Git is an open source tool which help to track or record changes done in application

Git provide local repository.

Git hub : Git hub is an open source Remote repository provided by Micro soft.

Git	git hub
Provide local repository	Git hub provide remote repository

We can use different type of remote repository

Ie Git hub

   Git lab

   Bit bucket

      AWS : Code commit

Azure

Google cloud

Private cloud

Remote repository provided they can provide public as well as private repository.

Please create git hub account.

git remote add origin RemoteRepositoryURL   it is use to connect local repository with

                                                 remote repository

git push -u origin main   this command is use to push the code from

u : upstream data   local to remote.

==git remote -v==   it will provide remote repository details in local repository.

Git hub support lot of different types of authentication mode.

1. Token base authentication to push the code from local to remote.

Generate the token

==git remote remove origin==   it is use to disconnect local with remote repository.

Steps to push the code from local repository to remote repository

1. Create the folder
2. Then create more than one file using any command or GUI with some contents.
3. Then make this folder as local repository so open the terminal
   And type the command as ==git init==
4. To verify this folder as local repository or not write command as ==ls -a==
5. ==git status==   to check current status of repository
6. ==git add .==   to add all files or folder from file system to staging area.
7. ==git commit -m "commit message"==   to push the code from staging area to local repository
8. ==git branch -M main (by default branch is master rename to main)==
9. ==now== create remote repository
10. please create the token
11. ==connect== local repository with remote repository
    git remote add origin https://token@github.com/username/repositoryname
12. ==git remote -v==   : this command is use to display remote repository URL.
13. If anything go wrong please remove remote repository url using command as
    ==git remote remove origin==
14. ==git push -u origin branchName== ie master or main
    ==(local branch name)==

If we want to download any public repository in local machine.(Virtual Lab)

Create the folder : TrainerRepository

Then open terminal inside that folder and run the command as

git clone URL   it is use to download public repository code in local machine.

git clone `https://github.com/Kaleakash/test121212`

After clone using ls command verify folder name
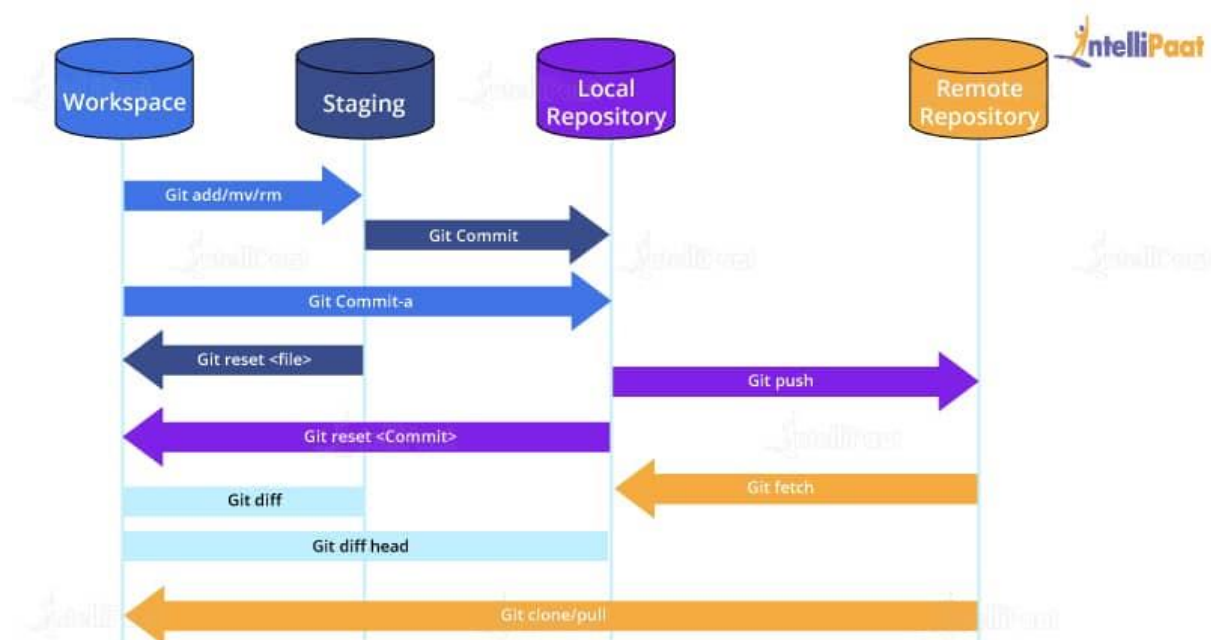
ls

test121212

cd test121212

git pull   this command you need to run inside repository folder.

          It will pull new changes done in remote repository.

git push -u origin main   (please run this command insider trainer repository ie test121212)

Git fork : it is use to create the copy of remote repository folder without effecting actual repository.

Hello

After fork

Please clone repository in your local machine.

git clone URL

ls

test121212

cd test121212   move inside a folder

create new file or do some task

main

       git add .

       git commit -m "done"

       git push -u origin main

git remote remove origin

git add remote origin https://YourToken@github.com/YourName/test121212.git

git push -u origin main

clone : creating copy of remote repository in local machine or local repository

fork : creating copy of remote repository in remote machine or git hub without effect actual repository code.