**GIT & GITHUB TEST**

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

Git is a distributed version control system used for tracking changes in source code during software development.

It enables collaboration, tracks changes, and allows multiple developers to work on the same project simultaneously.

**2.Explain the difference between Git pull and Git fetch.**

git pull: Fetches changes from a remote repository and merges them into the current branch.

git fetch: Retrieves changes from a remote repository but does not merge them.

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

We can use git revert <commit> to create a new commit that undoes the changes introduced by the specific commit.

**4.Describe the Git staging area.**

The staging area is where changes are prepared before committing.

Files are added to the staging area using git add before committing them to the repository.

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

**6.How does Git branching contribute to collaboration?**

Git branching allows developers to work on isolated features or fixes without affecting the main codebase.

Branches can be merged back into the main branch when the work is complete.

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

Git rebase integrates changes from one branch into another by applying each commit from the source branch onto the destination branch.

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

git clone is used to copy a repository to the local machine.

git fork is a feature on platforms like GitHub, creating a personal copy of someone else's repository on the platform for independent development.

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

Use git branch -d <branchname> to delete a local branch.

Use git push origin --delete <branchname> to delete a remote branch.

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

A Git hook is a script triggered by Git events, such as pre-commit or post-receive.

Hooks can be used for tasks like running tests before a commit or sending notifications after a push.