



# Git/Github

`git clone <link>` To clone a existing repo

`git checkout branch1` To go to that branch

`git branch branchname` To create a new branch of a certain name

`git merge branchname` will merge your current branch with other branch

`git branch -d branchname` Deletes a existing branch

`git push origin -delete branchname` Deletes the branch from remote repo

`git fetch` To get the changes between current local Repo and Remote repo without merging them in

`git stash` Saves changes without using `git add .` so that you can switch branches without losing your changes

`git stash list` Gives list of all stashes

`git stash apply stash@{2}` this will apply those changes in your current window

`git stash pop` removes latest stash

`git stash clear` Clears all stash

`git pull origin main` Pulls changes from the remote repo to the local repo (`git fetch + git merge`)

`git status` Gives status of each file U-Untracked git doesn't know about this file . M-Modified some changes have been made to this file . S-Staged ready to commit

`git diff branch1 branch2` gives all differences between the branches

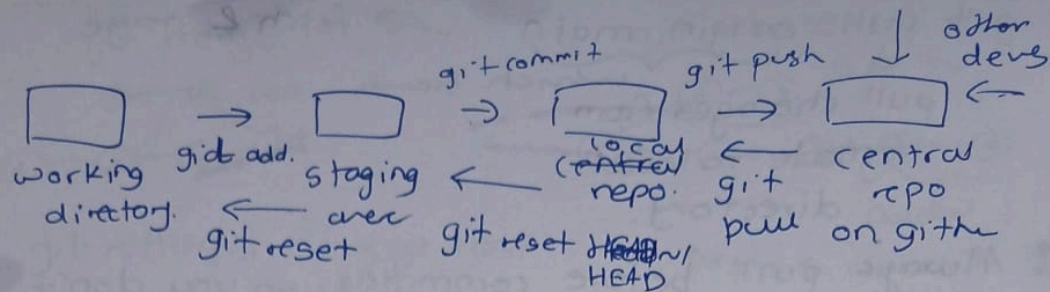
`git rebase branch` instead of merging all changes all the commit history of that merge gets attached to the current branch preserves the commit history

`git reflog` if you wanna go back

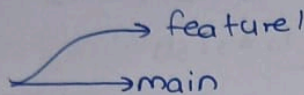
`git reset -soft` or `-mixed` `-hard` soft just moves head changes are still there `-mixed` just unstages those changes they are still there `-hard` removes those changes entirely

`git revert` creates another commit that does exact opposite of latest commit

## Handwritten Notes



git clone <link> → to clone existing repo.



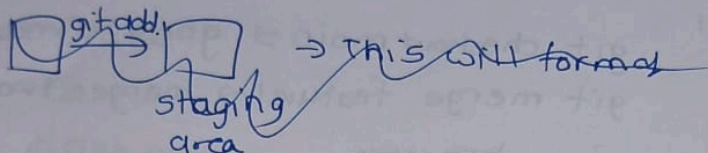
git checkout main → goes to main  
git merge feature → merges two branches.

- git branch name → creates new branch (or use git checkout -b 'name')
- git branch → shows all branches
- git branch -d branchname → delete branch. (local)
- git push origin --delete branchname → remove from remote repo
- git fetch → download latest changes from remote repo
- git stash → save changes without using git add. before you switch branches
- git stash save "This is uncommitted" → helps in finding latest
- git stash list → List all stashes
- git stash apply stash@{2} → code  
→ apply that change to current
- git stash apply → most recent
- git stash pop → remove latest stash.
- git stash clear → clear all stashes
- git remote add origin URL → connecting to a remote repo



git pull origin main → fetch & merge  
↓  
pull changes from which branch  
remote to local  
directory.

⚠ Always pull before committing so you don't accidentally overwrite someone else's code



git add → all files in current folder

git add -A → all files everywhere

git status → gives status of each file.

untracked → git has no history for this file (new file)

git log → see all commits with their id.

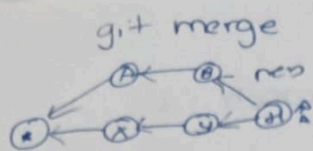
Head → pointer to latest commit.

git diff → changes that aren't git add yet

git diff --staged → shows what new things are changed than the last commit

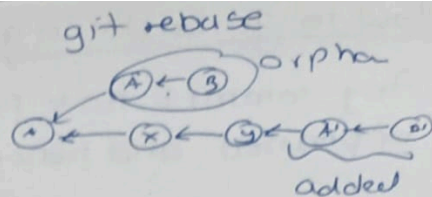
git diff <commit 1> <commit 2> → diff between 2 commits

git diff main branchname → compares 2 branches  
+ → added - → removed



git reflog → if you lost work

commits which are orphaned are deleted 30 days later



Preserves commit cycle of previous branch but the id changes

Pull request : If we want our code to go from our branch to main branch you make a PR. (person of authority will review code) & accept or deny PR.

not a command but on github this is a thing.

git commit -am "message" → add & commit in one line only works for modified not untracked files

Merge conflicts : resolve in vs code

Forking → Make a copy of another repo. & then edit it & then

### How to go back in git

Any commit not part of a branch is orphaned and hence deleted

git reset commitX → delete all commits after this commit

git revert → creates a new commit that does exact opposite of prev commit

git reset --soft moves head

--mixed (default)

--hard

OR

do git reflog

find commit

git branch recoverybran <commit hash>