

1. GIT means global information tracker.it is popular distributed version control system.GIT is used for tracking code changes,tracking who made changes like history of the files and coding collaborations means we share our code with other developers to make better projects
2. Version control system is a system that records changes to a file or set of files overtime.so that we can recall specific versions later. i.e for every source code changes in a file and a new version will be created.
3. GITHUB is a tool of git server. it is a repository and largest host of the source code in the world and it is used to store or maintain the source code of projects.
4. GITHUB,GITlab,BITBUCKET are the tools of git hosting services.

5. 1.centralized version control system

By cvcs developers can collaborate and do changes in code.centralized version server will have a single server that contains all version files.no more clients connect cvcs and checkout for files.for many years this has been standard version control system.Advantages of version control system are everyone knows to a certain degree what everyone else on the project is doing.administrators have full control over who can do what and easier to manage.disadvantages of cvcs are if server goes down for an hour then during that hour no body can collaborate at all or save versioned changes to the server.if the hard disk of centralize server will be corrupted and proper backup have not been kept then we will lose all the data(source code).

To resolve this problem we need to use distributed version control system In DVCS, developers can not check for latest snapshot of files rather they fully mirror the repository including its full history.advantages of DVCS are If the main server dies then local system will maintain a copy of main repository which has full backup of data and if the main repository server is down then developer can make changes in local repository and when main repository server is up then can be pushed the code in main repository from local repository.

Local repository or local version control system is used to maintain files version and retrieve files based on specific versions and local repository is in our personal system so if our system is corrupted then there may be data loss issues.

6. GIT is used for tracking code changes,tracking who made changes like history of the files and coding collaborations means we share our code with other developers to make better projects
7. Git repository is .git folder inside the project.this repository tracks all the changes made to files in the project and building a history overtime.

8. To create a new repo we will use git init command this is one time command we use during initial setup of new repo executing this command will create a new git subdirectory in our current working directory.this will also create a new main branch.