg=01;35:*.jpeg=01;35:*.mjpg=01;35:*.mjpeg=01;35:*.gif=01;35:*.bmp=01;35:*.pbm=01;35:*.pgm=01;35:*.ppm=01;35:*.tga=01;35:*.xbm=01;35:*.xpm=01;35:*.tif=01;35:*.tiff=01;35:*.png=01;35:*.svg=01;35:*.svgz=01;35:*.mng=01;35:*.pcx=01;35:*.mov=01;35:*.mpg=01;35:*.mpeg=01;35:*.m2v=01;35:*.mkv=01;35:*.webm=01;35:*.ogm=01;35:*.mp4=01;35:*.m4v=01;35:*.mp4v=01;35:*.vob=01;35:*.qt=01;35:*.nuv=01;35:*.wmv=01;35:*.asf=01;35:*.rm=01;35:*.rmvb=01;35:*.flc=01;35:*.avi=01;35:*.fli=01;35:*.flv=01;35:*.gl=01;35:*.dl=01;35:*.xcf=01;35:*.xwd=01;35:*.yuv=01;35:*.cgm=01;35:*.emf=01;35:*.ogv=01;35:*.ogx=01;35:*.aac=00;36:*.au=00;36:*.flac=00;36:*.m4a=00;36:*.mid=00;36:*.midi=00;36:*.mka=00;36:*.mp3=00;36:*.mpc=00;36:*.ogg=00;36:*.ra=00;36:*.wav=00;36:*.oga=00;36:*.opus=00;36:*.spx=00;36:*.xspf=00;36:
```

```
LESSCLOSE=/usr/bin/lesspipe %s %s
```

```
TERM=xterm-256color
```

```
LESSOPEN=| /usr/bin/lesspipe %s
```

USER=root

SHLVL=1

XDG_DATA_DIRS=/usr/local/share:/usr/share:/var/lib/napd/desktop

PATH=/usr/local/sbin:/usr/local/bin:/usr/sbin:/usr/bin:/sbin:/bin:/usr/games:/usr/local/games:/snap/bin

MAIL=/var/mail/root

OLDPWD=/root

_=/usr/bin/env

root@Mahipal:~/linux# notepad

notepad: command not found

root@Mahipal:~/linux#

root@Mahipal:~/linux#