**What is Git, and why is it used in software development? 🡪Git it is a distributed version control System, used to keept track of files, specially used in software development projects, it allow multiple devlopers to collaborate on one branch**

**Explain the difference between Git's staging area (index) and working directory. 🡪 Working area is where your were making changes in file n staging area is buffer between working area and repository, n to commit changes to repo wecan use git add n git commit**

**What is the purpose of the .gitignore file, and how is it used? 🡪 it is used to ignore specific pattern of files or dir, it is used to ignore logfiles also**

**Describe the process of creating a new branch in Git and switching to it. 🡪 git checkout –b branchname**

**What is a merge conflict in Git, and how do you resolve it? 🡪 if multiple devlopers were trying to make changes to same branch then merge conflict occurs n git cannot do commit automatically , we need to resolve it manually open file n edit changes n later we can commit file**

**Explain the difference between git merge and git rebase. When would you use each? 🡪 when we want to merge one branch into another branch we can use git merge n it will preserve history. Git rebase also do same work like merging both branches n it will preserve history in linear way**

**How do you undo the last commit in Git without losing changes? 🡪 git reset Head~1**

**Describe the concept of remote repositories in Git. How do you push changes to a remote repository? 🡪 keeping project on remote location using git hub or gitlab n we can push changes using git add ., git commit –m “”, git push origin master**

**What is Git cherry-pick, and in what scenario would you use it? 🡪 If we have to merge changes from single commit then we can use git cherry-pick, git cherry-pick commitid**

**Explain the Git flow workflow and its benefits in software development. 🡪 It’s a distributed version control system, used to track files n to maintain various versions of files we can use it**

**Explain the difference between Git pull and Git fetch. When would you use each? 🡪 git pull will pull changes from remote repo n merge the changes to current branch n git fetch will just fetch changes from remote repo it won’t merge**

**How do you revert a commit that has already been pushed to a remote repository in Git? 🡪 git revert commitid, git push origin master**