

Linux Commands

Syntax : command name + options + arguments

1. man command:

Purpose : this command is used to display the user manual of any command we can run on the terminal.

Syntax : man command name

Example : man pwd

Output:

```
PWD(1)                               User Commands                               PWD(1)

NAME
      pwd - print name of current/working directory

SYNOPSIS
      pwd [OPTION]...

DESCRIPTION
      Print the full filename of the current working directory.

      -L, --logical
          use PWD from environment, even if it contains symlinks

      -P, --physical
          avoid all symlinks

      --help display this help and exit

      --version
          output version information and exit

      If no option is specified, -P is assumed.

      NOTE: your shell may have its own version of pwd, which usually super-
            sedes the version described here. Please refer to your shell's docu-
            mentation for details about the options it supports.

AUTHOR
      Written by Jim Meyering.

REPORTING BUGS
      GNU coreutils online help: <https://www.gnu.org/software/coreutils/>
      Report pwd translation bugs to <https://translationproject.org/team/>
```

2. pwd command :

Purpose : This command is used to print the name of the working directory.

Syntax : pwd [options]...

Example : pwd

Output: `cheshta@cheshta-Latitude-E7470:~$ pwd`
`/home/cheshta`

Options:

~ -L : (Logical): Displays the path based on environment variables, including symbolic links.

~ -P : (Physical): Displays the actual, physical path, resolving all symbolic links to their real location.

~ --help : Displays help information about the command and its usage.

Example: pwd --help

Output:

```
cheshta@cheshta-Latitude-E7470:~$ pwd --help
pwd: pwd [-LP]
      Print the name of the current working directory.

  Options:
    -L      print the value of $PWD if it names the current working
           directory
    -P      print the physical directory, without any symbolic links

  By default, `pwd' behaves as if '-L' were specified.

  Exit Status:
  Returns 0 unless an invalid option is given or the current directory
  cannot be read.
```

3. ls command :

Purpose : This command is used to list all the content of the directory.

Syntax : ls [option]... [file]...

Example : ls

Output :

```
cheshta@cheshta-Latitude-E7470:~$ ls
Desktop   Downloads          Music      Public  Templates
Documents google-chrome-stable_current_amd64.deb Pictures  snap   Videos
```

Options:

~ -l : Displays a long listing format, including file permissions, number of links, owner, group, size, and last modification date and time.

Output:

```
cheshta@cheshta-Latitude-E7470:~$ ls -l
total 116060
drwxr-xr-x 2 cheshta cheshta 4096 Feb  2 22:09 Desktop
drwxr-xr-x 2 cheshta cheshta 4096 Feb  3 18:21 Documents
drwxr-xr-x 2 cheshta cheshta 4096 Feb  3 10:16 Downloads
-rw-rw-r-- 1 cheshta cheshta 118801336 Jan 28 03:22 google-chrome-stable_current_amd64.deb
drwxr-xr-x 2 cheshta cheshta 4096 Feb  2 22:09 Music
drwxr-xr-x 2 cheshta cheshta 4096 Feb  4 12:43 Pictures
drwxr-xr-x 2 cheshta cheshta 4096 Feb  2 22:09 Public
drwx----- 3 cheshta cheshta 4096 Feb  2 12:31 snap
drwxr-xr-x 2 cheshta cheshta 4096 Feb  2 22:09 Templates
drwxr-xr-x 2 cheshta cheshta 4096 Feb  2 22:09 Videos
cheshta@cheshta-Latitude-E7470:~$
```

~ -a: List all files, including hidden files that start with a dot (.).

Output:

```
cheshta@cheshta-Latitude-E7470:~$ ls -a
.
..
.bash_history
.bash_logout
.bashrc
.cache
.config
Desktop
Documents
Downloads
.gnupg
google-chrome-stable_current_amd64.deb
.local
Music
Pictures
.pki
.profile
Public
snap
.ssh
.sudo_as_admin_successful
Templates
Videos
```

~ -h: With -l option (ls -lh), prints file sizes in human-readable formats instead of bytes.

Output:

```
cheshta@cheshta-Latitude-E7470:~$ ls -lh
total 114M
drwxr-xr-x 2 cheshta cheshta 4.0K Feb  2 22:09 Desktop
drwxr-xr-x 2 cheshta cheshta 4.0K Feb  3 18:21 Documents
drwxr-xr-x 2 cheshta cheshta 4.0K Feb  3 10:16 Downloads
-rw-rw-r-- 1 cheshta cheshta 114M Jan 28 03:22 google-chrome-stable_current_amd64.deb
drwxr-xr-x 2 cheshta cheshta 4.0K Feb  2 22:09 Music
drwxr-xr-x 2 cheshta cheshta 4.0K Feb  4 13:12 Pictures
drwxr-xr-x 2 cheshta cheshta 4.0K Feb  2 22:09 Public
drwx----- 3 cheshta cheshta 4.0K Feb  2 12:31 snap
drwxr-xr-x 2 cheshta cheshta 4.0K Feb  2 22:09 Templates
drwxr-xr-x 2 cheshta cheshta 4.0K Feb  2 22:09 Videos
```

~ -t: Sorts by modification time, newest first.

Output:

```
cheshta@cheshta-Latitude-E7470:~$ ls -t
Pictures  Downloads  Music  Templates  snap
Documents  Desktop   Public  Videos    google-chrome-stable_current_amd64.deb
```

~ -d: Lists information about directories themselves; rather than their contents.

Output: Here “.” means current directory.

```
cheshta@cheshta-Latitude-E7470:~$ ls -d  
.
```

~ -F: Appends an indicator(e.g., / for directories, * for executable files) to entry names to show file type.

Output:

```
cheshta@cheshta-Latitude-E7470:~$ ls -F  
Desktop/      google-chrome-stable_current_amd64.deb  Public/      Videos/  
Documents/    Music/                                snap/      Templates/  
Downloads/   Pictures/
```

~ -r: Reverses the sorting order. When combined with -t (ls -ltr), it lists the oldest file first.

Output:

```
cheshta@cheshta-Latitude-E7470:~$ ls -ltr  
total 116060  
-rw-rw-r-- 1 cheshta cheshta 118801336 Jan 28 03:22 google-chrome-stable_current_amd64.deb  
drwx----- 3 cheshta cheshta 4096 Feb  2 12:31 snap  
drwxr-xr-x 2 cheshta cheshta 4096 Feb  2 22:09 Videos  
drwxr-xr-x 2 cheshta cheshta 4096 Feb  2 22:09 Templates  
drwxr-xr-x 2 cheshta cheshta 4096 Feb  2 22:09 Public  
drwxr-xr-x 2 cheshta cheshta 4096 Feb  2 22:09 Music  
drwxr-xr-x 2 cheshta cheshta 4096 Feb  2 22:09 Desktop  
drwxr-xr-x 2 cheshta cheshta 4096 Feb  3 10:16 Downloads  
drwxr-xr-x 2 cheshta cheshta 4096 Feb  3 18:21 Documents  
drwxr-xr-x 2 cheshta cheshta 4096 Feb  4 13:20 Pictures
```

~ -i: Prints the inode number(index number) of each file or directory.

Output:

```
cheshta@cheshta-Latitude-E7470:~$ ls -i  
5374018 Desktop                      5374024 Pictures  
5374022 Documents                     5374021 Public  
5374019 Downloads                     5379870 snap  
5374225 google-chrome-stable_current_amd64.deb 5374020 Templates  
5374023 Music                         5374025 Videos
```

~ -s: Sorts by file size, largest first.

Output:

```
cheshta@cheshta-Latitude-E7470:~$ ls -s  
total 116060  
     4 Desktop                      4 Pictures  
     4 Documents                     4 Public  
     4 Downloads                     4 snap  
116024 google-chrome-stable_current_amd64.deb 4 Templates  
     4 Music                        4 Videos
```

4. cd command:

Purpose: Used to change the current working directory.

Syntax: cd [options]

Example: cd

Output:

```
cheshta@cheshta-Latitude-E7470:~$ cd Desktop/
cheshta@cheshta-Latitude-E7470:~/Desktop$ █
```

Options:

- ~ cd ~ : Changes the directory to the user's home directory.
- ~ cd - : Toggles back to the previous working directory, which is useful for switching between two locations.
- ~ cd .. : Moves one level up the directory tree.
- ~ cd / : Changes the directory to the file system root directory.
- ~ cd [path] : Changes to the directory specified by the path, which can either be absolute path or relative path.
- ~ cd -L [path] : Follows the logical directory structure.
- ~ cd -P [path] : Changes the directory to the physical(real) path, resolving any symbolic link.

5. mkdir command:

Purpose: This command is used to make directories.

Syntax: mkdir [option].... Directory...

Example: mkdir movies

Output:

```
cheshta@cheshta-Latitude-E7470:~$ mkdir movies
cheshta@cheshta-Latitude-E7470:~$ ls
Desktop      google-chrome-stable_current_amd64.deb  Pictures  Templates
Documents    movies                                Public    Videos
Downloads    Music                                 snap
```

Options:

- ~ -p: Creates parent directories as needed. For example, If want to create a directory app inside project but project directory does not exist than we can use -p as
mkdir -p project/app .
- ~ -m: This allows you to set the file permissions(mode) for the new directory.
- ~ -v: This option prints a message for each directory that is successfully created, providing confirmation of the operation.
- ~ --help: Displays a help message with all the available options and exits.
- ~ --version: Outputs version information about the mkdir command and exits.

6. touch command:

Purpose: Used to create an empty file or update the access and modification time of existing files.

Syntax: touch [Option].... File.....

Example: touch abc

Output:

```
cheshta@cheshta-Latitude-E7470:~$ touch abc
cheshta@cheshta-Latitude-E7470:~$ ls
abc          Downloads          Music      snap
Desktop      google-chrome-stable_current_amd64.deb  Pictures  Templates
Documents    movies           Public    Videos
```

Options:

- ~ -a: Change only the access time.
- ~ -m: Change only the modification time.
- ~ -c: Do not create any files that do not exist.
- ~ -d: Use the specified time/date string instead of the current time.
- ~ -r: Use the timestamp of a specified reference file instead of current time.
- ~ -t: Use a specific time specified in the format.

7. nano command:

Purpose: Text editor that operates within a terminal window.

Syntax: nano [Options]...

Example: nano abc.txt

Output:

```
GNU nano 4.8                      abc.txt
One day, a mighty lion was sleeping in the forest. A little mouse began playing>
A few days later, the lion got trapped in a hunter's net. The mouse heard the l>

^G Get Help  ^O Write Out  ^W Where Is  ^K Cut Text  ^J Justify  ^C Cur Pos
^X Exit      ^R Read File  ^\ Replace   ^U Paste Text^T To Spell  ^L Go To Line
```

Options:

- ~ -l: Show line number.
- ~ -c: Show cursor position, row and column number at bottom.
- ~ -m: Enable mouse and allow it to click select and scroll.
- ~ -i: Keeps indentation while writing code.
- ~ -w: Disable word wrapping, long lines stay in one line.
- ~ -B: Creates backup files.
- ~ -E: Converts tabs to spaces.
- ~ -R: Read only mode, prevents accidental editing.

8. rmdir command:

Purpose: Deletes a directory only if it's empty.

Syntax: rmdir [Options].... Directory....

Example: rmdir movies

Output:

```
cheshta@cheshta-Latitude-E7470:~$ ls
abc.txt    Downloads          Music      snap
Desktop    google-chrome-stable_current_amd64.deb Pictures  Templates
Documents  movies            Public     Videos
cheshta@cheshta-Latitude-E7470:~$ rmdir movies
cheshta@cheshta-Latitude-E7470:~$ ls
abc.txt    Downloads          Pictures  Templates
Desktop    google-chrome-stable_current_amd64.deb Public   Videos
Documents  Music             snap
```

Options:

- ~ -p: Removes the specified directory and its ancestor directories in the path, provided they are also empty after the child directory is removed.
- ~ -v: Displays a diagnostic message for every directory processed or removed.
- ~ --ignore-fail-on-non-empty: Suppresses the error message that is typically shown when trying to remove a non-empty directory. NOTE- It only ignores the error message, does not remove the directory.
- ~ --help: Displays help information and exit.
- ~ --version: Outputs version information and exit.

9. rm command:

Purpose: Permanently removes files and directories. Files deleted using this command cannot be recovered from the recycle bin.

Syntax: rm [Option]... [File]...

Example: rm aaa.txt

Output:

```
cheshta@cheshta-Latitude-E7470:~$ ls
aaa.txt  Documents          Music      snap
abc.txt  Downloads          Pictures  Templates
Desktop  google-chrome-stable_current_amd64.deb Public   Videos
cheshta@cheshta-Latitude-E7470:~$ rm aaa.txt
cheshta@cheshta-Latitude-E7470:~$ ls
abc.txt  Downloads          Pictures  Templates
Desktop  google-chrome-stable_current_amd64.deb Public   Videos
Documents  Music             snap
```

Options:

- ~ -r: This option is used to remove directories and all of their contents recursively.
- ~ -f: This ignores nonexistent files and arguments, and overrides any confirmation prompts. Allows deletion without asking for confirmation, even if files are write-protected.
- ~ -i: Prompts for confirmation before every removal.
- ~ -I: Prompts only once before removing more than three files, or when removing recursively.
- ~ -v: Explains what is being done by printing the name of each file as it is removed.
- ~ -d: Removes empty directory. This provides the same functionality as the rmdir command.

10. cp commands:

Purpose: This command is used to copy files and directories.

Syntax: cp [Option]... source/Directory... Directory/source

Example:

```
cheshta@cheshta-Latitude-E7470:~/songs$ cp kamli.mp4 ../"movie song"/
cheshta@cheshta-Latitude-E7470:~/songs$ cd ..
cheshta@cheshta-Latitude-E7470:~$ cd "movie song"
cheshta@cheshta-Latitude-E7470:~/movie song$ ls
kamli.mp4
```

Options:

- ~ -a: Preserves specified attributes(mode, ownership, timestamps, links, etc.).
- ~ -f: Forces the removal of an existing destination file if it cannot be opened for writing before attempting to copy.
- ~ -i: Prompts for confirmation before overwriting an existing file.
- ~ -n: Prevents overwriting existing files.
- ~ -p: Preserves the original file attributes, including modification time, access time, ownership, and permissions, in the copy.
- ~ -r or -R: Recursively copies directory, including all their files and subdirectories
- ~ -u: Copies only when the source file is newer than the destination file or when the destination file is missing.
- ~ -v: Explains what is being done by showing the files as they are copied.

11. mv command

Purpose: The mv command is used to move or rename files and directories.

Syntax: mv [Option]... Source... destination...

Example: mv bhajan.mp4 ../"movie song"

Output:

```
cheshta@cheshta-Latitude-E7470:~$ cd songs
cheshta@cheshta-Latitude-E7470:~/songs$ mv bhajan.mp4 ../"movie song"
cheshta@cheshta-Latitude-E7470:~/songs$ cd ../"movie song"
cheshta@cheshta-Latitude-E7470:~/movie song$ ls
bhajan.mp4  kamli.mp4
```

Options:

- ~ -i: Prompts for confirmation before overwriting an existing file. An affirmative answer(usually y) is required to proceed with the overwrite; any other response cancels the move for that specific file.
- ~ -f: Forces the move to happen without prompting for confirmation, even if the destination file is write-protected.
- ~ -n: Prevents overwriting an existing file. The file will simply not be moved if a file with the same name already exists in the destination.
- ~ -v: Displays a message for each file that is moved showing the source and destination path.

12. cat command:

Purpose: The cat command is used to display content of a file.

Syntax: cat [Option]... [File]...

Example: cat abc.txt

Output:

```
cheshta@cheshta-Latitude-E7470:~$ cat abc.txt
One day, a mighty lion was sleeping in the forest. A little mouse began playing
on him, which woke the lion up. The lion caught the mouse and was about to kill
it. The mouse begged for forgiveness, promising to help the lion someday if he l
et him go. The lion laughed and let the mouse go.
A few days later, the lion got trapped in a hunter's net. The mouse heard the li
on's roar, ran over, and chewed the ropes to set the lion free.
```

Options:

- ~ -n: Number all output lines including black ones.
- ~ -b: Number nonempty output lines.
- ~ -s: Suppress repeated empty output lines, replacing multiple consecutive blank lines with a single black line.
- ~ --help: Display help information and exit.
- ~ --version: Output version information and exit.
- ~ > : To create a new file and enter data in it.

13. less command:

Purpose: A powerful file viewer offering numerous options and in-program commands for navigating and viewing large files efficiently.

Syntax: less file_name

Example: less abc.txt

Output:

```
One day, a mighty lion was sleeping in the forest. A little mouse began playing
on him, which woke the lion up. The lion caught the mouse and was about to kill
it. The mouse begged for forgiveness, promising to help the lion someday if he l
et him go. The lion laughed and let the mouse go.
A few days later, the lion got trapped in a hunter's net. The mouse heard the li
on's roar, ran over, and chewed the ropes to set the lion free.
```

Options:

- ~ -N: Displays line number.
- ~ -F: Exit if the file fits on one screen.

- ~ -E: Exit upon reaching the end of the file for the first time.
- ~ -i: Ignore case in searches unless uppercase letters are used.
- ~ -I: Always ignore case in searches.
- ~ -s: Condense multiple blank lines into one.
- ~ -? or --help: Show a summary of commands and options.

14. grep command:

Purpose: Used to search for specific words, phrases, or patterns inside text files.

Syntax: grep [Option...] Patterns.... [File...]

Example: grep "lion" abc.txt

Output:

```
cheshta@cheshta-Latitude-E7470:~$ grep "lion" abc.txt
One day, a mighty lion was sleeping in the forest. A little mouse began playing on him, which woke the lion up. The lion caught the mouse and
was about to kill it. The mouse begged for forgiveness, promising to help the lion someday if he let him go. The lion laughed and let the mous
e go.
A few days later, the lion got trapped in a hunter's net. The mouse heard the lion's roar, ran over, and chewed the ropes to set the lion free
.
```

Options:

- ~ -i: Enable to search case insensitively in the given file.
- ~ -c: To find the number of lines that match the given pattern.
- ~ -l: Display the files that contain the given pattern.
- ~ -w: Matches only the whole word.
- ~ -o: To display only the matched pattern rather than the whole line.
- ~ -n: To show the line number of files with the line matched.

15. whoami/who command:

Purpose: To display information about the user who is currently logged onto the system.

Syntax: whoami [Option]...

Example:

```
cheshta@cheshta-Latitude-E7470:~$ whoami
cheshta
```

Options:

- ~ -h or --help: Display a help message and exit.
- ~ -V or --version: Displays version information and exits.

16. tac command:

```
cheshta@cheshta-Latitude-E7470:~$ cat aa.txt
mango
orange
guava
lichi
banana
apple
cheshta@cheshta-Latitude-E7470:~$ tac aa.txt
apple
banana
lichi
guava
orange
mango
```

Options:

- ~ -b: Attach the separator before each line of output instead of after.
- ~ -r: Interprets the separator as a regular expression.
- ~ --help: Displays the help information and exits.
- ~ --version: Outputs version information and exits.

17. rev command:

Purpose: It reverses the lines characterwise.

Syntax: rev [Option] [File...]

Example: rev aa.txt

Output:

```
cheshta@cheshta-Latitude-E7470:~$ rev aa.txt
ognam
egnaro
avaug
ihcil
ananab
elppa
```

Options:

- ~ --help: Displays a help message and exits.
- ~ --version: Prints the version information and exits.

18. head command:

Purpose: This command is used to output the starting part of a file.

Syntax: head [Option]... [File]...

Example: head -2 aa.txt

Output:

```
cheshta@cheshta-Latitude-E7470:~$ head -2 aa.txt
mango
orange
```

Options:

- ~ -n num: Print the first num lines.
- ~ -c num: Print the first num bytes.

19. tail command:

Purpose: This command is used to output the end point of a file.

Syntax: tail [Option]... [File]...

Example: tail -3 aa.txt

Output:

```
cheshta@cheshta-Latitude-E7470:~$ tail -3 aa.txt
tomato
grapes
cherry
```

Options:

~ -n num: Displays the last num of lines.

~ -c num: Displays the last num bytes of file.

~ -f: Continuously monitors the file for changes and displays new lines as they are added.

Terminate with ctrl + c.

20. sort command:

Purpose: Use to sort the file.

Syntax: sort [Option]... [File]

Example: sort aa.txt

Output:

```
cheshta@cheshta-Latitude-E7470:~$ sort aa.txt
apple
banana
cherry
dragonfruit
grapes
guava
kiwi
lichi
mango
muskmelon
orange
strawberry
tomato
watermelon
```

Options:

~ -n: Sorts according to numerical value.

~ -r: Sorts in reverse order.

~ -u: Outputs only the first of an equal run, effectively removing duplicates and providing a unique sorted list.

~ -f: Folds lowercase character to uppercase for comparison, allowing for case-insensitive sorting.

~ -c: Checks whether the input file is already sorted according to the specified option and reports if it is not.

21. echo command:

Purpose: Used for displaying text on the screen.

Syntax: echo [Short-Option]... [String]...

Example: echo Hello, how are you?

Output:

```
cheshta@cheshta-Latitude-E7470:~$ man echo
```

```
cheshta@cheshta-Latitude-E7470:~$ echo Hello, how are you?
Hello, how are you?
```

22. find command:

Purpose: Used to search for files and directories based on various criteria.

Syntax: find [path] [Option] [expression]

Example: find aa.txt

Output:

```
cheshta@cheshta-Latitude-E7470:~$ find aa.txt
aa.txt
```

Options:

~ -name "filename": Searches for files with a specific, case-sensitive name.

~ iname "filename": Perform a case-insensitive name search.

~ -type [f|d|l]: Filters results by filetype: f for regular files, d for directories, l for symbolic links.

~ -empty: Locates empty files or directory.

~ -prune: Excludes a specific directory from the search.

~ -delete: Deletes all found files or empty directories.

23. chmod command:

Purpose: Used to modify the read, write, and execute permissions of files and directories.

Syntax: chmod [Option]... Mode[Mode] [file]

Example: chmod u+x aa.txt

Output:

```
cheshta@cheshta-Latitude-E7470:~$ chmod u+x aa.txt
cheshta@cheshta-Latitude-E7470:~$ ls -l
total 116076
-rwxrw-r-- 1 cheshta cheshta      108 Feb  6 11:43  aa.txt
-rw-rw-r-- 1 cheshta cheshta     440 Feb  4 15:14  abc.txt
drwxr-xr-x 2 cheshta cheshta    4096 Feb  2 22:09  Desktop
drwxr-xr-x 2 cheshta cheshta    4096 Feb  5 16:34  Documents
drwxr-xr-x 2 cheshta cheshta    4096 Feb  3 10:16  Downloads
-rw-rw-r-- 1 cheshta cheshta 118801336 Jan 28 03:22  google-chrome-stable_current_amd64.deb
drwxrwxr-x 2 cheshta cheshta    4096 Feb  5 16:54  'movie song'
drwxr-xr-x 2 cheshta cheshta    4096 Feb  2 22:09  Music
drwxr-xr-x 2 cheshta cheshta    4096 Feb  6 14:39  Pictures
drwxr-xr-x 2 cheshta cheshta    4096 Feb  2 22:09  Public
drwx----- 3 cheshta cheshta    4096 Feb  2 12:31  snap
drwxrwxr-x 2 cheshta cheshta    4096 Feb  5 16:54  songs
drwxr-xr-x 2 cheshta cheshta    4096 Feb  2 22:09  Templates
drwxr-xr-x 2 cheshta cheshta    4096 Feb  2 22:09  Videos
```

Options:

~ -c: Like verbose(-v), but reports only when a change is actually made.

~ -f: Suppresses most error messages.

~ -v: Outputs a diagnostic message for every file processed.

~ -R: Changes files and directories recursively within a specified directory tree.

24. sudo command:

Purpose: Allows a permitted user to execute commands with elevated privileges, typically as the root user.

Syntax: sudo [options] command [arguments]

Example: sudo -l

Output:

```
cheshta@cheshta-Latitude-E7470:~$ sudo -l
[sudo] password for cheshta:
Matching Defaults entries for cheshta on cheshta-Latitude-E7470:
    env_reset, mail_badpass,
    secure_path=/usr/local/sbin\:/usr/local/bin\:/usr/sbin\:/usr/bin\:/sbin\:/bin\:/snap/bin

User cheshta may run the following commands on cheshta-Latitude-E7470:
    (ALL : ALL) ALL
```

Options:

- ~ --help: Displays help message.
- ~ --version: Print sudo version.
- ~ -v: Updates cached credentials.
- ~ -k: Invalidates cached credentials.
- ~ -K: Removes cached credentials entirely.
- ~ -l: Lists allowed/forbidden commands.
- ~ -n: Prevents password prompt.

25. apt command:

Purpose: A high-level command-line interface for the advanced packaging tool system.

Syntax: sudo apt [options] <command> [package(s)]

Example: sudo apt update

Output:

```
cheshta@cheshta-Latitude-E7470:~$ sudo apt update
[sudo] password for cheshta:
Get:1 https://dl.google.com/linux/chrome/deb stable InRelease [1,825 B]
Get:2 https://dl.google.com/linux/chrome/deb stable/main amd64 Packages [1,217 B]
Hit:3 http://in.archive.ubuntu.com/ubuntu focal InRelease
Get:4 http://security.ubuntu.com/ubuntu focal-security InRelease [128 kB]
Get:5 http://in.archive.ubuntu.com/ubuntu focal-updates InRelease [128 kB]
Get:6 http://in.archive.ubuntu.com/ubuntu focal-backports InRelease [128 kB]
Get:7 http://security.ubuntu.com/ubuntu focal-security/main amd64 DEP-11 Metadata [74.9 kB]
Get:8 http://security.ubuntu.com/ubuntu focal-security/restricted amd64 DEP-11 Metadata [212 B]
Get:9 http://security.ubuntu.com/ubuntu focal-security/universe amd64 DEP-11 Metadata [159 kB]
Get:10 http://in.archive.ubuntu.com/ubuntu focal-updates/main amd64 Packages [3,957 kB]
Get:11 http://security.ubuntu.com/ubuntu focal-security/multiverse amd64 DEP-11 Metadata [940 B]
Get:12 http://in.archive.ubuntu.com/ubuntu focal-updates/main amd64 DEP-11 Metadata [276 kB]
Get:13 http://in.archive.ubuntu.com/ubuntu focal-updates/restricted amd64 DEP-11 Metadata [212 B]
Get:14 http://in.archive.ubuntu.com/ubuntu focal-updates/universe amd64 DEP-11 Metadata [446 kB]
Get:15 http://in.archive.ubuntu.com/ubuntu focal-updates/multiverse amd64 DEP-11 Metadata [940 B]
Get:16 http://in.archive.ubuntu.com/ubuntu focal-backports/main amd64 DEP-11 Metadata [7,972 B]
Get:17 http://in.archive.ubuntu.com/ubuntu focal-backports/restricted amd64 DEP-11 Metadata [216 B]
Get:18 http://in.archive.ubuntu.com/ubuntu focal-backports/universe amd64 DEP-11 Metadata [30.5 kB]
Get:19 http://in.archive.ubuntu.com/ubuntu focal-backports/multiverse amd64 DEP-11 Metadata [212 B]
Fetched 5,341 kB in 13s (403 kB/s)
Reading package lists... Done
Building dependency tree
Reading state information... Done
243 packages can be upgraded. Run 'apt list --upgradable' to see them.
```

Options:

- ~ -y: Assumes yes automatically as the answer to all prompts, running non-interactively.

- ~ -d: Downloads package files but does not unpack or install them.
- ~ -f: Attempts to correct a system with broken dependencies.

26. snap command:

Purpose: Snap is a modern package management system developed by Canonical. It installs applications as snap packages (self-contained, with dependencies included).

Syntax: snap options

Example: snap list

Output:

Name	Version	Rev	Tracking	Publisher	Notes
bare	1.0	5	latest/stable	canonical**	base
code	bdd88df0	221	latest/stable	vscode**	classic
core18	20260105	2979	latest/stable	canonical**	base
core20	20251031	2686	latest/stable	canonical**	base
core22	20260113	2292	latest/stable	canonical**	base
gnome-3-28-1804	3.28.0-19-g98f9e67.98f9e67	198	latest/stable	canonical**	-
gnome-3-34-1804	0+git.3556cb3	93	latest/stable/...	canonical**	-
gnome-42-2204	0+git.c1d3d69-sdk0+git.015db9a	247	latest/stable	canonical**	-
gtk-common-themes	0.1-81-g442e511	1535	latest/stable/...	canonical**	-
snap-store	41.3-72-g80e7130	1216	latest/stable/...	canonical**	-
snapd	2.73	25935	latest/stable	canonical**	snaps
whatapp-linux-app	1.2.0	2	latest/stable	swe-himel	-