

Assignment 1: Initialize a new Git repository in a directory of your choice. Add a simple text file to the repository and make the first commit.

Program:

```
mkdir repo  
cd repo  
git init  
vi file.txt  
git add file.txt  
git commit -m "first commit"
```

Assignment 2: Branch Creation and Switching

Create a new branch named 'feature' and switch to it. Make changes in the 'feature' branch and commit them.

Program:

```
git branch feature  
git checkout feature  
vi text.txt  
git add text.txt  
git commit -m "feature branch"
```

Assignment 3: Feature Branches and Hotfixes

Create a 'hotfix' branch to fix an issue in the main code. Merge the 'hotfix' branch into 'main' ensuring that the issue is resolved.

Program:

```
git branch hotfix  
git checkout hotfix  
vi fix.txt  
git add fix.txt  
git commit -m "Fixed issue"  
git checkout main  
git merge hotfix  
cat fix.txt
```