**3. Branching and Merging in Git**

**Objective:**

The objective of this task is to demonstrate creating and working with branches in Git, performing changes in a branch, and merging them back into the main branch. This also includes checking differences, using visual merge tools, and cleaning up after merging.

**Branching:**

**1. Create a new branch GitNewBranch**

>> git branch GitNewBranch

**2. List all local and remote branches**

>> git branch -a

* The branch with \* is the current active branch.

**3. Switch to the new branch**

>> git checkout GitNewBranch

**4. Add some files with content**

>> echo "File 1 content" > file1.txt

>> echo "File 2 content" > file2.txt

**5. Stage and commit changes**

>> git add file1.txt file2.txt

>> git commit -m "Added files in GitNewBranch"

**6. Check the status**

>> git status

* Confirms all changes are committed in GitNewBranch.

**Merging:**

**1. Switch to the master branch**

>> git checkout master

**2. List differences between master and GitNewBranch**

>> git diff master GitNewBranch

**3. View visual differences using P4Merge**

>> git difftool master GitNewBranch

**4. Merge the source branch into master**

>> git merge GitNewBranch

**5. View merge history**

>> git log --oneline --graph --decorate

**6. Delete the merged branch**

>> git branch -d GitNewBranch

**7. Check Git status after branch deletion**

>> git status

* Working directory should be clean.