## 1. What is Git?

Answer: Git is an open-source distributed version control system that is used to manage the source code of software, website, project, etc.

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

Answer: A version control system tracks changes in the source code of software, website, etc. so that in the future we can recall a specific version if needed.

## 3. What is Github?

Answer: Github is a git repository hosting site. It is used by developers to share code and collaborate on projects. It is commonly used for open-source software development.

4. Mention some popular Git hosting services.

Answer: Some of the git hosting services are Github, Gitlabs, Bitbucket, Perforce, etc.

5. Different types of version control systems.

Answer: There are mainly three types of version control systems:

- a. Central Version Control System: Central Version Control System has a central server where all the code is stored and maintained.
- b. Distributed Version Control System: In Distributed Version Control System there is a main repository. If a developer wants to make changes to the code he can clone the repository and make changes in his local system, test the code and then ask for a pull request to approve the change.

## 6. What benefits come with using git?

Answer: Following are the benefit that comes with using git:

- a. Many developers can work at the same time on the same project.
- b. As it is a distributed version control system if the main repository goes down still developer can work on the project as a copy of the repository is available to all the developers in their local system.
- c. Branching capability of git makes it easy to work on different features at the same time.
- d. It is used by a large number of developers so it has great community support.

## 7. What is a Git repository?

Answer: A Git repository contains all the project-related files and git tracks all the changes and saves the history of all changes made to the files in a Git project.

8. How can you initialize a repository in Git?

Answer: We can initialize a git repository by using "git init" command in the git bash.