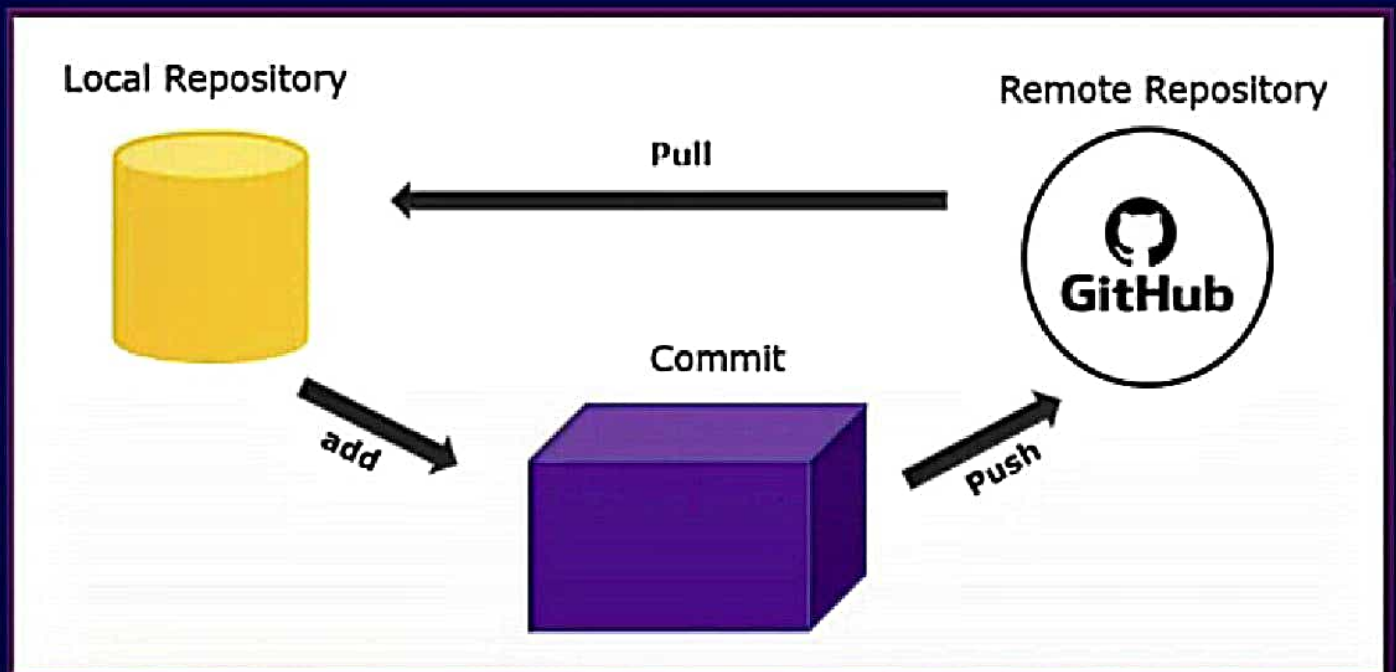# 7. How can you initialize a repository in Git?

Using git init command

14. What does the git push command do?

25.How you revert a commit command that has already been pushed and made public?

git revert <commit id>

git commit –m "commit message"

18. What is Git stash ?

GIT stash captures the present state of the working directory and index it and keeps it on the stack at a later stage.

It returns a clean working directory.

17. What does git clone do?

Git clone allows you to create a local copy of the remote GitHub repository.

12. Which command is used for writing a Commit message in Git?

git commit -m "commit message"

4. What is the difference between Git and Github?

Git	Github
It is a software.	It is a service.
It is installed locally on a system.	It is hosted in the web.
It is a high quality version control system.	It is a cloud based hosting service.
It is a distributed version-control system for tracking changes in source code during software development.	It provides hosting for software development and version control using Git.
It focused on version control and code sharing.	It focused on centralized source code hosting.

13. What does git pull origin master do ?

It fetches all the changes from the master branch onto the origin and integrates them into the local branch.

git pull = git fetch + git merge origin/ master

24. What is the command used to fix a broken commit?

git commit --amend

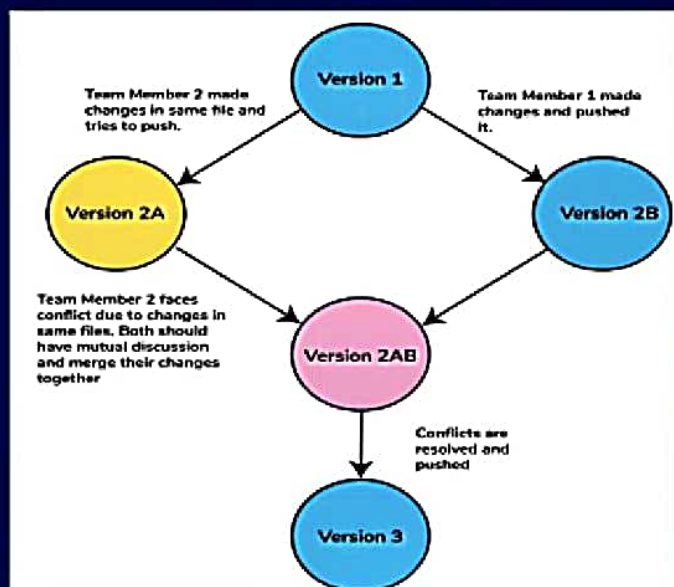git commit --amend -m "Revised commit message"

22. What is the difference between fork, branch, and clone?

A fork is a copy of a repository that you manage. Forks let you make changes to a project without affecting the original repository.

git cloning means pointing to an existing repository and make a copy of that repository in a new directory, at some other location.

In Git, a branch is a new/separate version of the main repository.

23. How do you resolve conflicts in Git?

- ➤ Identify the files responsible for the conflicts.
- ➤ Implement the desired changes to the files
- ➤ Add the files using the git add command.
- ➤ The last step is to commit the changes in the file with the help of the git commit command.

21. What is the functionality of git clean command?

The git clean command removes the untracked files from the working directory.

15. What is the difference between git pull and git fetch?

git pull = git fetch + git merge
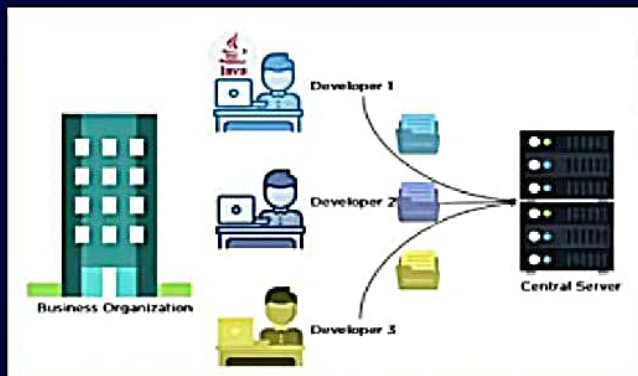
Command –

`git fetch origin`

`git fetch –all`

Command –

`git pull origin master`

1. What is Git?

Git is a free and open source distributed version control system which enables you to store code, track revision history, merge code changes, and revert to earlier code version when needed.
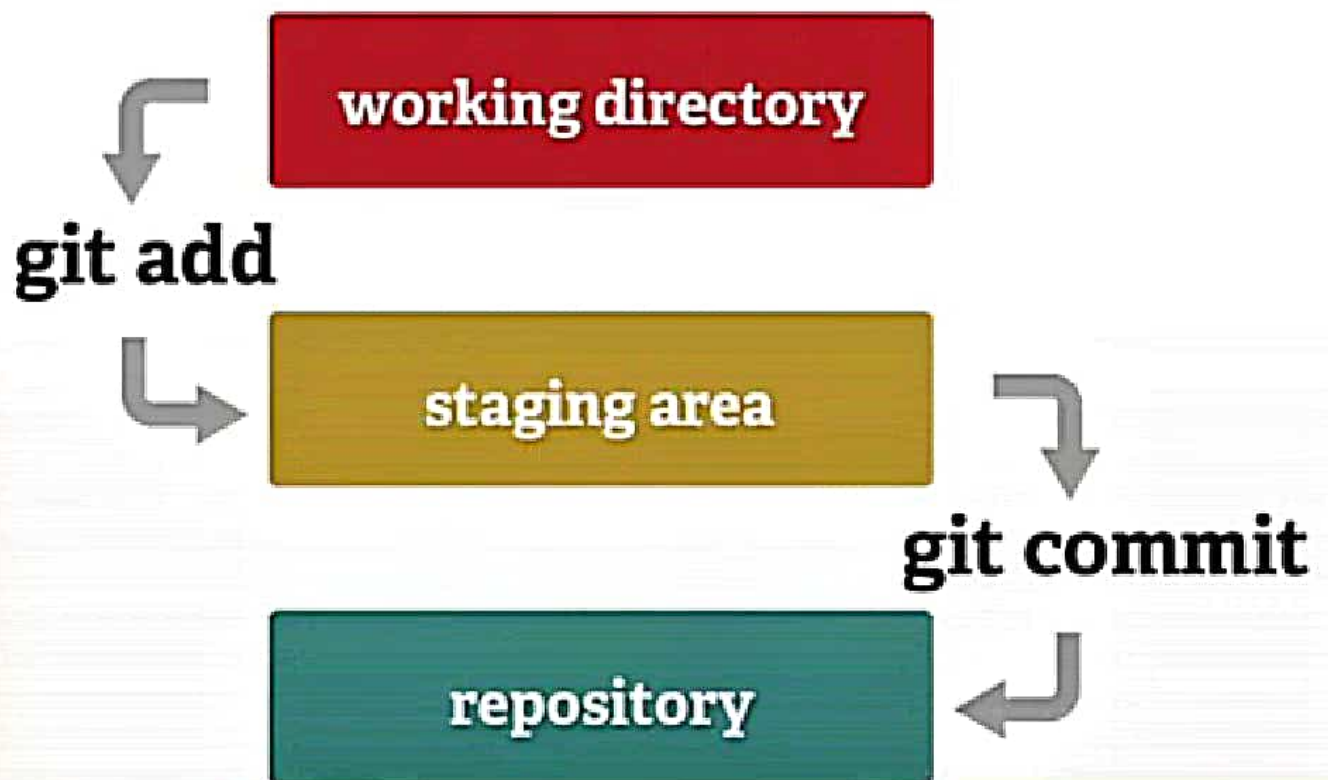
8. What are the states of a file in Git?

Three different states.

➢ **Modified**

➢ **Staged**

➢ **Committed**

9. What Is Staging Area In GIT?

19. What does the git reset --mixed and git merge --abort commands do?

git reset --mixed is used to undo changes made in the working directory and staging area.

git merge --abort is used to stop the merge process and return back to the state before the merging began.

20. How do you find a list of files that has been changed in a particular commit?

`git diff-tree –r {commit hash}`

10. Name a few Git commands with their usage.

git init: To initialize an empty Git repository

git config: To configure a username and email address

git add: To add one or more files to the staging area

git diff: To view the changes made to a file

git commit: To commit changes to head but not to the remote repository.

git log :- list the version history for the current branch.

git checkout [branch name] :- used to switch from one branch to another.

16. What is the difference between git merge and git rebase

Command – `git merge feature master`

Or :-

git checkout feature

git merge master

Command – `git rebase master`

Or :-

git checkout feature

git rebase -i master

5. Mention the various Git repository hosting services.

- Github
- Gitlab
- Bitbucket
- SourceForge
- GitEnterprise

- LaunchPad
- Perforce
- Beanstalk
- Assembla

2. What is Version Control System?

➢Version Control System is a collection of software tools that help a team to work together on the same project and allow them to manage changes to a file or set of data over time.

➢It maintains all the edits and historic versions of the project.

6. What is a Git repository?

➢ Git repository is a place where all the Git files are stored.

➢ These files can either be stored on the local repository or on the remote repository.

➢ It allows us to save versions of our code which we can access whenever needed.