PROGRAM 2

Create a new branch named "new"

Switch to the "master" branch. Merge the "new" into "master."

STEP 1: git branch new:

- This command creates a new branch named "new". This new branch is a copy of the current branch's state.

STEP 2: git branch:

- This command lists all the branches in the current repository. Youshould see both "master" and "new" branches now.

STEP 3: git checkout new:

- This command switches your working directory to the newly created "new" branch. Any changes you make from now on will be specific to this branch.

STEP 4: vi file3.txt

- This command opens the file "file3.txt" in the vi text editor. You can editthe contents of this file.

STEP 5: git add .:

- This command stages all the changes made to tracked files in thecurrent directory. In this case, it stages the changes made to "file3.txt".

STEP 6: git commit -m "edited file":

- This command creates a new commit on the "new" branch with themessage "edited file". The staged changes are included in this commit.

STEP 7: git status:

- This command shows the current state of the working directory. It willshow that you're on the "new" branch and there are no changes to be committed.

STEP 8: git checkout master:

- This command switches your working directory back to the "master"branch. Any changes you make from now on will be specific to this branch.

STEP 9: git merge new:

- This command merges the changes from the "new" branch into the "master" branch. Git will automatically try to combine the changes from both branches. If there are conflicts, you'll need to resolve them manually.

STEP 10: git log:

- This command shows the commit history of the current branch. Youshould see the commit you made on the "new" branch, followed by the merge commit that combined the changes from "new" into "master". In essence, what we've done is:

- Created a new branch to work on a specific feature or bug fix.
- Made changes to the file "file3.txt" on the new branch.
- Committed the changes to the new branch.
- Merged the changes from the new branch back into the main branch.

This is a common workflow in Git for managing different development tasks and keeping your codebase organized.