ASSIGNMENT 2

1. What is GIT and GitHub

Git: Git is a distributed version control system for tracking changes in source code during software development. It is designed for coordinating work among programmers, but it can be used to track changes in any set of files. Its goals include speed, data integrity, and support for distributed, non-linear workflows.

GitHub: GitHub is a web-based Git repository hosting service, which offers all of the distributed revision control and source code management (SCM) functionality of Git as well as adding its own features.

2. What is a git repository?

A Git repository tracks and saves the history of all changes made to the files in a Git project. It saves this data in a directory called . git , also known as the repository folder. Git uses a version control system to track all changes made to the project and save them in the repository

3. What are the branches in GitHub?

Branches allow you to develop features, fix bugs, or safely experiment with new ideas in a contained area of your repository.You always create a branch from an existing branch. Typically, you might create a new branch from the default branch of your repository.Use a branch to isolate development work without affecting other branches in the repository.

Each repository has one default branch, and can have multiple other branches. You can merge a branch into another branch using a pull request.

4. What do you mean by commit?

The git commit command captures a snapshot of the project's currently staged changes. Committed snapshots can be thought of as “safe” versions of a project—Git will never change them unless you explicitly ask it to. Prior to the execution of git commit, The git add command is used to promote or 'stage' changes to the project that will be stored in a commit. These two commands git commit and git add are two of the most frequently used.

5. What is the command used to delete a branch?

The command to delete a local branch in Git is:

git branch -d local_branch_name

git branch is the command to delete a branch locally.

-d is a flag, an option to the command, and it's an alias for --delete. It denotes that you want to delete something, as the name suggests.

- local_branch_name is the name of the branch you want to delete.

6. What is the git-clone command used for?

git clone is primarily used to point to an existing repo and make a clone or copy of that repo at in a new directory, at another location.

The original repository can be located on the local filesystem or on remote machine accessible supported protocols. The git clone command copies an existing Git repository

Cloning to a specific folder

git clone <repo> <directory>

Cloning a specific tag

git clone --branch <tag> <repo>

7.What is the difference between git pull and git fetch

git fetch is the command that tells your local git to retrieve the latest meta-data info from the original (yet doesn't do any file transferring. It's more like just checking to see if there are any changes available). git pull on the other hand does that AND brings (copy) those changes from the remote repository.