1. Concepts of Git explaining various terms

Repository (Repo):
A repository is a central location where all the files and their version history are stored. It can be local (on your machine) or remote (on a server).

Clone:
Cloning is the process of creating a copy of a repository. When you clone a repository, you get all the files, commit history, and branches.

Commit:
A commit is a snapshot of the changes made to files in the repository at a specific point in time. Each commit has a unique identifier (hash) and includes a commit message describing the changes.

Branch:
A branch is an independent line of development. Creating branches allows you to work on new features or bug fixes without affecting the main codebase. Branches can be merged later.

Merge:
Merging is the process of combining changes from one branch into another. It brings the changes made in one branch into another, typically used to incorporate features or bug fixes.

Pull Request (PR):
A pull request is a way to propose changes to a repository. It allows collaborators to review the changes made in a branch and, if approved, merge those changes into the main branch.

2. Basic Commands of GIT

Initialize a Repository: git init

Clone a Repository: git clone <repository_url>

Add Changes: git add <file_name>