

### **1. What is Git?**

**ANSWER:** Git is an open source cross-platform version control system. Here, every project involving various text files will have a revision history, and Git helps you to give track of it. Git is also known as distributed version control system. A popular hosting platform for Git is GitHub.

### **2. What do you understand by the term version control system?**

**ANSWER:** Version control system are software tools that help software teams manage changes to source code over time. It is also known as revision control or source control. By this, you can manage changes to documents and computer programs. Version control system is a system that keeps record of specific files that you can get access to different versions of files easily.

### **3. what is GitHub?**

**ANSWER:** GitHub is just like a social networking site for the programmers and Developers. Here the programmers and coders post their codes and follows Each Other as they can follow great programmers just like everyone follows their idols on Facebook and Instagram. Also, anyone can contribute to other projects by asking their permission and solve the errors.

### **4. Mention some popular git hosting services.**

**ANSWER:** Some popular git hosting services are GitHub, GitLab, Bitbucket, Launchpad, Codebase, etc.

## **5. Different types of version control system.**

**ANSWER:** There are two types of version control systems, First is centralized version control system CVCS and Second is distributed version control system DVCS. In centralized version control system we can make single repository, commit required connections, impossible to commit changes to another user, all history in one place, considered to be not so fast as DVCS, it is chosen for enterprise development. Whereas the Distributed version control system we make multiple repositories, commit does not require connections, possible to commit changes to another user, impossible to get all history, considered to be faster than CVCS, it is chosen for open source development.

## **6. What benefit come with using Git?**

**ANSWER:** Git allows you to create branches to test code with. When they are working properly, you can merge the branch into the working site. You can have as many branches as you wish. Git allows you to save all the versions of your site, day by day. You have special commit message to summarize what those file contains, Git also allows you to compare changed file among versions.

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

**ANSWER:** Git repository tracks and save 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 of version control system to track all changes made to the project and save them into the repository.

## **8. How can you initialize a repository in Git?**

**ANSWER:** To initialize a repository in Git, we have a command called `git init`. To create a new repository, you will use the `git init` command. Executing this command will create a new Git subdirectory in your current working directory, this will also create a new main Branch.