GIT Assignment 2

1. What does the command 'git status' do?

   Git status gives the information about the current branch we are in. Along with that it displays the files which are in the working area and staging area.

2. How to delete a Git local branch?
   Git branch -d <branch–name> deletes the branch if it is merged with any local branch.

3. How can I add a project to Git that already exists?

   In the command-line, navigate to the project folder with all the files. Git init command is to initialise the local git repository and .git folder. Then all the files to the staging area by “git add.” command. Then commit the project by git commit -m “message” command.

4. What exactly is a Git fork? What are the distinctions between a fork, a branch, and a clone?

   Git fork makes a copy of the entire project, so if the developer wants to make changes it won’t affect the current project. Branch is making a separate distinct unique path from the master branch. Clone is to make a copy of the entire project from the remote repository to local repository.

5. What is the difference between HEAD, working tree, and index in GIT?

   HEAD is the pointer pointing the latest commit of the current branch in which the developer is in.
   Working tree consists of all the files of the project which can be edited.
   Index is a large binary file which contains the details of all the file commits and its details.

6. Which GIT command is used to change branches?

Git switch <target–branch–name> command used to change from current branch to target branch.

7. What is the difference between GitHub and Git?

Git is a version control system which is used to keep track of changes in the source code by maintaining the history.
GitHub is a cloud based distributed repository hosting service which lets the remote users access their service to manage their source code and repository.

8. What are some of the advantages of using the Variation Control System? Which programming language is used in Git?

1. Easy to maintain the versions of the source code.
2. Quickly reachable to any particular version or state of the source code.
3. Good to make the changes in the source code from different developers at the same time.
4. Every commit is atomic and has detailed information about the changes of the source code.

We can use C, Java, Python, etc languages in Git.

9. List out some Git repository features.

1. Distributed system.
2. Branching and Forking.
3. Free and open source.
4. Save the history of changes.
5. Maintains backups.