

## 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.

1:

Create a 'hotfix' branch:

**git checkout -b hotfix**

This command creates a new branch named 'hotfix' and switches to it.

Fix the issue in the 'hotfix' branch:

Make the necessary changes to fix the issue in your codebase. This could involve editing existing files or adding new files.

Stage and commit the changes:

2:

After fixing the issue, stage the changes and commit them:

**git add <file(s) changed>**

**git commit -m "Fix issue in hotfix branch"**

3:

Switch back to the 'main' branch:

**git checkout main**

4:

Merge the 'hotfix' branch into 'main':

**git merge hotfix**

This command merges the changes from the 'hotfix' branch into the 'main' branch. If there are no conflicts, Git will automatically perform the merge.

Resolve any merge conflicts (if applicable):

If there are conflicts during the merge, Git will pause the process and ask you to resolve them manually. After resolving the conflicts, you need to stage the changes and complete the merge by committing the merge result.

Verify that the issue is resolved:

After merging the 'hotfix' branch into 'main', test your code to ensure that the issue has been successfully resolved.

Now the 'hotfix' branch has been merged into 'main', and the issue should be resolved in the main codebase.