**LINUX**

* Linux is a operating system based on the kernel. It is very light weight and open source. You can use it for multiple task and multiple users. It has multiple option to use.

**ALL BASIC LINUX COMMAND**

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* CAT –With the help of this command you can create, read and put some data in it. You cannot edit it with the help of cat command but you can any data in it.
* TOUCH – With the help of this command you can create empty file.
* VI/VIM AND NANO -With the help this command you can create and also edit in an existing file.
* TAC- It is used for reverse the content of your file.
* COPY - With the help of copy command you can copy your document from one file to another.
* MOVE ­­– This command is used to cut and pest your data from one to another file and also used to rename the file.
* MKDIR – It is used to create a directory.
* IFCONFIG -IP – To know the Ip address.
* HOSTNAME – It will show the details of the machine that you use.
* CAT /ETC/OS-REALSE – Which version you are using on your os of Linux.
* YUM INSTALL – To install a package.
* YUM REMOVE – To delete a package.
* YUM UPDATE – To update the package.
* WHICH – Package install or not.
* WHOIAM – To know which user you are.
* ECO – with the help this command you can put some data and also edit the file.
* GRAP – With the help of this command you can find any particular word.
* SORT – Whit the help of this command you can put data in an alphabetical order.
* USEADD – To create a user.
* GROUPADD – To create a group.
* GPASSWD -A USERNAME GROUPNAME – To add a user in a group.
* GPASSWD -M MULTIPLEUSER GROUPNAME – To add multiple users in a group.
* IN – To create a hard link.
* LN -S – To create a soft link.
* TAR -CVF OUTPUTFILE EXESTINGFILE – Multiple files become one directory.
* GZIP FILENAME – To compress a file.
* GUNZIP FILENAME – To open a compress a file.
* XVF DIRECTORYNAME – To extract the directory
* CHOWN – To change the owner/ user.
* CHGRP – To change the group.

**SOURCE CODE MANAGEMENT**

* **LOCAL VERSION CONTROL SYSTEM** – Now it is fully out dated.
* **CENTRAL VERSION CONTROL SYSTEM** – In central version control there is also two demerits, the 1st one is it does not have any back up and the 2nd thing is here the internet is mandatory.
* **DISTRIBUTED VERION CONTROL SYSTEM ­**– It is the upgrade version of central version control system and GIT is the example of it.

**GIT (GLOBAL INFORMATION TRAKER)**

* Git is a DevOps tool used for source code management. It is free to use and open-source code management. It is used to track the changes in the source code.

**ALL BASIC LINUX COMMAND**

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* GIT ADD . - To transfer data from working space to staging area.
* GIT COMMIT -M (MASSAGE) – To transfer data from staging area to local repo.
* GIT PUSH -U ORIGIN MASTER - To push the data to central repo.
* LS – To see all files.
* LS -A – To see hidden files also.
* GIT STATUS - To see which place your code is.
* GIT LOG - To know all the details of your commit.
* GIT LOG -N – It will show the number of commits.
* GIT REMOTE ADD ORIGIN URL – To connect local repo with the central repo.
* GIT PULL ORIGIN MASTER – To pull the code from the central repo.
* GIT BRANCH – To create a branch.
* GIT CHECKOUT – To exit from a branch.
* GIT BRANCH -D – To delete a branch.
* GIT MARGE BRANCH NAME – To marge a branch.
* GIT STASH – To stash any data.
* GIT STASH LIST – To see all stash.
* GIT STASH APPLY STASH@{0} – To bring a stash item.
* GIT STASH CLEAR – To clear all stash item.
* GIT RESET – To bring any code from staging area to working space.
* GIT REVERT – It will reverse your data to previous area.
* GIT CLEAN -N – To delete untrack file.
* GIT CLEAN -F – To delete untrack file forcefully.
* GIT TAG-A(TAGNAME) -M(MASSAGE) COMMIT ID – To give a tag
* GIT TAG – To see all tag
* GIT TAG -D (TAGNAME)– To delete tag.
* .GITIGNORE – If you want to ignore any file.
* GIT DIFF – It shows the difference between two branches.
* GIT CLONE - Creates a copy of an existing Git repository. Cloning is the most common way for developers to obtain a working copy of a central repository.
* GIT FETCH - Fetching downloads a branch from another repository, along with all of its associated commits and files. But it doesn't try to integrate anything into your local repository. This gives you a chance to inspect changes before merging them with your project.
* GIT REBASE **-** Rebasing lets you move branches around, which helps you avoid unnecessary merge commits. The resulting linear history is often much easier to understand and explore.

**MAVEN**

* It is an automation, project management and build tool.
* Maven means accumulation of data.
* Maven gives all the information about the project.
* It makes the project easy to build.
* Maven can make any number of projects with a desire stage.

**WORKFLOW**

* Generate the source code.
* Generate document from the source code.
* Compile the source code.
* Package the compile code into jar and war file.
* Installing the packaging code into central repo or local repo.

**JENKINS**

* It is an open source ci cd automation software devops tool.
* It is written in java.
* It automates the software.
* It is heart of the devops.