Name: Shubham Yeole

UID: U01248378

Exercise on GitHub and Git

**What is GitHub? When was it created? Why? By who? What similar platforms exist? Why would you use such a platform? (Answer between 5 and 10 lines)**

GitHub is service or we can say a Git repository hosting service. Along with a repository, it also has its many feature that helps user to use it to save his/her projects or files and then can commit and push more updated data.

Programmers started writing code for GitHub platform on 1 October 2007. Furthermore, the GitHub website was released in year 2008.

Main reason to launch this product was to keep track of project work throughout the team. When programmers develop some software, they need to constantly update the code to release new version of the product. Git hub allows them to maintain the track of their work with several features.

GitHub was launched by Tom Preston-Werner, Chris Wanstrath, and PJ Hyett.

Project Locker or SVN is the platform which is pretty much similar to GitHub.

I would like to use this platform because there will be no fear of losing my data from the project. I can give permissions or can make my work private. Even if I am away from my computer, I can access my work from another computer through GitHub platform.

**Define the following terms in the context of Git (2 lines maximum):**

* **Repository**: Git Repository is a storage place where user can store files, projects and its documentations. Mostly, this repository is used to manage a project.
* **Commit**: Git commit is basically used for keeping track of changes made to the repository.
* **Push**: Git push is basically used for transferring users last commit to remote server.
* **Branch**: There may be one or more branches in a repository. This feature is build in Git because it allows multiple user to commit their own work without causing conflict with other users. Later admin can test each code and merge it.
* **Fork**: Git fork sounds like git clone but it has something new. In order to fork code in Git Repository, one has to take code from someone and then he can do changes to that code. Furthermore, he can apply changes to existing code and finally commit the changes in it.
* **Merge**: As per the name, merge keyword in GitHub is used to merge code from different branches to the original one. This command is generally used by Git pull command
* **Clone**: Git clone is command which is used to import or clone the exact same files in some repository. This is only possible when something is cloned into empty directory.
* **Pull**: Git Pull command is generally used to incorporate the changes made in remote repository into current branch.
* **Pull** **request**: This command is used when user do modification in someone repository. After making modifications to others repository, the owner of that repository gets an email. Furthermore, he/she has to approve the changes then only it will be visible in the frontend.

**Commands used for adding my name to README.md file are**

1. Git clone
2. Update readme file
3. Then git.add command to add the update
4. Git commit
5. Git push origin master