Linux Command Basics

- ip - used to show or manipulate routing, devices, and tunnels.
- ls - list the contents of a directory.
- df - Displays the amount of disk space used.
- du - display a list of all the files along with their respective sizes.
- free - use to get a detailed report on the system's memory usage.
- scp - securely copy files or directories over ssh.
- find - locates files using user-defined criteria.
- ncdu - provides a useful and convenient way to view disk usage.
- pstree - used to show running processes in a tree (data structure).
- latest - displays a list of the most recently logged-in people.
- w – display a list of the currently logged-in user sessions.
- grep - searches a file for a pattern of characters and displays all lines that match.
- awk - a scripting language used for text processing.
- sed - stream editor used to perform lots of functions on files, like searching, find and replace, insertion, or deletion.
- cut - allows you to cut out sections of a specified file or piped data and print the result to standard output.
- sort - used to sort files
- uniq - used to extract uniq occurences
- tr - utility for translating or deleting characters.
- diff - used to display differences in files by comparing line by line.
- uptime – displays the system uptime as well as the load average.
- top – shows a real-time view of running processes in Linux.
- vmstat - used to obtain information about memory, system processes, paging, interrupts, block I/O, disk, and CPU scheduling.
- htop - a process viewer and manager that is interactive.
- dstat - allows you to view all of your system resources instantly. All-in-one vmstat, iostat, netstat, and ifstat utility.
- Iftop - is a network traffic viewer.
- nethogs - is a network traffic analyzer.
- iotop - is an interactive I/O viewer. Get a snapshot of storage r/w activity.
- iostat - provides statistics on storage I/O.
- netstat -used to show network statistics.
- ss - ss command is a simpler and faster version of the now obsolete netstat command.
- atop – a tool for monitoring system resources in Linux.
- ssh – secure protocol used as the primary means of connecting to Linux servers remotely.
- sudo - run commands with administrative privileges.
- cd – navigate between directories.
- pwd – displays the current directory path.
- cp - copy files and directories.
- mv – move file or directories.
- rm – deletes files and directories.
- mkdir - create new directories.
- touch – used to create, update a computer file or directory's access and modification dates.
- man – used to read system reference manuals.

- apropos – searches manual page names and descriptions for a user-supplied keyword.
- rsync - remote file transfer and synchronization.
- tar - is an archive utility.
- gzip - use for compression and decompression of files.
- b2zip - a compression utility comparable to gzip. It employs a distinct compression algorithm.
- zip – used for file packaging and compression (archiving).
- locate – in Linux, search for files.
- ps – allows you to list the status of processes running on your system easily.
- cron - execute scheduled tasks.
- nmcli - sused to display network device status, create, edit, activate/deactivate, and delete network connections.
- ping - sends an ICMP ECHO REQUEST to network hosts.
- traceroute - examine the path packets follow to reach a specific host.
- mtr - is a network diagnostic tool, a combination of ping and traceroute commands.
- nslookup - interactively query Internet name servers (NS).
- host –used for DNS (Domain Name System) lookup operations.
- dig – DNS lookup tool.
- wget - download files through HTTP, HTTPS, FTP, and FTPS.
- curl – data transport via several network protocols. (Can handle more protocols than wget)
- dd - used to convert and copy files.
- fdisk - Modify the disk partition table.
- parted – used to create and manipulate partition tables.
- blkid - a command-line utility for finding and printing block device attributes.
- mkfs - create a Linux file system.
- fsck - an utility for determining the consistency of a file system.
- nc - used for just about anything under the sun involving TCP or UDP.
- umask - returns, or sets, the value of the system's file mode creation mask.
- chmod – alters the access rights of file system objects.
- chown – alter the owner and group of a file.
- chroot - used to change the root directory.
- useradd - create a new user or alter the default information for a new user.
- userdel - used to delete a user account and all associated files.
- usermod – used to edit or change any existing user account's properties.
- vi is a text editor.
- cat – displays the contents of a file.
- tac – reverse output file contents.
- more - show file contents one screen/page at a time.
- less – identical to more, but with more features
- tail – used to show the last few lines of a text file or piped data.
- head - used to show the first few lines of a text file or piped data.
- dmesg – displays the kernel ring's message buffer.
- journalctl - Tused to view systemd, kernel and journal logs.
- kill - terminates a process.
- killall - sends a kill signal to all instances of a specific process.
- sleep – pauses program execution for a given amount of time.
- wait – suspend script execution until all background jobs have been completed.

- nohup - short for no hang up is a command in Linux systems that keep processes running even after exiting the shell or terminal.
- screen – keep a remote server session open. (It also functions as a full-screen window manager.)
- tmux is a terminal multiplexer.
- passwd — Change the password of a user.
- clear – clears the terminal's screen.
- env - run a command in an altered environment.
- screen – keep a remote server session open. (It also functions as a full-screen window manager.)
- tmux is a terminal multiplexer.
- systemctl - used to control and manage systemd and services.