

Output : 4. Git-HOL

→ Create and Work on the New Branch **GitWork** with File **hello.xml**

```
nilesh@Jagriti: ~/GitDemo
nilesh:~/GitDemo$ git checkout master
git status
Already on 'master'
Your branch is up to date with 'origin/master'.
On branch master
Your branch is up to date with 'origin/master'.

nothing to commit, working tree clean
nilesh:~/GitDemo$ git checkout -b GitWork
Switched to a new branch 'GitWork'
nilesh:~/GitDemo$ echo "<hello>Initial content in branch</hello>" > hello.xml
nilesh:~/GitDemo$ echo "<hello>Updated content in GitWork branch</hello>" > hello.xml
nilesh:~/GitDemo$ git status
On branch GitWork
Untracked files:
  (use "git add <file>..." to include in what will be committed)
        hello.xml

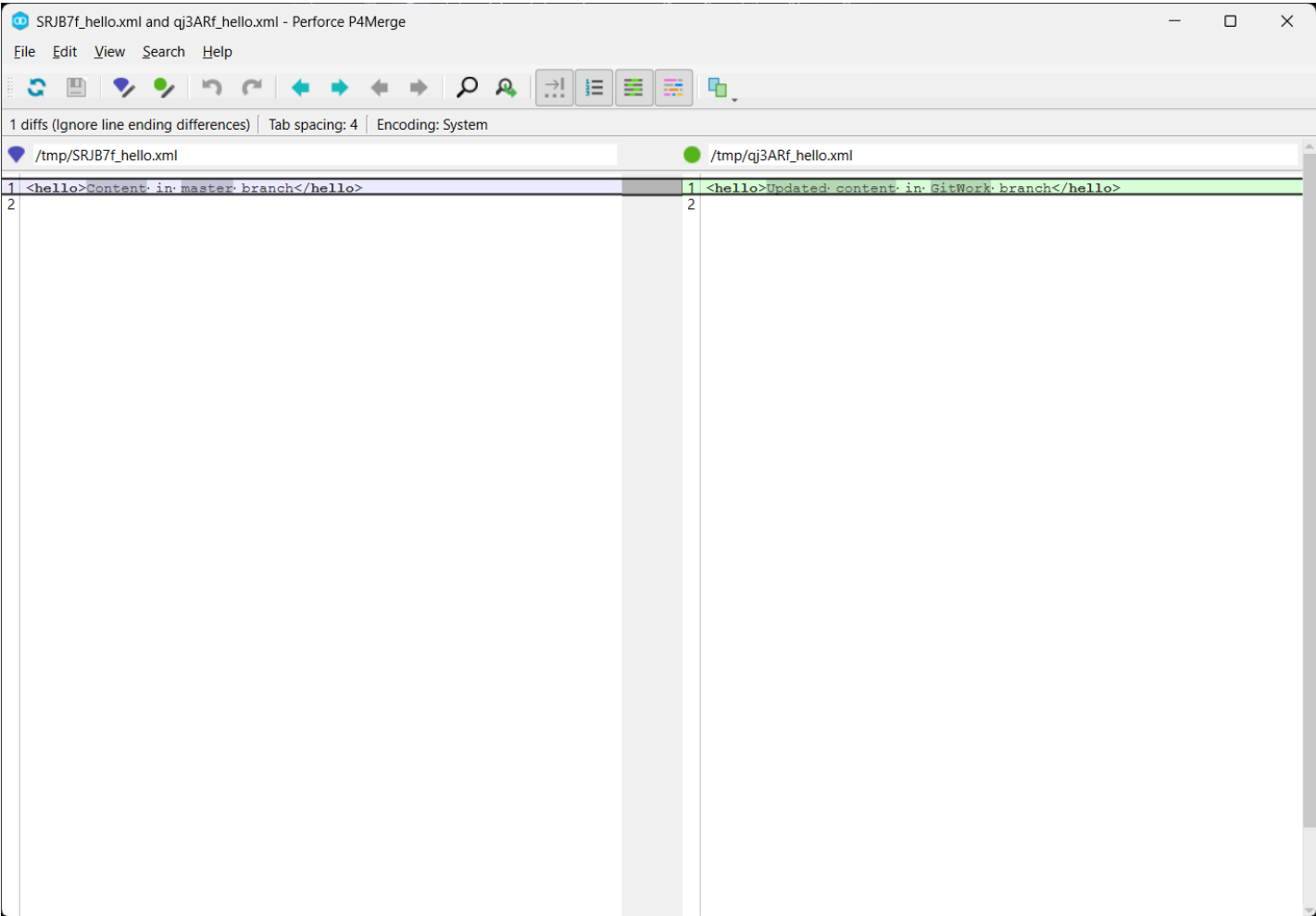
nothing added to commit but untracked files present (use "git add" to track)
nilesh:~/GitDemo$ git add hello.xml
nilesh:~/GitDemo$ git commit -m "Update hello.xml in GitWork branch"
> "[GitWork ac8b7eb] Update hello.xml in GitWork branch
1 file changed, 1 insertion(+)
create mode 100644 hello.xml"
nilesh:~/GitDemo$
```

→ Switch to Master and Add **hello.xml** with Different Content

```
nilesh@Jagriti: ~/GitDemo
nilesh:~/GitDemo$ git checkout master
Switched to branch 'master'
Your branch is up to date with 'origin/master'.
nilesh:~/GitDemo$ echo "<hello>Content in master branch</hello>" > hello.xml
nilesh:~/GitDemo$ git add hello.xml
nilesh:~/GitDemo$ git commit -m "Add hello.xml to master with different content"
[master c0045bf] Add hello.xml to master with different content
1 file changed, 1 insertion(+)
create mode 100644 hello.xml
nilesh:~/GitDemo$
```

→ Review Commit History and Compare Differences Using Git Diff and P4Merge

```
nilesh@Jagriti: ~/GitDemo
nilesh:~/GitDemo$ git log --oneline --graph --decorate --all
* c0045bf (HEAD -> master) Add hello.xml to master with different content
| * ac8b7eb (GitWork) Update hello.xml in GitWork branch
|/
* ee317b5 (origin/master) Added new files in GitNewBranch
* 7aad145 Ignore .log files and log folder
* bf224e6 Initial commit
nilesh:~/GitDemo$ git diff master GitWork
diff --git a/hello.xml b/hello.xml
index d608739..ef5ca3d 100644
--- a/hello.xml
+++ b/hello.xml
@@ -1,1 @@
-<hello>Content in master branch</hello>
+<hello>Updated content in GitWork branch</hello>
nilesh:~/GitDemo$ git difftool master GitWork
```



→ Merge Branch, Resolve Conflicts, Update .gitignore, Clean Up Branches, and Review History

```
nilesh@Jagriti: ~/GitDemo
nilesh:~/GitDemo$ git commit -m "Merge GitWork branch into master after resolving conflicts"
[master a8b0856] Merge GitWork branch into master after resolving conflicts
nilesh:~/GitDemo$ git status
echo "*.bak" >> .gitignore
On branch master
Your branch is ahead of 'origin/master' by 3 commits.
(use "git push" to publish your local commits)

Untracked files:
  (use "git add <file>..." to include in what will be committed)
    hello.xml.orig

nothing added to commit but untracked files present (use "git add" to track)
nilesh:~/GitDemo$ git branch -a
  GitWork
* master
  remotes/origin/master
nilesh:~/GitDemo$ git branch -d GitWork
Deleted branch GitWork (was ac8b7eb).
nilesh:~/GitDemo$ git log --oneline --graph --decorate
*   a8b0856 (HEAD -> master) Merge GitWork branch into master after resolving conflicts
| \
| * ac8b7eb Update hello.xml in GitWork branch
| * | c0045bf Add hello.xml to master with different content
|/
* ee317b5 (origin/master) Added new files in GitNewBranch
* 7aad145 Ignore .log files and log folder
* bf224e6 Initial commit
nilesh:~/GitDemo$
```