Assignment – 2

1. 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
2. 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. GitHub is **a code hosting platform for version control and collaboration**. It lets you and others work together on projects from anywhere
   1. Bitbucket.
   2. GitLab.
   3. Perforce.
   4. Beanstalk.
   5. Amazon AWS CodeCommit.
   6. Codebase.
   7. Microsoft Azure DevOps.
   8. SourceForge.
4. There are two types of version control: **centralized and distributed**.
5. 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.
6. 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.
7. 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.