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 allows multiple developers to collaborate, track changes, and maintain different versions of a project.

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

Git Pull: Fetches changes from a remote repository and automatically merges them into the current branch.

- Git Fetch: Fetches changes from a remote repository but does not automatically merge them. It updates the remote-tracking branches.

3.How do you revert a commit in Git?

Use git revert <commit> to create a new commit that undoes the changes made by the specified commit. This approach keeps a clean history

4.Describe the Git staging area.

The staging area is where changes are prepared before committing in Git. It allows selective inclusion of modifications in the next commit through the git add command.

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

The staging area is where changes are prepared before committing in Git. It allows selective inclusion of modifications in the next commit through the git add command.

6.How does Git branching contribute to collaboration?

Git branching enables parallel development by creating separate branches for features or bug fixes. Developers can work independently and later merge their changes into the main branch, facilitating collaboration.

7. What is the purpose of Git rebase?

Git rebase is used to integrate changes from one branch into another by moving or combining a sequence of commits. It helps maintain a linear and cleaner project history

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

- Git Clone: Creates a copy of a repository on your local machine.

- Git Fork: Creates a copy of a repository on a remote server (like GitHub). Forked repositories are often used for contributing to open-source projects.

9.How do you delete a branch in Git?

Use git branch -d <branch\_name> to delete a branch locally. For remote branches, use git push origin --delete <branch\_name>.

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

Git hooks are scripts that run automatically every time a particular event occurs in a Git repository. They let you customize Git's internal behavior and trigger customizable actions at key points in the development life cycle.