

# Git and Github

## Assignment Questions

### Assignment Solution

Q1. What is Git?

Ans. Git is a DevOps tool used for source code management. It is a free and open-source version control system used to handle small to very large projects efficiently. Git is used to tracking changes in the source code, enabling multiple developers to work together on non-linear development.

Q2. What do you understand by the term 'Version Control System'?

Ans. Version control - also known as source control or revision control - is an important software development practice for tracking and managing changes made to code and other files. It is closely related to source code management. Learn how to streamline development.

Q3. What is GitHub?

Ans. GitHub Apps are tools that extend GitHub's functionality. GitHub Apps can do things on GitHub like open issues, comment on pull requests, and manage projects. They can also do things outside of GitHub based on events that

happen on GitHub. GitHub **allows you to create, store, change, merge, and collaborate on files or code.** Any member of a team can access the GitHub repository (think of this as a folder for files) and see the most recent version in real-time.

**Q4. Mention some popular Git hosting services?**

**Ans. Bitbucket , CodeBase, Beanstalk, Assembla, Amazon Code**

**Commit, Github, Gitlab, Microsoft Azure DevOps, Perforce.**

**Q.5 Different types of version control Systems?**

- Ans.**
- 1. Local Version Control Systems**
  - 2. Centralized Version Control Systems**
  - 3. Distributed Version Control Systems**

**Q.6 What benefits come with using GIT?**

**Ans. 1. It makes it easy to contribute to your open-source projects.**

**2 it easier to get excellent documentation.**

**3. Markdown allows you to use a simple text editor to write formatted documents.**

**4. it allows your work to get out there in front of the public.**

**5. Track changes in your code across versions.**

**Q7. What is a Git repository?**

**Ans. A Git repository is a central storage location for managing and tracking changes**

in files and directories. It is a crucial component of the Git version control system, which enables collaborative development and allows multiple developers to work on a project simultaneously.

**Q8,How can you initialize a repository in Git?**

**Ans. 1 Open Terminal .**

**2 Navigate to the root directory of your project.**

**3 Initialize the local directory as a Git repository. By default, the initial branch is called main . ...**

**4 Add the files in your new local repository. ...**

**5 Commit the files that you've staged in your local repository.**