Q: What is Git?

A: Git is a distributed version control system that tracks changes in source code during software development.

Q: What is a Git repository?

A: A Git repository is a storage space for your project, including all files, history, and branches.

Q: What does git init do?

A: Initializes a new Git repository in the current directory.

Q: What is a commit in Git?

A: A commit is a snapshot of changes made to the codebase, saved with a message describing the changes.

Q: What is the staging area in Git?

A: The staging area is where changes are placed before committing.

Q: What does git add do?

A: Adds changes to the staging area, preparing them for commit.

Q: What does git commit -m 'message' do?

A: Commits the staged changes with a descriptive message.

Q: What is a branch in Git?

A: A branch is a separate line of development, allowing you to work on features or fixes independently.

Q: What does git checkout <branch> do?

A: Switches to the specified branch.

Q: What does git merge <branch> do?

A: Merges the specified branch into the current branch.

Q: What is a remote repository?

A: A remote repository is hosted on a server and allows collaboration between developers.

Q: What does git push do?

A: Sends your local commits to the remote repository.

Q: What does git pull do?

A: Fetches and merges changes from the remote repository into your local branch.

Q: What is a merge conflict?

A: A merge conflict occurs when Git cannot automatically resolve differences between branches.

Q: What is the difference between git fetch and git pull?

A: git fetch downloads changes but doesn’t merge them; git pull does both.