GIT Assignment 4

1. How can new features be added to the main branch? What is a git conflict?

git checkout -b new-feature main
git add <some-file>
git commit
git push -u origin new-feature
*Git can handle most merges on its own with automatic merging features. A conflict arises when two separate branches have made edits to the same line in a file, or when a file has been deleted in one branch but edited in the other. Conflicts will most likely happen when working in a team environment.

2. How do I remove a branch from GIT?

Delete a branch with **git branch -d <branch>.**

Here's the command to delete a branch remotely: **git push <remote> --delete <branch>.**

3. What is the purpose of the git checkout command?

The git checkout command lets you navigate between the branches created by git branch . Checking out a branch updates the files in the working directory to match the version stored in that branch, and it tells Git to record all new commits on that branch.

4. What is the purpose of the git commit command?

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.

5. What is the purpose of the command 'git rm'?

The git rm command removes a file from a Git repository. This command removes a file from your file system and then removes it from the list of files tracked by a Git repository.

6. What is the purpose of the git log command?

The git log command shows a list of all the commits made to a repository. You can see the hash of each Git commit, the message associated with each commit, and more metadata. This command is useful for displaying the history of a repository.

7. What is the purpose of 'git add'?

The git add command adds a change in the working directory to the staging area. It tells Git that you want to include updates to a particular file in the next commit. However, git add doesn't really affect the repository in any significant way—changes are not actually recorded until you run git commit .

8. In GIT, what is a 'bare repository'?

A bare repository is the same as default, but no commits can be made in a bare repository. The changes made in projects cannot be tracked by a bare repository as it doesn’t have a working tree. A working tree is a directory in which all the project files/sub-directories reside. Bare repository is essentially a .git folder with a specific folder where all the project files reside.

9. What's the difference between git remote and git clone?

They are two completely different things. git remote is used to refer to a remote repository or your central repository. git clone is used to copy or clone a different repository.