

# Git And GitHub Assignment (Part-1)

## Q1. What is Git ?

Ans. Git is distributed version control system that tracks changes in any set of computer files, usually used for coordinating work among programmers collaboratively developing source code during software development. Its goals include speed data integrity and support for distributed , non-linear workflows.

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

Ans. Version Control System also known as source control is the practice of tracking and managing changes to software code. Version Control System are software tools that help software team manage change to source code.

## Q3. What is GitHub ?

Ans. GitHub, Is an Internet hosting service for software development and version control using Git. It provides the distributed version control of Git plus access control , bug tracking , software feature request , task management continuous integration for every project.

## Q4. Mention some popular Git hosting service .

Ans. From Source across the web

GitLab , GitHub, BitBucket, SourceForge, AWS Elastic Beanstalk, Gerrit, Perforce, Codebase.

## Q5. Different type of Version Control System.

Ans. Git, Apache, Subversion, CVS, Mercurial, GNU Bazaar, Azure DevOps Server, Monotone, Darcs, BitKeeper, RabbitVCS

## Q6. What benefits come with using Git ?

Ans. One of the biggest advantage of Git is its branching capabilities. Unlike centralized Version Control system. Git branches are cheap and easy to merge this facilitates the feature branch workflow popular with many Git user feature branches provide an isolated environment for every change to your codebase.

## Q7. What is a Git Repository ?

Ans. Git is a distributed version control system that tracks changes in any set of computer files, usually used for co-ordinating work among programmers collaboratively developing source code during software development . Its goals include speed , data integrity and support for distributed, non-linear workflow.

### Q8. How can you initialize a repository in Git ?

Ans. To create a new repo, you'll use the `Git init` command. You use during the initial setup of a new repo. Executing this command will create a new Git subdirectory in your current working directory. This will also create a new main branch.