1.What is Git and why is it used?

Ans – Git is a distributed version control system used for tracking changes in source code during software development. It allows multiple developers to work on the same project concurrently by tracking the changes

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

Ans -

Git pull - Fetches changes from remote repository and automatically merges into current branch

Git Fetch – Retrives changes from remote repository and allow to decide before merge

3.How do you revert a commit in Git?

Ans – the revert command undo the changes made in specific commit

Command – git revert <commit-id>

4.Describe the Git staging area.

Ans – Staging Areas in git is a step before actual commit

Use git add command to transfer the file into staging area before doing commit

Help to select particular file to be commit

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

Ans – It occurs when a git is unable to automatically merge changes from different branches to resolve use git add and then git merge --continue

6.How does Git branching contribute to collaboration?

Ans – It allows to work on isolated feature without affecting other main code enable parallel development and collaboration easy

7. What is the purpose of Git rebase?

Ans - Git rebase is used to integrate changes from one branch into another by moving a sequence of commit.

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

Ans –

Git Clone – Creates a copy of repository on local machine

Git Fork - Github create a copy of repository in the user account

9.How do you delete a branch in Git?

Ans – git branch -d <branch-name> for local branch

Git push origin –delete <branch-name> for remote branch

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

Ans- it is a Script that git executes before and after certain events such as commit and push . it used to enforce coding ,run tests or trigger custom workflows