GIT AND GITHUB ASSIGNMENT - 1

1. **What is Git?**

Ans - Git is a version control system for tracking changes in computer files and is used to help coordinate work among several people on a project while tracking progress over time. In other words, it's a tool that facilitates source code management in software development.

Git favours both programmers and non-technical users by keeping track of their project files. It enables multiple users to work together and handles large projects efficiently.

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

**Ans-** In order to invoke a specific version later, if necessary, a version control system (VCS) keeps track of all the changes made to a file or group of data.

This makes sure that everyone in the team is using the most recent version of the file.

1. **What is GitHub?**

**Ans:** GitHub uses Git to offer Internet hosting for version control and software development.

1. **Mention some popular Git hosting services.**

* GitHub
* SourceForge
* GitLab
* Bitbucket

**5. Different types of version control systems.**

1. Local version control systems have a database that stores all file changes under revision control on disc in a special format.
2. Centralised version control systems have a single repository, from which each user receives their working copy.
3. Distributed version control systems contain multiple repositories, and different users can access each one with their working copy.

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

* Data replication and redundancy are both possible.
* It is a service with high availability.
* There can only be one Git directory per repository.
* Excellent network and disc performance are achieved.
* On any project, collaboration is very simple.

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

The term "Git repository" describes the location where all Git files are kept. Either the local repository or the remote repository may be used to store these files.

1. **How can you initialize a repository in Git?**

**Ans:** The git init command must be used to initialise an empty repository to a directory in Git. Following this command, a hidden .git folder will become visible.