

Git-

1. What is git?

Git is a popular version control system.

It is used for tracking code changes, who made the changes and team collaboration.

Keywords.

Repository - a folder where git tracks our project code and its history

Clone - make a copy of a remote repository on our local machine.

Stage - it tells which changes we want to save next.

Commit - it is a snapshot of staged changes.

Branch - it is a different version on which we can work in parallel on different features.

Merge - it is a process of combining changes from different branches.

Push - send our changes to a remote repository.

Pull - get the latest changes from the remote repository.

How does it work?

Step 1 - Initialize git on a folder to make it a valid repository.

Step 2 - git now creates a hidden folder to keep track of changes in that folder.

Step 3 - when a file is changed or added or deleted, it is considered as modified.

Step 4 - select the modified files which we want to stage.

Step 5 - the staged files are committed, which prompts git to store a permanent snapshot of the files.

Step 6 - git allows us to see the full history of every commit we can revert back to any commit.

Step 7 - we push the code to a remote repository for collaboration.

Note - git does not store a separate copy of every file in every commit, but it keeps the track of changes made in each commit.