**What is Git and why is it used?**

Git is a control system used for tracking changes in source code during software development. It allows multiple developers to work on a project simultaneously without interfering with each other's work. Git provides features like branching, merging, and history tracking and making.

**Explain the difference between Git pull and Git fetch?**

Git pull: Fetches changes from a remote repository and merges them into the current branch. It is essentially a combination of git fetch and git merge.

Git fetch: Fetches changes from a remote repository but does not automatically merge them into the local branch.

**How do you revert a commit in Git?**

git revert <commit hash>

**Describe the Git staging area.**

The staging area, also known as the index, is a crucial concept in Git. It is an intermediate area where changes are placed before committing them to the repository. Developers use commands like **git add** to stage changes, and once the changes are staged, they can be committed to the repository using **git commit.**

**What is a merge conflict, and how can it be resolved?**

A merge conflict occurs when Git is unable to automatically merge changes from different branches. This typically happens when two branches modify the same part of a file. To resolve a merge conflict, you need to manually edit the conflicted files, choose which changes to keep, and then complete the merge by committing the resolved changes.

**What is the purpose of Git rebase?**

Git rebase is used to combine or integrate changes from one branch into another. It allows for a cleaner and more linear project history by applying the changes of one branch onto another.

**Explain the difference between Git clone and Git fork.**

git clone: Used to create a copy of a remote repository on your local machine. It establishes a connection with the original repository and allows you to fetch updates.

git fork: A feature on code hosting platforms like GitHub. Forking creates a personal copy of someone else's repository on your account.

**How do you delete a branch in Git?**

git branch -d <branch >

**What is a Git hook, and how can it be used?**

A Git hook is a script that Git executes before or after certain events, such as committing, pushing, or receiving a commit. Git hooks allow developers to automate tasks and enforce certain workflows.