Git and GitHub Assessment - 2

01. What is Git?
Ans: Git is a popular version control system **(VCS)**, It was created by **Linus Torvalds** in **2005** and has been maintained by **Junio Hamano**

Git is used for:
a. Tracking code changes
b. Tracking who made changes like history of the files
c. Coding Collaborations

02. What do you understand by the term ‘Version Control System'?
Ans: It is a system that records changes to a file or set of files over time, so that we can recall specific versions later,
i.e., for every source code changes in a file a new version will be created.

There are 3 types of VCS:
1. Local Version Control System **(LVCS)**
2. Centralised Version Control System **(CVCS)**
3. Distributed Version Control System **(DLVCS)**

03. What is GitHub?
Ans: GitHub is a code hosting platform for version control and collaboration. It lets you and others work together on projects from anywhere.

At a high level, GitHub is a website and cloud-based service that helps developers store and manage their code, as well as track and control changes to their code. To understand exactly what GitHub is, you need to know two connected principles:

1. Version control
2. Git

04. Mention some popular Git hosting services.
Ans: Some of the git server tools are : **Github**, **Gitlab**, **BitBucket**, **Gitblit**.etc.,

05. Different types of version control systems.
Ans: There are two different types of Version Control System. They are:
1. Centralized Version Control System **(CVCS)**
2. Distributed Version Control System **(DVCS)**

06. What benefits come with using GIT?
Ans: One of the biggest advantages of Git is its branching capabilities. Unlike centralized version control systems, Git branches are cheap and easy to merge. This facilitates the feature branch workflow popular with many Git users. Feature branches provide an isolated environment for every change to your codebase.

07. What is a Git repository?
Ans: 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.

08. How can you initialize a repository in Git?
Ans: To create a new repo, you'll use the git init command. git init is a one-time command you use during the initial setup of a new repo. Executing this command will create a new .git subdirectory in your current working directory. This will also create a new main branch.