

Output : 3. Git-HOL

→ Branching

Create a new branch "GitNewBranch"

```
nilesh@Jagriti: ~/GitDemo
nilesh:~/GitDemo$ git branch GitNewBranch
nilesh:~/GitDemo$ git branch -a
  GitNewBranch
* master
  remotes/origin/master
nilesh:~/GitDemo$ git checkout GitNewBranch
Switched to branch 'GitNewBranch'
nilesh:~/GitDemo$
```

Add some files with content & commit it to the branch

```
nilesh:~/GitDemo$ echo "This is a new file in GitNewBranch" > newfile.txt
nilesh:~/GitDemo$ echo "Another file with content" > anotherfile.txt
nilesh:~/GitDemo$ git add .
nilesh:~/GitDemo$ git commit -m "Added new files in GitNewBranch"
[GitNewBranch ee317b5] Added new files in GitNewBranch
 2 files changed, 2 insertions(+)
 create mode 100644 anotherfile.txt
 create mode 100644 newfile.txt
nilesh:~/GitDemo$ git status
On branch GitNewBranch
nothing to commit, working tree clean
nilesh:~/GitDemo$
```

→ Merging

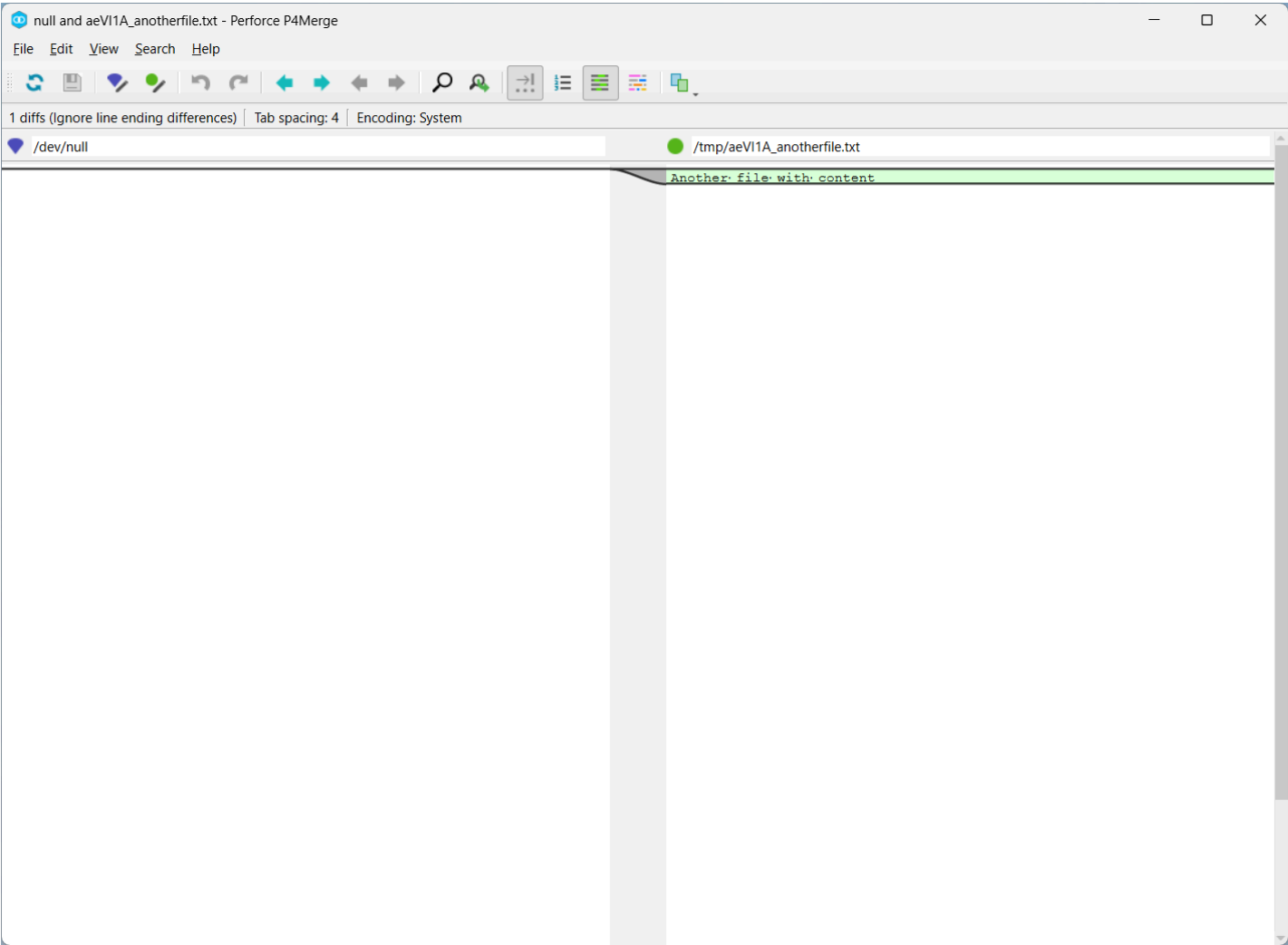
Switch to Master & List the differences between trunk(master) and branch

```
nilesh@Jagriti: ~/GitDemo
nilesh:~/GitDemo$ echo "This is a new file in GitNewBranch" > newfile.txt
nilesh:~/GitDemo$ echo "Another file with content" > anotherfile.txt
nilesh:~/GitDemo$ git add .
nilesh:~/GitDemo$ git commit -m "Added new files in GitNewBranch"
[GitNewBranch ee317b5] Added new files in GitNewBranch
 2 files changed, 2 insertions(+)
 create mode 100644 anotherfile.txt
 create mode 100644 newfile.txt
nilesh:~/GitDemo$ git status
On branch GitNewBranch
nothing to commit, working tree clean
nilesh:~/GitDemo$
```

Setting up p4merge

```
nilesh@Jagriti: ~/GitDemo
nilesh:~/GitDemo$ git config --global diff.tool p4merge
nilesh:~/GitDemo$ git config --global difftool.p4merge.cmd '/mnt/c/Program\ Files/Perforce/p4merge.exe "$LOCAL
" "$REMOTE"'
nilesh:~/GitDemo$ git config --global difftool.prompt false
nilesh:~/GitDemo$ git difftool master..GitNewBranch
nilesh:~/GitDemo$
```

difference in branches



Merge GitNewBranch into master

```
nilesh@Jagriti: ~/GitDemo
nilesh@Jagriti: ~
nilesh:~/GitDemo$ git config --global diff.tool p4merge
nilesh:~/GitDemo$ git config --global difftool.p4merge.cmd '/mnt/c/Program\ Files/Perforce/p4merge.exe "$LOCAL" "$REMOTE"'
nilesh:~/GitDemo$ git config --global difftool.prompt false
nilesh:~/GitDemo$ git difftool master..GitNewBranch
nilesh:~/GitDemo$
```

commit history with graph

```
nilesh@Jagriti: ~/GitDemo
nilesh@Jagriti: ~
nilesh:~/GitDemo$ git log --oneline --graph --decorate
* ee317b5 (HEAD -> master, GitNewBranch) Added new files in GitNewBranch
* 7aad145 (origin/master) Ignore .log files and log folder
* bf224e6 Initial commit
nilesh:~/GitDemo$
```

Delete GitNewBranch & Status

```
nilesh@Jagriti: ~/GitDemo
nilesh@Jagriti: ~
nilesh:~/GitDemo$ git branch -d GitNewBranch
Deleted branch GitNewBranch (was ee317b5).
nilesh:~/GitDemo$ git status
On branch master
Your branch is ahead of 'origin/master' by 1 commit.
  (use "git push" to publish your local commits)

nothing to commit, working tree clean
nilesh:~/GitDemo$ git push
Username for 'https://gitlab.com': nnagar1203@gmail.com
Password for 'https://nnagar1203%40gmail.com@gitlab.com':
Enumerating objects: 5, done.
Counting objects: 100% (5/5), done.
Delta compression using up to 16 threads
Compressing objects: 100% (2/2), done.
Writing objects: 100% (4/4), 426 bytes | 426.00 KiB/s, done.
Total 4 (delta 0), reused 0 (delta 0), pack-reused 0
To https://gitlab.com/cognizant_java-fse/GitDemo.git
  7aad145..ee317b5  master -> master
nilesh:~/GitDemo$
```