1 :What is Git and why is it used?

Ans: GIT is a version control used to track changes in the source control during software development.
It advantage is that multiple developers can develop or collaborate during collaboration or making changes to the branches or directory.

2: Explain the difference between Git pull and Git fetch?
Ans : Git Pull: Its used to fetch the changes in the remote repository during commit and merge them to the current branch
GIT fetch : It is used to download the objects and references from remote repository and update the remote tracking branches.

3: How do you revert a commit in Git?
Ans : A commit is reverted in GIT using 'git revert' followed by commit -m or commit hash of the change or file you want to revert.This creates a new commit.It s followed by git add

4: Describe the Git staging area?
Ans : Git staging area(or index) is the area where the changes to files are marked for the next commit .It is followed by add (git add) and collectively change the file.

5: What is a merge conflict, and how can it be resolved?
Ans : A merge conflict occurs when GIT cannot recognise the changes or it cannot resolve the changes made from 2 branches while merging the branches to main.
Its resolved manually by editing the file and mark them resolved by git add, and commit change(git commit -m)

6: How does Git branching contribute to collaboration?
Ans : Branching always helps in collaboration .That is many developers can work in the same file by creating branches .It is a way of experimenting with files by creating branches .After branching developers can merge the file.
The advantage is that it wont disturb the program execution or the main file or it wont affect the main branch .This makes the code more clearer and neat , reusability of projects.

7: What is the purpose of Git rebase?
Ans : GIT rebase is used to integrate changes from one branch to another by applying each commit after adding file and sandwitching each commit on top of the base branch or the branch you want to rebase.This gives a clear Project history.

8: Explain the difference between Git clone and Git fork.?
Ans : GIT clone: - It is used to clone a remote repository to the local machine with full commit history.

Git fork: It is used to create a copy of the remote repository to the GITHUB account allowing us to experiment with the project files without affecting the original copy.
The advantage is the we can make our contribution and revert back.

9: How do you delete a branch in Git?
Ans: You can delete a branch in Git using the command git branch -d branch name after merging the branch .
You can also use git branch -D branch name for deleting the branch without merging the branch with the main branch.

10: What is a Git hook, and how can it be used?
Ans: Git hook is a script used by Git before or after events such as commit,push,receive.They can be used to automate task such as formatting,running test.