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Assignment2: Version Control with Git-Initialise a new Git repository, simulate making changes to a project by adding text files, and commit those changes. Create a new branch, make further changes in this branch and merge it back to the main branch, resolving a simulated merge conflict.

```
nandi@VivoBook15 MINGW64 ~/OneDrive/Desktop/assgn2
$ git init
Initialized empty Git repository in C:/Users/nandi/OneDrive/Desktop/assgn2/.git/
nandi@VivoBook15 MINGW64 ~/<mark>OneDrive/Desktop/assgn2 (main)</mark>
$ echo "Hello, this is the file1" >> file1.txt
nandi@VivoBook15 MINGW64 ~/<mark>OneDrive/Desktop/assgn2 (main)</mark>
$ git add file1.txt
warning: in the working copy of 'file1.txt', LF will be replaced by CRLF the next time Git touches it
nandi@VivoBook15 MINGW64 ~/OneDrive/Desktop/assgn2 (main)
$ git commit -m "Initial commit file1.txt"
[main (root-commit) bff2593] Initial commit file1.txt
 1 file changed, 1 insertion(+)
 create mode 100644 file1.txt
nandi@VivoBook15 MINGW64 ~/OneDrive/Desktop/assgn2 (main)
$ git checkout -b new-branch
Switched to a new branch 'new-branch'
nandi@VivoBook15 MINGW64 ~/OneDrive/Desktop/assgn2 (new-branch)
$ echo "adding new feature">> file1.txt
nandi@VivoBook15 MINGW64 ~/OneDrive/Desktop/assgn2 (main|MERGING)
$ git add file1.txt
nandi@VivoBook15 MINGW64 ~/OneDrive/Desktop/assgn2 (main|MERGING)
$ git commit -m "resolved merge conflict"
[main 1911488] resolved merge conflict
nandi@VivoBook15 MINGW64 ~/OneDrive/Desktop/assgn2 (new-branch) $ git commit -m "Updated file1.txt"
[new-branch a0a943c] Updated file1.txt
 1 file changed, 1 insertion(+)
nandi@VivoBook15 MINGW64 ~/OneDrive/Desktop/assgn2 (new-branch)
$ git checkout main
Switched to branch 'main'
nandi@VivoBook15 MINGW64 ~/OneDrive/Desktop/assgn2 (main)
$ echo "Updating the project">>file1.txt
                MINGW64 ~/OneDrive/Desktop/assgn2 (new-branch)
git add file1.txt
varning: in the working copy of 'file1.txt', LF will be replaced by CRLF the next time Git touches it
```

```
nandi@VivoBook15 MINGW64 ~/OneDrive/Desktop/assgn2 (main)
$ git commit -m "Updated file1.txt again in main"
[main 28bb8cd] Updated file1.txt again in main
 1 file changed, 1 insertion(+)
nandi@VivoBook15 MINGW64 ~/OneDrive/Desktop/assgn2 (main)
$ git merge new-branch
Auto-merging file1.txt
CONFLICT (content): Merge conflict in file1.txt
Automatic merge failed; fix conflicts and then commit the result.
  Hello, this is the file1
  <<<<<< HEAD
  Updating the project
  Adding a new feature
  >>>>> new-branch
nandi@VivoBook15 MINGW64 ~/OneDrive/Desktop/assgn2 (main|MERGING)
$ git add file1.txt
nandi@VivoBook15 MINGW64 ~/OneDrive/Desktop/assgn2 (main|MERGING)
$ git commit -m "resolved merge conflict"
[main 1911488] resolved merge conflict
nandi@VivoBook15 MINGW64 ~/OneDrive/Desktop/assgn2 (main)
$ echo "Hello, this is the file1" >> file1.txt
nandi@VivoBook15 MINGW64 ~/OneDrive/Desktop/assgn2 (main)
$ git add file1.txt
warning: in the working copy of 'file1.txt', LF will be replaced by CRLF the next time Git touches it
nandi@VivoBook15 MINGW64 ~/OneDrive/Desktop/assgn2 (new-branch)
$ echo "adding new feature">> file1.txt
nandi@VivoBook15 MINGW64 ~/OneDrive/Desktop/assgn2 (main)
$ git add file1.txt
warning: in the working copy of 'file1.txt', LF will be replaced by CRLF the next time Git touches it
nandi@VivoBook15 MINGW64 ~/OneDrive/Desktop/assgn2 (main)
$ git commit -m "Updated file1.txt again in main"
[main 28bb8cd] Updated file1.txt again in main
1 file changed, 1 insertion(+)
```

```
Hello, this is the file1
  Updating the project
  adding new feature
nandi@VivoBook15 MINGW64 ~/OneDrive/Desktop/assgn2 (main)
$ git log --oneline
1911488 (HEAD -> main) resolved merge conflict
28bb8cd Updated file1.txt again in main
a0a943c (new-branch) Updated file1.txt bff2593 Initial commit file1.txt
nandi@VivoBook15 MINGW64 ~/OneDrive/Desktop/assgn2 (main)
$ git log
commit 1911488e326c33a9298d81a06cd1f4d74e73d0e3 (HEAD -> main)
Merge: 28bb8cd a0a943c
Author: Nandita Singh <nandita5511@gmail.com>
Date: Thu Apr 3 12:38:48 2025 +0530
     resolved merge conflict
commit 28bb8cd056e20a231cb31a3e8769468e6377bf54
Author: Nandita Singh <nandita5511@gmail.com>
         Thu Apr 3 12:36:56 2025 +0530
Date:
     Updated file1.txt again in main
commit a0a943c9ff91eda746c9506ba124b8652b75d277 (new-branch)
Author: Nandita Singh <nandita5511@gmail.com>
        Thu Apr 3 12:35:12 2025 +0530
Date:
     Updated file1.txt
commit bff259339012be66666be57c09162ef0c88cb98e0
Author: Nandita Singh <nandita5511@gmail.com>
Date: Thu Apr 3 12:33:20 2025 +0530
     Initial commit file1.txt
```