**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.

- Open command prompt
- Change directory to where you want to initialize git
  - use "cd" to change directory
- Initialize git in the command prompt
  - o git init
- Create a text file "simpletext.txt" in your directory
- Add the text file to the repository using "git add" command
  - git add simpletext.txt
- Make your first commit using "git commit -m 'some message' "
  - o git commit -m "first commit"
- Use "git log" command to view your commit history

## **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.

- Create a new branch using "git branch" command
  - o git branch feature
- switch to new branch using "git checkout" command
  - git checkout feature
- make changes in the feature branch that you want
- · commit the changes
  - git add .git commit -m "changes made in 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.

- · Create a hotfix branch
  - use the git checkout -b to crate a new hotfix branch git checkout -b hotfix
- make changes in the file which has issues let us say its issue file
- add and commit changes in the hotfix branch
  - o git add issue.file
  - o git commit -m "fixed an issue in the hotfix branch"
- now you need to switch to main branch to merge this hotfix
  - o git checkout main
- now merge the hotfix branch with main branch
  - o git merge hotfix
- now push the changes
  - o git push origin main