**GIT Assignment 1**

1. What is a git stash list?

This will display a list of all your stashes, along with their index number, the name of the branch that was current when the stash was created, and a short description of the commit that the stash was based on. How do you get a list of all the files that have been updated in each commit?

1. What is a Git merge conflict?

A Git merge conflict occurs when Git is unable to automatically merge two branches together because there are conflicting changes in the same file.

1. How do you distinguish between git fetch and git pull? How do you differentiate between Git Merge and Git Rebase?

git fetch and git pull are two commonly used commands in Git, but they have different purposes.

git fetch updates your local repository with the latest changes from a remote repository. However, it does not merge those changes into your local branch. This means that you will need to manually merge the changes from the remote repository into your local branch using the git merge command.

git pull is a shortcut that combines git fetch and git merge. It updates your local repository with the latest changes from a remote repository and then merges those changes into your local branch. This is a more convenient command to use if you want to quickly get the latest changes from a remote repository and merge them into your local branch.

1. What command uploads any GitHub repository to your computer using the git command?

git clone repository-url

1. How do you write a commit message using the command? How do you push code in GitHub?

git commit -m “note message”

1. How do you make a Git repository?

Create a project directory and then run “git init” command.

1. What is Git, and how does it work?

Git is a distributed version control system (VCS) for tracking changes in source code during software development.

Git stores a complete copy of every file in your project, as well as a record of every change that has been made to each file. This allows you to go back in time and see exactly what your project looked like at any point in its history.

Git also uses a technique called "staging" to track changes. When you make a change to a file, it is initially marked as "unstaged". This means that the change is not yet part of your next commit. To add a change to your next commit, you need to stage it. Once a change is staged, it will be included in your next commit.

Commits are snapshots of your project's state at a particular point in time. When you create a commit, Git takes a picture of your entire project, including all of the files and their contents. This snapshot is then stored in your repository's history.