• What is Git?

Ans:-Git is a distributed version control system: tracking changes in any set of files, usually used for coordinating work among programmers collaboratively developing source code during software development. Its goals include speed, data integrity, and support for distributed, non-linear workflows

• What do you understand by the term 'version control system'?

Ans:-Version control systems are software tools that help software teams manage changes to source code over time. Version control, also known as source control, is the practice of tracking and managing changes to software code.

What is GitHub?

Ans:- GitHub is a website and cloud-based service that helps developers to store and manage their code, as well as track and control changes to their code.

• Mention some popular Git hosting services.

Ans:- Popular Git hosting services are as follows:-1)Bitbucket

- 2)GitHub
- 3)GitLab
- 4)Perforce
- 5)Beanstalk
- Different types of version control systems.

Ans:- There are two types of version control: centralized and distributed.

1)Centralized version control

centralized version control systems, a single "central" copy of your project on a server and commit your changes to this central copy. You pull the files that you need, but you never have a full copy of your project locally. Some of the most common version control systems are centralized, including Subversion (SVN) and Perforce

2) Distributed version control

distributed version control systems (DVCS), you don't rely on a central server to store all the versions of a project's files. Instead, you clone a copy of a repository locally so that you have the full history of the project. Two common distributed version control systems are Git and Mercurial.

What benefits come with using Git?

Ans:- .•Performance. Git performs very strongly and reliably when compared to other version control systems.

- •Security. Git is designed specially to maintain the integrity of source code
- Flexibility.
- •Wide acceptance.
- Quality open source project.
- What is a Git repository?

Ans :- A Git repository is the .git/ folder inside a project. This repository tracks all changes made to files in your project, building a history over time. if you delete the .git/ folder, then you delete your project's history.

• How can you initialize a repository in Git?

Ans :-There are two ways of obtaining a Git repository :-1)Turning an existing directory into a Git repository (initializing).

2)Cloning a Git repository from an existing project.