1. What is Git?
   * Git is a distributed version control system used for tracking changes in source code during software development.
   * It allows multiple developers to collaborate on a project and manage different versions of files.
2. Key Concepts:
   * Repository: A repository is a central location where all the files, history, and changes for a project are stored.
   * Commit: A commit represents a saved change in Git. It captures the state of the project at a specific point in time.
   * Branch: A branch is a separate line of development. It allows you to work on different features or bug fixes independently.
   * Merge: Merging combines changes from different branches into one. It integrates the changes and resolves conflicts, if any.
3. Basic Git Commands:
   * git init: Initializes a new Git repository in the current directory.
   * git add <file>: Adds a file to the staging area, ready to be committed.
   * git commit -m "message": Commits the changes in the staging area with a descriptive message.
   * git status: Shows the status of files in the repository (modified, staged, etc.).
   * git log: Displays the commit history of the repository.
   * git branch: Lists all the branches in the repository.
   * git checkout <branch>: Switches to a different branch.
   * git merge <branch>: Merges changes from a branch into the current branch.
4. Remote Repositories:
   * Remote repository: A Git repository hosted on a remote server, such as GitHub or GitLab.
   * git clone <repository>: Copies a remote repository to your local machine.
   * git pull: Fetches and merges changes from a remote repository to your local branch.
   * git push: Pushes your local commits to a remote repository.
5. Collaboration:
   * Fork: Creating a personal copy of a repository on a remote server to contribute changes.
   * Pull Request: Proposing changes to be merged into the original repository via a formal request.
   * Review: Collaborators can review and provide feedback on pull requests before merging.