Git Assignment 4 Answers

1. In order to add a new feature to the main branch, first create a side branch for the development and testing of the new feature. After the successful development and testing of the feature, go ahead and merge the side branch into the main branch. If any merge conflicts occur while merging the side branch into the main branch, you will have to sit down and take care of those conflicts yourself.

One can consider merge conflict as a kind of warning that stops us from merging the side branch into the main branch. This happens when there is some kind of conflict between the existing code in the main branch and the code in the side branch. Whenever git warns us about the merge conflict, us as developers need to pitch in and solve this merge conflict. Solving merge conflict means to just decide whether to keep the conflicting code from main branch or the conflicting code from the side branch.

1. The command “git branch -d <branch-name>” is used to delete the branch locally.
2. The main purpose of git checkout command is to switch between branches in the repository. But make sure to commit or stash the changes in the code before using the git checkout command to switch the branches. We can also create as well as switch to that branch using the command “git checkout -d <new-branch-name>”
3. The main purpose of the git commit command is to save the changes made to the local repository. Make sure you add the changes to the staging area before you commit them.
4. The purpose of git rm command to remove the file or a collection of files. Here rm stands for remove. The git rm command removes the tracked files from the git index. If while removing certain file, you get some kind of error then you can either solve the issue using different commands or if you want to remove the files regardless of the error then you must use “-f” tag. This tag will remove the related files forcefully.
5. The purpose the git log command to see the commit history. Git log will provide us with the detailed information about each of the commit. If you want to get the summarized one-line info about the commits then use the command “git log --oneline”. If you want to see what changes happened in each file then use the command “git log --patch”. If you want to see all the commits of all the branches then use the command

“git log --oneline --graph --all"

1. The purpose of the git add command is to add the changes made in working directory to the staging area (pre-commit area) and to make them ready for the commit.
2. Basically, a bare repository is same as normal repository but no commits can be made in a bare repository and also modifications in the code are not tracked since it does not have a working tree.
3. Git remote is used to add the shorthand to the path to remote repository. Usually people use the word “origin” for this shorthand. The command to do this is “git remote add origin <URL-for-the-remote-repository>”. If we enter the command “git remote” in the terminal then we will get the list of all the shorthands created.

Git clone command is used in git to clone the code from remote repository to the our local device. The command used for this is “git clone <URL-for-the-remote-repository>”.