Hello everyone, in this video, you will learn about the command line interface in Linux and the basic commands.

There are several ways to get to a command line interface in Linux. Three of the most common are the shell prompt, Terminal window, and virtual console.
Shell stands for the command-line interpreter, a layer that sits on top of the kernel. It is a program that processes commands and outputs the results. It is used when Linux OS is used without GUI component.
A terminal is a text-only window that emulates a console in a graphical user interface (GUI) and
A virtual console is a type of terminal. It is a window in which your text-mode programs are active. It is often used when the machine is accessed in remote mode.

Let's understand about Linux Shell. The Linux user shell is the command line interpreter which interprets the commands entered by users for executing them.

The default prompt for a regular user is simply a dollar sign:
$
The default prompt for the root user is a pound sign (also called
number sign or a hash tag):
#
The commands entered on the Shell prompt are executed in the Linux OS. Let's know about some common Linux commands.

Man is a command, used to display any Linux command's reference manual.
In this figure, man command shows the description of the man command itself.

Another command grep is used to filter /search the text from text files or from the output of a command. In the first example, grep is used to search abc string in fasttrack.txt text file while in the second example, grep is used to filter the output of ls command (listing the files with ps extension in the current directory), to display only the files created in May.

echo command in Linux is used to display line of text/string that are passed as an argument to it.
Let's see some examples of echo command with different options. Options allow the echo command to display its output in various styles.
First snapshot shows the simple command to display string passed under argument.
In second snapshot you can see that **\b parameter** removes all the spaces in between the text
In third snapshot, **\c is used to** suppress trailing new line with backspace. And
In fourth snapshot, **\n creates** new line from where it is used.
Similarly, **\t** option is used to create horizontal tab spaces, while
\r specifies carriage return in output.

\v option is used to create vertical tab spaces and
echo * command prints all files/folders, similar to ls command.

After you type a command, the entire command line is saved in your shell's history list. The list is stored in the current shell until you exit the shell. After that, it is written to a history file, from which any command can be recalled to be run again in your next session. After a command is recalled, you can modify the command line, as described earlier. To view your history list, use the history command. Enter the command without options or followed by a number to list that many of the most recent commands as in figures.

cal command is a calendar command in Linux which is used to see the calendar of a specific month or a whole year.
It Shows current month calendar on the terminal
cal -y Shows the calendar of the complete current year with the current date highlighted
If cal command is not installed by default, install ncal by typing **"apt install ncal" in debain Linux distributions.**

The cron is a software utility that automates the scheduled task at a predetermined time. It is a daemon process, which runs as a background process and performs the specified operations at the predefined time when a certain event or condition is triggered without the intervention of a user.

On the other hand, the crontab (abbreviation for “cron table”) is a list of cron jobs. It allows the user to add, remove or modify the scheduled tasks.

The next command to know about is df command, which is used to display the space available in your filesystems. To see the amount of space available on all of the mounted filesystems on your Linux computer, type df with no options:
This example output shows the space available on the hard disk partition mounted on the / (root) directory (/dev/sda1). Disk space is shown in 1KB blocks. To produce output in a more human-readable form, use the -h option:

The uname command shows the type of system you are running (Linux here). When you add -a, you also can see the hostname, kernel release, and kernel version.
Hostname command displays the system’s host name. In the given command snapshot, the hostname command displays the hostname as cdac. A domain name, Ypdomainname etc. are the commands similar to host name to display additional system information.

What is in Linux is a command used to get a one-line manual page description. In Linux, each manual page has some sort of description within it. So, this command search for the manual pages names and show the manual page

description of the specified filename or argument, as in snapshot, you can see one line description of ls command.

You can see information about your current login session by using the who command.
In the example, two options u and h are used with who. The u option says to add information about idle time and the process ID and option H prints the header.

The top command provides a screen-oriented means of displaying processes running on your system. With top, the default is to display processes based on how much CPU time they are currently consuming. Different fields in the output are explained in the figure such as PID, PR, VIRT etc.

banner command in Linux is used to print the ASCII character string in large letter to standard output.
User may have to install it by "apt install systemvbanner", if not installed already.

whoami command is used both in *Unix Operating System* and as well as in *Windows Operating System to display the username associated with the current user id.*

Thank You…