Assignment: Git and GitHub

1. What is Git?

Git is a modern and widely used distributed version control system in the world. It is developed to manage projects with high speed and efficiency. The version control system allows us to monitor and work together with our team members at the same workspace.

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

Version control systems are a category of software tools that helps in recording changes made to files by keeping a track of modifications done in the code.

3. What is GitHub?

GitHub is a Git repository hosting service. GitHub also facilitates with many of its features, such as access control and collaboration. It provides a Web-based graphical interface.

4. Mention some popular Git hosting services?

GitHub, Bitbucket, TaraVault, Gitea etc

5. Different kinds of version control systems?

- Local version control system
- Centralized version control system
- Distributed version control system

6. What benefits come with using GIT?

- Git is used to tracking changes in the source code.
- The distributed version control tool is used for source code management.
- It allows multiple developers to work together.
- It supports non-linear development through its thousands of parallel branches.

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. Users can then delete or copy existing repositories or create new ones for ongoing projects.

8. How can you initialize a repository in Git?

Initializing a new repository: git init