**Assignment No 6 [3]**

**Question:** Write a step to create a new branch and merge with master branch

**Solution:**

1. **Navigate to Your Repository:** Open your terminal or command line and navigate to your Git repository.

Example: cd path/to/your/repo

1. **Check Out the Master Branch:** Ensure you are on the master branch before creating a new branch.

Command: git checkout master

1. **Pull Latest Changes (Optional but recommended):** Ensure your master branch is up-to-date with the remote repository.

Command: git pull origin master

1. **Create a New Branch:** Create and switch to the new branch.

Command: git checkout -b new-branch-name

Example: git checkout -b feature-branch

1. **Make Changes and Commit:** Make the necessary changes in your working directory, then add and commit those changes.

Commands:

git add .

git commit -m "Describe your changes"

Example:

git add .

git commit -m "Add new feature to application"

1. **Switch Back to the Master Branch:** After committing your changes, switch back to the master branch.

Command: git checkout master

1. **Merge the New Branch with Master:** Merge the changes from your new branch into the master branch.

Command: git merge new-branch-name

Example: git merge feature-branch

1. **Resolve Any Merge Conflicts (If Any):** If there are any conflicts, Git will prompt you to resolve them. Open the conflicted files, resolve the conflicts, and then complete the merge. After resolving conflicts, you need to add the resolved files and commit the merge.

Commands:

git add .

git commit -m "Resolve merge conflicts"

1. **Push Changes to Remote Repository (Optional):** If you want to update the remote master branch, push your changes.

Command: git push origin master

**Summary of Commands**

1. cd path/to/your/repo
2. git checkout master
3. git pull origin master
4. git checkout -b feature-branch
5. git add .
6. git commit -m "Add new feature to application"
7. git checkout master
8. git merge feature-branch
9. git add .
10. git commit -m "Resolve merge conflicts"
11. git push origin master