1. Concepts of Git explaining various terms

   <u>Repository (Repo):</u>
   A storage space where your project's history, files, and configurations are stored. It can be local (on your computer) or remote (on a server).

   <u>Commit:</u>
   A snapshot of changes made to the repository. Each commit has a unique identifier and includes a message describing the changes.

   <u>Branch:</u>
   A parallel version of the repository, allowing you to work on different features or bug fixes without affecting the main codebase. The default branch is usually called 'master' or 'main.'

   <u>Merge:</u>
   Merging combines changes from different branches into a single branch. It is used to integrate changes and resolve any conflicts that may arise.

   <u>Pull Request (PR):</u>
   In collaborative development, a pull request is a proposal to merge changes. It allows team members to review and discuss the proposed changes before they are merged into the main branch.

2. Write basic commands of git.

   i. Git init (Initializing a Repository)
   ii. Git Add (To Add any Changes)
   iii. Git Commit (To commit the changes)
   iv. Git Status (To check the Status)
   v. Git Branch (To create a branch)
   vi. Git Checkout (To Switch branches)
   vii. Git Merge (To merge branches)
   viii. Git Pull (Pulling Changes)
   ix. Git Push (Pushing Changes)

3. Add concepts on GITHUB, GitLab And BitBucket.

GitHub:
GitHub is a web-based platform that provides hosting for Git repositories. It offers collaboration features such as pull requests, issue tracking, and project management.

GitLab:
Similar to GitHub, GitLab is a web-based platform for Git repository hosting. It includes features like continuous integration, code review, and container registry.

Bitbucket:
Bitbucket is another web-based platform for Git repositories. It integrates seamlessly with other Atlassian tools like Jira and Confluence.

4. Industrial practices of using Git.

   Git is widely used in industry for version control and collaboration. Best practices include creating feature branches, writing meaningful commit messages, and conducting code reviews through pull requests.

5. Cloning a Repo to Local

   To clone a repository from a remote server to your local machine:

   git clone <repository_url>

6. References

   Git Documentation: https://git-scm.com/docs/git
   GitHub Documentation: https://github.com/git-guides
   GitLab Documentation: https://docs.gitlab.com/
   Bitbucket Documentation: https://support.atlassian.com/bitbucket-cloud/resources/