# day-003-git-github-assignment

## 1. What is Git?

Git is a distributed version control system: that tracks changes in any set of 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.

## 2. What do you understand by the term 'Version Control System

Version control, also known as source control, is the practice of tracking and managing changes to software code. Version control systems are software tools that help software teams manage changes to source code over time.

## 3. What is GitHub?

GitHub, Inc. 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 requests, task management, continuous integration, and wikis for every project.

## 4. Mention some popular Git hosting services.

Bitbucket.
GitLab.
Perforce.
Beanstalk.
Amazon AWS CodeCommit.
Codebase.
Microsoft Azure DevOps.
SourceForge.

## 5. Different types of version control systems

There are two types of version control: centralized and distributed.

## 6. What benefits come with using GIT?

One of the biggest advantages of Git is its branching capabilities. Unlike centralized version control systems, Git branches are cheap and easy to merge. This facilitates the feature branch workflow popular with many Git users. Feature branches provide an isolated environment for every change to your codebase.

## 7. What is a Git repository?

A Git repository tracks and saves the history of all changes made to the files in a Git project. It saves this data in a directory called. git, also known as the repository folder. Git uses a version control system to track all changes made to the project and save them in the repository.

## 8. HOW can you initialize a repository in Git?

Initializing a new repository: git init
To create a new repo, you'll use the git init command. git init is a one-time 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.