

Git ASSIGNMENT 3

Git Repository: <https://gitlab.com/projita2003kar/gitdemo>

Branching:

1. Create a new branch "GitNewBranch".

```
proji@PROJITA_KAR MINGW64 ~/Downloads/GitDemo (main)
$ git branch GitNewBranch
```

2. List all the local and remote branches available in the current trunk. Observe the "*" mark which denote the current pointing branch.

```
proji@PROJITA_KAR MINGW64 ~/Downloads/GitDemo (main)
$ git branch -a
  GitNewBranch
* main
remotes/origin/main
```

3. Switch to the newly created branch. Add some files to it with some contents.

```
proji@PROJITA_KAR MINGW64 ~/Downloads/GitDemo (main)
$ git checkout GitNewBranch
Switched to branch 'GitNewBranch'

proji@PROJITA_KAR MINGW64 ~/Downloads/GitDemo (GitNewBranch)
$ git status
On branch GitNewBranch
nothing to commit, working tree clean

proji@PROJITA_KAR MINGW64 ~/Downloads/GitDemo (GitNewBranch)
$ echo "This is content for the new branch" > branchfile.txt

proji@PROJITA_KAR MINGW64 ~/Downloads/GitDemo (GitNewBranch)
$ git add branchfile.txt
warning: in the working copy of 'branchfile.txt', LF will be replaced by CRLF the next time Git touches it
```

4. Commit the changes to the branch.

```
proji@PROJITA_KAR MINGW64 ~/Downloads/GitDemo (GitNewBranch)
$ git commit -m "Add branchfile.txt in GitNewBranch"
[GitNewBranch fe297c1] Add branchfile.txt in GitNewBranch
1 file changed, 1 insertion(+)
create mode 100644 branchfile.txt
```

5. Check the status with “git status” command.

```
proji@PROJITA_KAR MINGW64 ~/Downloads/GitDemo (GitNewBranch)
$ git status
On branch GitNewBranch
nothing to commit, working tree clean
```

Merging:

1. Switch to the master

```
proji@PROJITA_KAR MINGW64 ~/Downloads/GitDemo (GitNewBranch)
$ git checkout main
Switched to branch 'main'
Your branch is up to date with 'origin/main'.
```

2. List out all the differences between trunk and branch. These provide the differences in command line interface.

```
proji@PROJITA_KAR MINGW64 ~/Downloads/GitDemo (main)
$ git diff main..GitNewBranch
diff --git a/branchfile.txt b/branchfile.txt
new file mode 100644
index 0000000..4942c00
--- /dev/null
+++ b/branchfile.txt
@@ -0,0 +1 @@
+This is content for the new branch
```

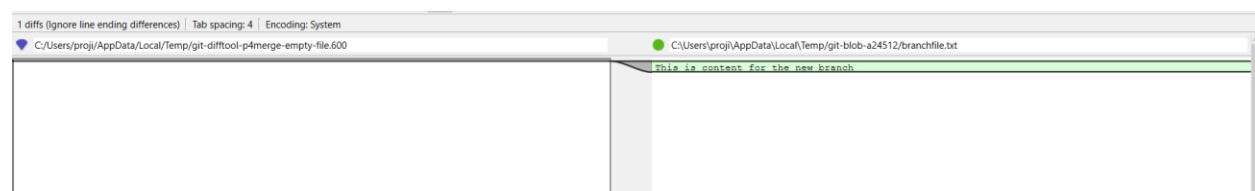
3. List out all the visual differences between master and branch using P4Merge tool.

```
proji@PROJITA_KAR MINGW64 ~/Downloads/GitDemo (main)
$ git config --global mergetool.p4merge.path "C:/Program Files/Perforce/p4merge.exe"

proji@PROJITA_KAR MINGW64 ~/Downloads/GitDemo (main)
$ git config --global difftool.p4merge.path "C:/Program Files/Perforce/p4merge.exe"

proji@PROJITA_KAR MINGW64 ~/Downloads/GitDemo (main)
$ git difftool main..GitNewBranch

Viewing (1/1): 'branchfile.txt'
Launch 'p4merge' [Y/n]? Y
```



4. Merge the source branch to the trunk.

```

proji@PROJITA_KAR MINGW64 ~/Downloads/GitDemo (main)
$ git merge GitNewBranch
Updating bla1bed..fe297c1
Fast-forward
 branchfile.txt | 1 +
 1 file changed, 1 insertion(+)
 create mode 100644 branchfile.txt

proji@PROJITA_KAR MINGW64 ~/Downloads/GitDemo (main)
$ git mergetool
No files need merging

```

5. Observe the logging after merging using “git log –online –graph –decorate”

```

proji@PROJITA_KAR MINGW64 ~/Downloads/GitDemo (main)
$ git log --online --graph --decorate
* fe297c1 (HEAD -> main, GitNewBranch) Add branchfile.txt in GitNewBranch
* bla1bed (origin/main) Add .gitignore to ignore .log files and log/ folder
* 6f84789 Adding welcome.txt

```

6. Delete the branch after merging with the trunk and observe the git status.

```

proji@PROJITA_KAR MINGW64 ~/Downloads/GitDemo (main)
$ git branch -d GitNewBranch
Deleted branch GitNewBranch (was fe297c1).

proji@PROJITA_KAR MINGW64 ~/Downloads/GitDemo (main)
$ git status
On branch main
Your branch is ahead of 'origin/main' by 1 commit.
  (use "git push" to publish your local commits)

nothing to commit, working tree clean

```

```

proji@PROJITA_KAR MINGW64 ~/Downloads/GitDemo (main)
$ git push origin main
Enumerating objects: 4, done.
Counting objects: 100% (4/4), done.
Delta compression using up to 8 threads
Compressing objects: 100% (2/2), done.
Writing objects: 100% (3/3), 377 bytes | 377.00 KiB/s, done.
Total 3 (delta 0), reused 0 (delta 0), pack-reused 0 (from 0)
To https://gitlab.com/projita2003kar/gitdemo.git
  bla1bed..fe297c1  main -> main

```






Add branchfile.txt in GitNewBranch

Projita Kar authored 1 hour ago

fe297c1b



History

Name	Last commit	Last update
 .gitignore	Add .gitignore to ignore .log files and L...	1 hour ago
 branchfile.txt	Add branchfile.txt in GitNewBranch	1 hour ago
 welcome.txt	Adding welcome.txt	3 hours ago