**Git Assignment**

1. **How do you initialize a new Git repository named "project1" on your local machine?**

mkdir project1

cd project1

git init

1. **How do you add a new file named "index.html" to the "project1" repository?**

touch index.html

1. **How do you stage the changes made to "index.html" for committing**?

git add index.html

1. **How do you commit the changes made to "index.html" with a commit message of "Add index.html"?**

git commit -m "Add index.html"

1. **How do you view the commit history of the "project1" repository?**

git log

1. **How do you create a new branch named "feature-branch" in the "project1" repository?**

git branch feature-branch

1. **How do you switch to the "feature-branch" in the "project1" repository?**

git checkout feature-branch

1. **How do you make changes to "index.html" in the "feature-branch"?**

You can edit the file using any text editor. After editing, save the file.

1. **How do you stage and commit the changes made in the "feature-branch" with a commit message of "Update index.html in feature branch"?**

git add index.html

git commit -m "Update index.html in feature branch"

1. **How do you switch back to the main branch in the "project1" repository?**

git checkout main # or 'master' if your main branch is named 'master'

1. **How do you merge the changes from the "feature-branch" into the main branch?**

git merge feature-branch

1. **How do you resolve any merge conflicts that occur during the merge process?**

Open the conflicted files, look for the conflict markers (<<<<<<<, =======, and >>>>>>>), make the desired changes to resolve the conflict, save the file, then stage and commit the resolved file.

1. **How do you view the changes introduced by the merge commit?**

git show

1. **How do you create a new tag named "v1.0" for the current commit in the "project1" repository?**

git tag v1.0

1. **How do you push the "project1" repository to a remote repository named "origin"?**

git push origin main

1. **How do you clone the "project1" repository from a remote repository to another machine?**

git clone <file:///C:/Users/Itunu/Training/project1/index.html>

1. **How do you fetch the latest changes from the remote repository to your local "project1" repository?**

git fetch

1. **How do you pull the latest changes from the remote repository into your current branch in the "project1" repository?**

git pull origin main

1. **How do you create a new branch named "bug-fix" in the "project1" repository based on a specific commit?**

git checkout -b bug-fix <commit-hash>

1. **How do you revert the last commit made in the "project1" repository?**

git revert HEAD