**Basic Shell/Linux Commands:**

1. **man**

man, command in Linux is used to display the user manual of any command that we can run on the terminal. It provides a detailed view of the command which includes NAME, SYNOPSIS, DESCRIPTION, OPTIONS, EXIT STATUS, RETURN VALUES, ERRORS, FILES, VERSIONS, EXAMPLES, AUTHORS and SEE ALSO.

**Options :**

**1) -a**: This option helps us to display all the available intro manual pages in succession.

**2) -k:** This option searches the given command as a regular expression in all the manuals and it returns the manual pages with the section number in which it is found.

**3)  -I:** It considers the command as case sensitive.

**4) -w:** This option returns the location in which the manual page of a given command is present.

1. **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.

**Options:**

1. **Cd ~ :** this command is used to change directory to the home directory.
2. **cd .. :** this command is used to move to the parent directory of current directory, or the directory one level up from the current directory.
3. **ls**

**ls** is a Linux shell command that lists directory contents of files and directories.

**Options:**

1. **ls -lrt :** The 'ls -lrt' command stands for “list in long format, reverse sorted by modification time”. This means that it will provide detailed information about each file or directory, as well as sort them in reverse order based on their last modified date/time stamp.
2. **ls -t** : It sorts the file by modification time, showing the last edited file first.
3. **ls -l** : To show long listing information about the file/directory.
4. **ls -lh** (h stands for human readable form): To display file size in easy-to-read format. i.e., M for MB, K for KB, G for GB.
5. **ls -a** : To show all the hidden files in the directory, use ‘-a option’. Hidden files in Unix starts with ‘.’ in its file name. It will show all the files including the ‘.’ (current directory) and ‘..’ (parent directory).
6. **touch**

The touch command is used to create a new file without any content inside it. It’s very useful, if you quickly want to create a file inside your working directory directly from terminal.

**Options:**

1. **touch -a:** This command is used to change access time only. To change or update the last access or modification times of a file touch -a command is used.
2. **touch -c**: This command is used to check whether a file is created or not. If not created then don’t create it. This command avoids creating files.
3. **touch -c-d** : This is used to update access and modification time.
4. **touch -m** : This is used to change the modification time only. It only updates last modification time.
5. **touch -d :** This command is used to change only modification date.
6. **touch -r** : This command is used to use the timestamp of another file.
7. **mkdir**

The mkdir stands for 'make directory'. With the help of mkdir command, you can create a new directory wherever you want in your system.

**Options:**

1. **mkdir -p:** A flag which enables the command to create parent directories as necessary. If the directories exist, no error is specified.

**i.e.,** mkdir -p first/second/third == If the first and second directories do not exist, due to the -p option, mkdir will create these directories for us.

**2) mkdir -m:** This option is used to set the file modes, i.e. permissions, etc. for the created directories. The syntax of the mode is the same as the chmod command**.**

1. **Pwd**

The pwd command writes to standard output the full path name of your current directory (from the root directory). All directories are separated by a / (slash). The root directory is represented by the first /, and the last directory named is your current directory.

1. **rm**

The rm command removes the entries for a specified file, group of files, or certain select files from a list within a directory. User confirmation, read permission, and write permission are not required before a file is removed when you use the rm command.

**Options :**

1. **-i (Interactive Deletion):**Like in [cp](https://www.geeksforgeeks.org/cp-command-linux-examples/), the -i option makes the command ask the user for confirmation before removing each file, you have to press y for confirm deletion, any other key leaves the file un-deleted.
2. **-f (Force Deletion):**rm prompts for confirmation removal if a file is write protected. The -f option overrides this minor protection and removes the file forcefully.
3. **wget**

Command wget stands for web get. The wget is a free non-interactive file downloader command. Non-interactive means it can work in background when user is not logged in.

**Options :**

1. **wget -b :** To download the file in background**.**
2. **wget -c :** To resume a partially downloaded file.
3. **wget -w :** This option is used to set the system to wait the specified number of seconds between the retrievals. Use of this option is recommended, as it lightens the server load by making the requests less frequent. Instead of in seconds, the time can be specified in minutes using the m suffix, in hours using h suffix, or in days using d suffix. Specifying a large value for this option is useful if the network or the destination host is down, so that wget can wait long enough to reasonably expect the network error to be fixed before the retry.
4. **mv**

mv stands for move. mv is used to move one or more files or directories from one place to another in a file system like UNIX.

It has two distinct functions:   
(i) It renames a file or folder.   
(ii) It moves a group of files to a different directory.

**Options :**

1. **-f (Force):** mv prompts for confirmation overwriting the destination file if a file is write-protected. The -f option overrides this minor protection and overwrites the destination file forcefully and deletes the source file.
2. **`-i` (interactive):** The “-i” option makes the “mv” command ask for confirmation before overwriting an existing file. If the file doesn’t exist, it will simply rename or move it without prompting.
3. **-b(backup):** With this option, it is easier to take a backup of an existing file that will be overwritten as a result of the mv command. This will create a backup file with the tilde character (~) appended to it.
4. **grep**

 "Global Regular Expression Print"

 The grep filter searches a file for a particular pattern of characters, and displays all lines that contain that pattern.

**Options :**

1. **-c :** This prints only a count of the lines that match a pattern
2. **-h :** Display the matched lines, but do not display the filenames.
3. **-i :** Ignores, case for matching
4. **-l :** Displays list of a filenames only.
5. **-n :** Display the matched lines and their line numbers.
6. **-v :** This prints out all the lines that do not matches the pattern
7. **-e exp :** Specifies expression with this option. Can use multiple times.
8. **-f file :** Takes patterns from file, one per line.
9. **-E :** Treats pattern as an extended regular expression (ERE)
10. **-w :** Match whole word
11. **-o :** Print only the matched parts of a matching line, with each such part on a separate output line.
12. **-A n :** Prints searched line and nlines after the result.
13. **-B n :** Prints searched line and n line before the result.
14. **-C n :** Prints searched line and n lines after before the result.
15. **top**

The top utility is a commonly used tool for displaying system-performance information. It dynamically shows administrators which processes are consuming processor and memory resources.

**Options :**

1. **top -s :** Use top in Secure mode.
2. **top -u :** Display Specific User Process.

1. **more**

Displays file contents one screen at a time.more command is used to view the text files in the command prompt, displaying one screen at a time in case the file is large (For example log files). The more command also allows the user do scroll up and down through the page.

1. **tail**

It is the complementary of [head](https://www.geeksforgeeks.org/head-command-linux-examples/) command. The tail command, as the name implies, print the last N number of data of the given input. By default, it prints the last 10 lines of the specified files.

1. **chmod**

In Unix operating systems, the chmod command is used to change the access mode of a file. The name is an abbreviation of change mode. Which states that every file and directory has a set of permissions that control the permissions like who can read, write or execute the file. In this the permissions have three categories: read, write, and execute simultaneously represented by `r`, `w` and `x`. These letters combine together to form a specific permission for a group of users.

The `chmod` command is used to modify this permission so that it can grant or restrict access to directories and files.

1. **vi – editor**

The default editor that comes with the UNIX operating system is called vi (visual editor). Using vi editor, we can edit an existing file or create a new file from scratch. we can also use this editor to just read a text file.