## 1. Create a new branch

$ git branch GitNewBranch

## 2. List local and remote branches

$ git branch -a  
\* main  
 GitNewBranch  
 remotes/origin/main  
  
\* shows the current branch (main).

## 3. Switch to the new branch

$ git checkout GitNewBranch  
Switched to branch 'GitNewBranch'

## 4. Add files in the branch

$ echo "This is branch-specific content" > branchfile.txt  
$ git add branchfile.txt  
$ git commit -m "Add branch-specific file"  
[GitNewBranch 2b4c6e7] Add branch-specific file  
 1 file changed, 1 insertion(+)  
 create mode 100644 branchfile.txt

## 5. Check branch status

$ git status  
On branch GitNewBranch  
nothing to commit, working tree clean

# Merging

## 6. Switch back to master

$ git checkout main  
Switched to branch 'main'  
Your branch is up to date with 'origin/main'.

## 7. List differences (CLI)

$ git diff main..GitNewBranch  
diff --git a/branchfile.txt b/branchfile.txt  
new file mode 100644  
index 0000000..e69de29  
--- /dev/null  
+++ b/branchfile.txt  
@@  
+This is branch-specific content

## 8. Merge the branch

$ git merge GitNewBranch  
Updating a3b1c2d..2b4c6e7  
Fast-forward  
 branchfile.txt | 1 +  
 1 file changed, 1 insertion(+)  
 create mode 100644 branchfile.txt

## 9. View merge log

$ git log --oneline --graph --decorate  
\* 2b4c6e7 (HEAD -> main, GitNewBranch) Add branch-specific file  
\* a3b1c2d Initial commit

## 10. Delete the branch

$ git branch -d GitNewBranch  
Deleted branch GitNewBranch (was 2b4c6e7).