Git & GitHub Assignment

Q1 What is Git?

Git is a software for tracking changes in any set of files, usually used for coordinating work among programmers collaboratively developing source code during software development.

Q2 What is Version Control System?

A Version Control System (VCS) is a system that records changes to a file or set of files over time so that you can recall specific versions later. It enables collaboration among multiple contributors by keeping track of changes, allowing version comparisons, and facilitating the merging of different edits.

Q3 What is GitHub?

GitHub is a web-based platform that provides hosting for software development projects using Git. It offers features such as version control, collaboration tools, and a platform for hosting and reviewing code. GitHub facilitates team collaboration and project management.

Q4 Mention some popular Git hosting services.

Some popular Git hosting services include GitHub, GitLab, Bitbucket, and others. These platforms provide a centralized location for storing and managing Git repositories

Q5 Different types of version control system.

here are two main types of version control systems: centralized version control systems (CVCS) and distributed version control systems (DVCS). Git falls under the DVCS category, where each user has a local copy of the entire repository, allowing for greater flexibility and offline work.

Q6 what benefits come with using Git?

Using Git provides several benefits, including:

.Easily track changes and collaborate with others.

Create branches for parallel development and feature isolation.

Effortlessly merge changes from different branches.

Q6 What is a GIT Repository?

A Git repository is a data structure that stores metadata for a set of files and/or directories. It includes information about the commit history, branches, and tags. Essentially, it's a place where your project and its history are stored.

Q7 How can you initialize a repository in Git?

To initialize a repository in Git, you use the "git init" command. Navigate to your project's directory in the terminal and run the command "git init." This sets up a new Git repository, and you can start tracking changes and making commits within that repository.