Que1 What is git and why is it used?

Answer1: Git is a version control system used for tracking changes in code during software development. It helps in collaboration, managing project history, and reverting to previous versions if needed.

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

Answer 2 Git pull fetches changes from a remote repository and merges them into the local branch. Git fetch only downloads changes without merging them, allowing you to review before integrating.

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

Answer 3. To revert a commit in Git, use the command git revert <commit_hash>. This creates a new commit that undoes the changes of the specific commit.

Que 4. Describe the Git staging area.

Answer 4 The Git staging area, or index, is a space where changes are gathered before committing them to the repository. It allows you to prepare and review changes before finalizing them with a commit.

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

Answer 5 A merge conflict occurs when Git cannot automatically reconcile differences between branches during a merge. It can be resolved by manually editing the conflicting files to reconcile the differences, then adding and committing the resolved files.

Que 6. How does Git branching contribute to collaboration?

Answer 6. Git branching allows multiple developers to work on separate features or fixes simultaneously without affecting the main codebase. It facilitates collaboration by isolating changes, making it easier to integrate and manage contributions.

Que 7. What is the purpose of Git rebase?

Answer 7 Git rebase is used to integrate changes from one branch into another by moving or combining commits. It creates a linear project history, making it cleaner and easier to read compared to merge commits.

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

Answer 8 Git clone creates a local copy of a remote repository, allowing you to work on the same codebase. Git fork creates a personal copy of someone else's repository on your GitHub account, enabling you to make changes and propose them back to the original repository.

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

Answer 9 To delete a branch in Git, use git branch -d <branch_name> for a merged branch or git branch -D <branch_name> for an unmerged branch. For a remote branch, use git push origin --delete <branch_name>.

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

Answer 10 A Git hook is a script that Git executes before or after specific events, such as committing, pushing, or merging. Hooks can automate tasks like code

formatting, running tests, or notifying team members, enhancing workflow consistency and automation in development processes.