

Week 8

1.Git-HOL

Gitbash

```
Hariprasad@HITMANS MINGW64 /
$ cd ~

Hariprasad@HITMANS MINGW64 ~
$ mkdir GitDemo
mkdir: cannot create directory 'GitDemo': File exists

Hariprasad@HITMANS MINGW64 ~
$ cd GitDemo

Hariprasad@HITMANS MINGW64 ~/GitDemo (main)
$ git init
Reinitialized existing Git repository in C:/Users/Hariprasad/GitDemo/.git/

Hariprasad@HITMANS MINGW64 ~/GitDemo (main)
$ echo "Hello, Iam Learning Git!" > wel.txt

Hariprasad@HITMANS MINGW64 ~/GitDemo (main)
$ ls
wel.txt  welcome.txt

Hariprasad@HITMANS MINGW64 ~/GitDemo (main)
$ cat wel.txt
Hello, Iam Learning Git!
```

```
Hariprasad@HITMANS MINGW64 ~/GitDemo (main)
$ cls
bash: cls: command not found

Hariprasad@HITMANS MINGW64 ~/GitDemo (main)
$ ls
wel.txt  welcome.txt

Hariprasad@HITMANS MINGW64 ~/GitDemo (main)
$ git add .
warning: in the working copy of 'wel.txt', LF will be replaced by CRLF the next time Git touches it

Hariprasad@HITMANS MINGW64 ~/GitDemo (main)
$ cd ..

Hariprasad@HITMANS MINGW64 ~
$ cd ..

Hariprasad@HITMANS MINGW64 /c/Users
$ cd ..

Hariprasad@HITMANS MINGW64 /c
$ cd GitDemo
bash: cd: GitDemo: No such file or directory

Hariprasad@HITMANS MINGW64 /c
$ cd -

Hariprasad@HITMANS MINGW64 ~
$ cd GitDemo

Hariprasad@HITMANS MINGW64 ~/GitDemo (main)
$ git branch -M master

Hariprasad@HITMANS MINGW64 ~/GitDemo (master)
$ git push -u origin master
fatal: 'origin' does not appear to be a git repository
fatal: could not read from remote repository.

Please make sure you have the correct access rights
and the repository exists.

Hariprasad@HITMANS MINGW64 ~/GitDemo (master)
$ git remote add origin https://github.com/J-K-Hariprasad/GitDemo.git

Hariprasad@HITMANS MINGW64 ~/GitDemo (master)
$ git push -u origin master
Total 0 (delta 0), reused 0 (delta 0), pack-reused 0 (from 0)
remote: This repository moved. Please use the new location:
remote:   https://github.com/J-K-Hariprasad/GitDemo.git
remote:
remote: Create a pull request for 'master' on GitHub by visiting:
```

```

Hariprasad@HITMANS MINGW64 ~/GitDemo (master)
$ git remote set-url origin https://github.com/J-k-Hariprasad/GitDemo.git

Hariprasad@HITMANS MINGW64 ~/GitDemo (master)
$ git push -u origin master
branch 'master' set up to track 'origin/master'.
Everything up-to-date

Hariprasad@HITMANS MINGW64 ~/GitDemo (master)
$ git add .

Hariprasad@HITMANS MINGW64 ~/GitDemo (master)
$ git commit
Aborting commit due to empty commit message.

Hariprasad@HITMANS MINGW64 ~/GitDemo (master)
$ git commit
[master 1207258] commit changes
1 file changed, 1 insertion(+)
create mode 100644 wel.txt

Hariprasad@HITMANS MINGW64 ~/GitDemo (master)
$ git push
Enumerating objects: 4, done.
Counting objects: 100% (4/4), done.
Delta compression using up to 12 threads
Compressing objects: 100% (2/2), done.
Writing objects: 100% (3/3), 301 bytes | 150.00 KiB/s, done.
Total 3 (delta 0), reused 0 (delta 0), pack-reused 0 (from 0)
To https://github.com/J-k-Hariprasad/GitDemo.git
3f75ae7..1207258 master -> master

Hariprasad@HITMANS MINGW64 ~/GitDemo (master)
$ git status
On branch master
Your branch is up to date with 'origin/master'.

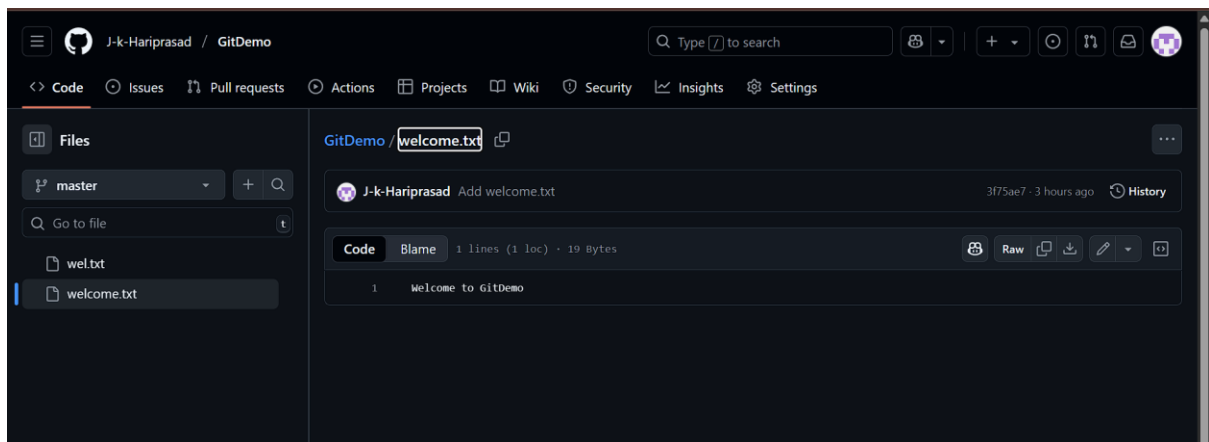
Untracked files:
  (use "git add <file>..." to include in what will be committed)
        -wait

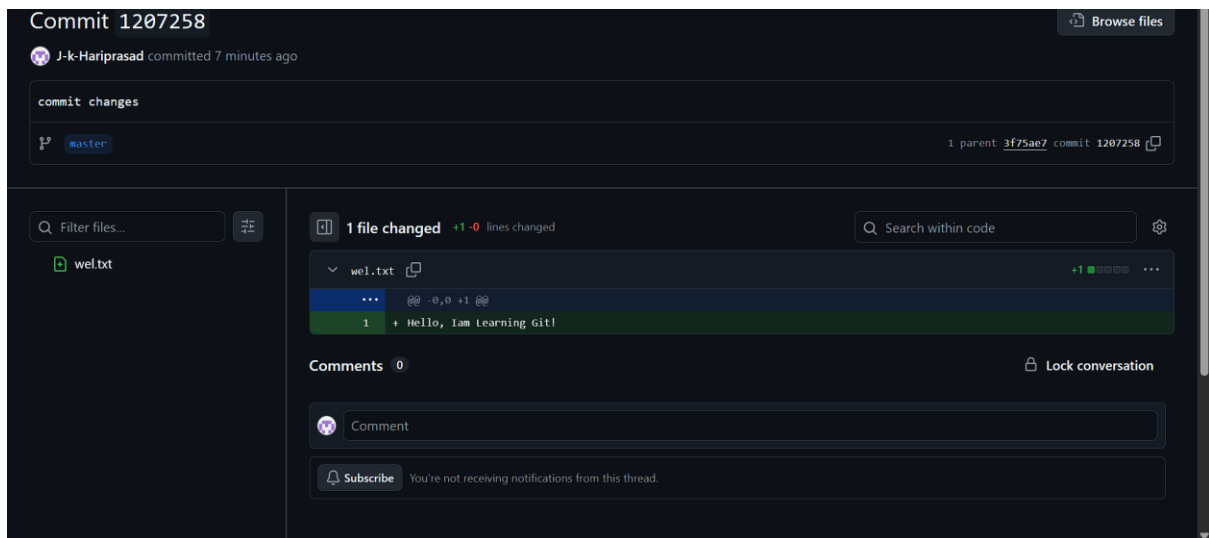
nothing added to commit but untracked files present (use "git add" to track)

Hariprasad@HITMANS MINGW64 ~/GitDemo (master)
$

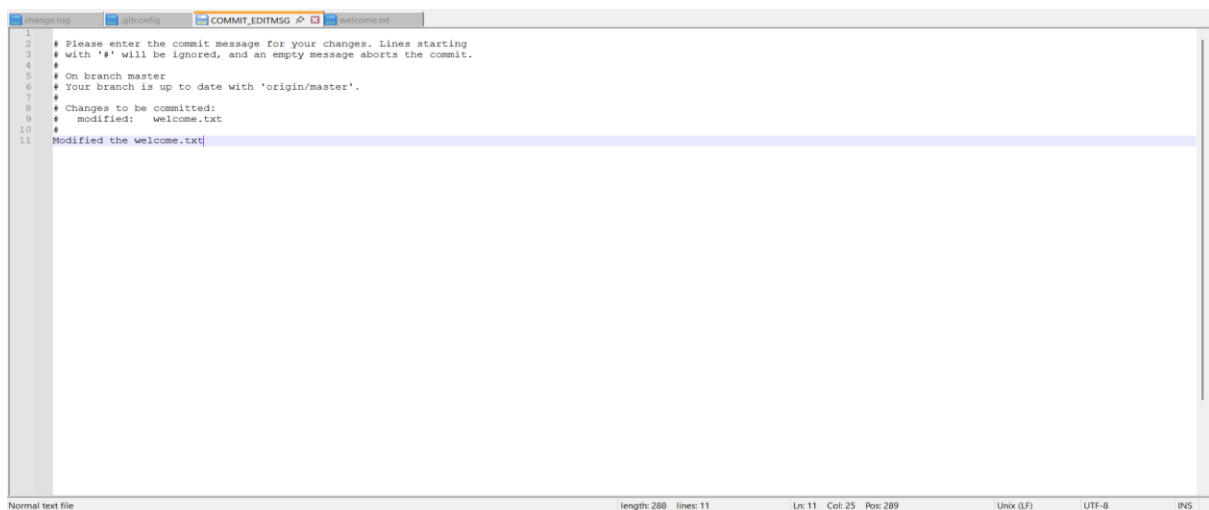
```

Github





Notepad++



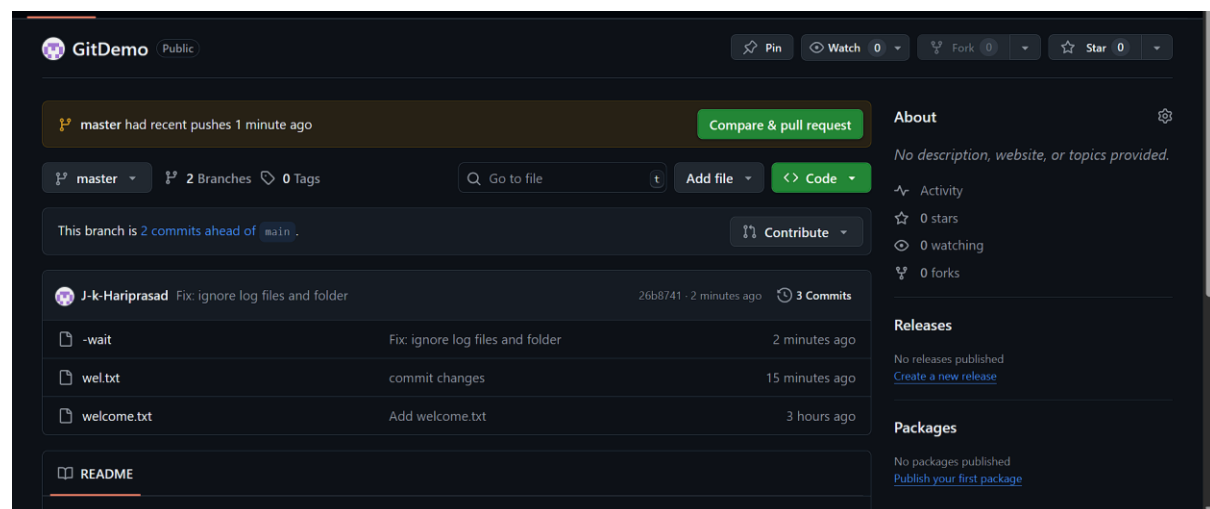
2. Git-HOL

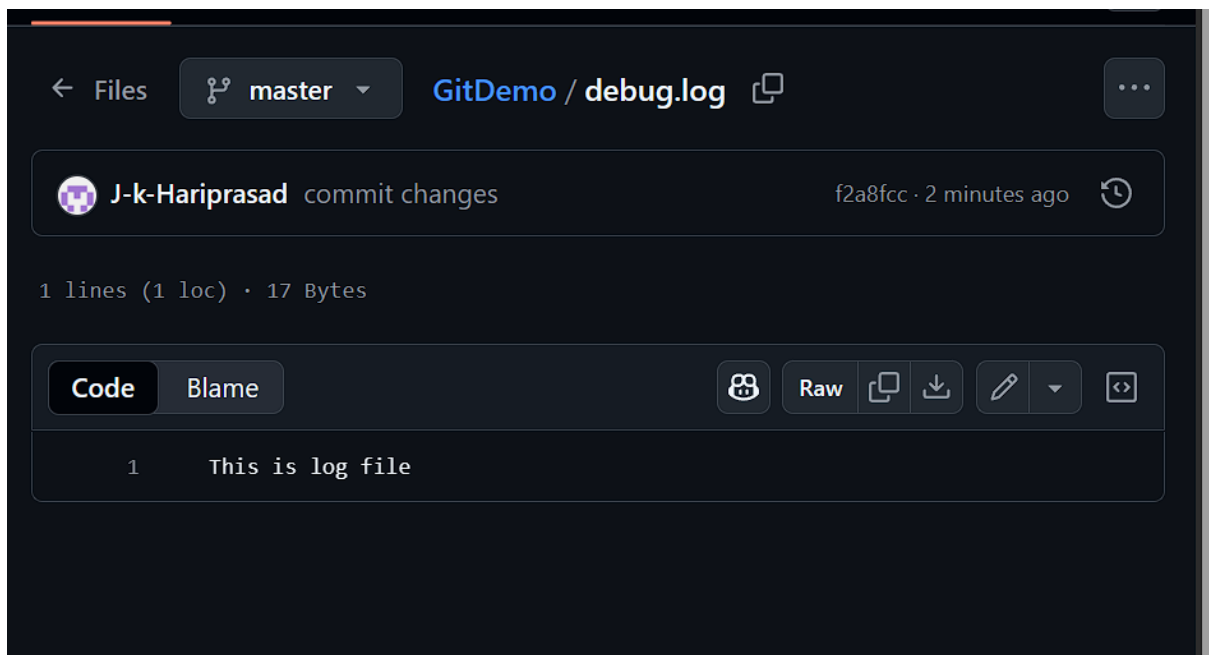
Gitbash

```
MINGW64/c/Users/Hariprasad/GitDemo
Hariprasad@HITMANS MINGW64 /
$ cd ~
Hariprasad@HITMANS MINGW64 ~
$ cd GitDemo
Hariprasad@HITMANS MINGW64 ~/GitDemo (master)
$ git rm -r --cached .
rm 'wel.txt'
rm 'welcome.txt'
Hariprasad@HITMANS MINGW64 ~/GitDemo (master)
$ git add .
warning: in the working copy of 'wel.txt', LF will be replaced by CRLF the next time Git touches it
warning: in the working copy of 'welcome.txt', LF will be replaced by CRLF the next time Git touches it
Hariprasad@HITMANS MINGW64 ~/GitDemo (master)
$ git commit -m "Fix: ignore log files and folder"
[master 26b8741] Fix: ignore log files and folder
1 file changed, 0 insertions(+), 0 deletions(-)
create mode 100644 -wait
Hariprasad@HITMANS MINGW64 ~/GitDemo (master)
$ git push origin master
Enumerating objects: 4, done.
Counting objects: 100% (4/4), done.
Delta compression using up to 12 threads
Compressing objects: 100% (2/2), done.
Writing objects: 100% (3/3), 325 bytes | 162.00 KiB/s, done.
Total 3 (delta 0), reused 0 (delta 0), pack-reused 0 (from 0)
To https://github.com/J-k-Hariprasad/GitDemo.git
1207258..26b8741 master -> master
Hariprasad@HITMANS MINGW64 ~/GitDemo (master)
$ git status
On branch master
Your branch is up to date with 'origin/master'.

nothing to commit, working tree clean
Hariprasad@HITMANS MINGW64 ~/GitDemo (master)
$ |
```

Github





3. Git-HOL

```
Viewing (1/1): 'newFile.txt'
Launch 'vimdiff' [Y/n]? y
2 files to edit
commit f2a8fcce366aece91586ac32b148327bc576e859 (HEAD -> master, origin/master)
Author: J-K-Hariprasad <tjkhari007@gmail.com>
Date: Sun Aug 10 12:48:13 2025 +0530

    commit changes

commit 26b8741ff8e6563ff999787d3196526c7aef69c3
Author: J-K-Hariprasad <tjkhari007@gmail.com>
Date: Sat Aug 9 21:38:16 2025 +0530

    Fix: ignore log files and folder

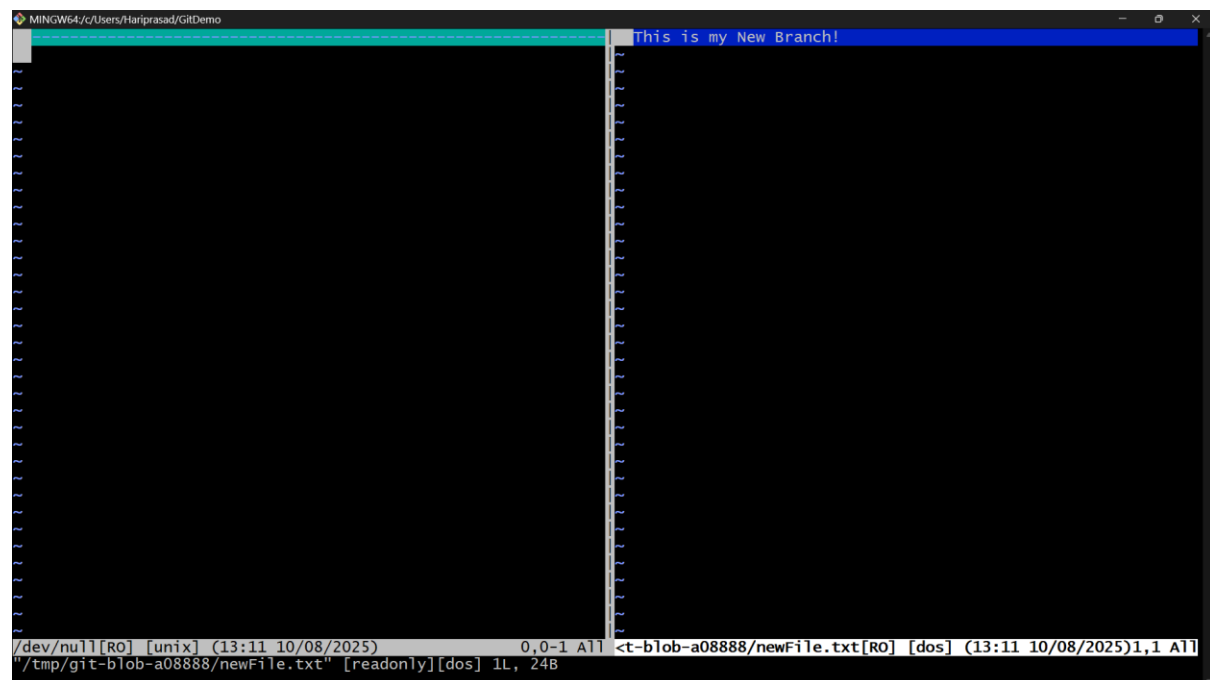
commit 1207258a52668e9065462c3d6c5fc6821dca4169
Author: J-K-Hariprasad <tjkhari007@gmail.com>
Date: Sat Aug 9 21:25:33 2025 +0530

    commit changes

commit 3f75ae7c1b20e2a62cf5ae7e5f9837531134cfa6
Author: J-K-Hariprasad <tjkhari007@gmail.com>
Date: Sat Aug 9 18:20:49 2025 +0530

    Add welcome.txt
```

View the changes by p4merge



After resolving the conflict the new branch is deleted

Deleted the new branch that is “GitNewBranch”

```
--[no-]sort <key>          list branches in columns
                             field name to sort on
--[no-]points-at <object>
                             print only branches of the object
-i, --[no-]ignore-case
                             sorting and filtering are case insensitive
--[no-]recurse-submodules
                             recurse through submodules
--[no-]format <format>
                             format to use for the output

Hariprasad@HITMANS MINGW64 ~/GitDemo (master)
$ git status
On branch master
Your branch is up to date with 'origin/master'.

nothing to commit, working tree clean

Hariprasad@HITMANS MINGW64 ~/GitDemo (master)
$ |
```

4. Git-HOL

```
Hariprasad@HITMANS MINGW64 ~/GitDemo (master)
$ git init
Reinitialized existing Git repository in C:/Users/Hariprasad/GitDemo/.git/

Hariprasad@HITMANS MINGW64 ~/GitDemo (master)
$ git checkout -b GitWork
fatal: a branch named 'GitWork' already exists

Hariprasad@HITMANS MINGW64 ~/GitDemo (master)
$ git checkout GitWork
Switched to branch 'GitWork'

Hariprasad@HITMANS MINGW64 ~/GitDemo (GitWork)
$ echo "<message>Hello from GitWork branch</message>" > hello.xml
echo "<update>Edited in GitWork branch</update>" >> hello.xml
git add hello.xml
git commit -m "GitWork: Added and updated hello.xml"
warning: in the working copy of 'hello.xml', LF will be replaced by CRLF the next time Git touches it
[GitWork 1b217c5] GitWork: Added and updated hello.xml
1 file changed, 2 insertions(+), 3 deletions(-)

Hariprasad@HITMANS MINGW64 ~/GitDemo (GitWork)
$ git checkout master
echo "<message>Conflicting content in master branch</message>" > hello.xml
git add hello.xml
git commit -m "Master: Added conflicting hello.xml"
Switched to branch 'master'
Your branch is ahead of 'origin/master' by 1 commit.
(use "git push" to publish your local commits)
warning: in the working copy of 'hello.xml', LF will be replaced by CRLF the next time Git touches it
[master fb38919] Master: Added conflicting hello.xml
1 file changed, 1 insertion(+), 1 deletion(-)

Hariprasad@HITMANS MINGW64 ~/GitDemo (master)
$ git log --oneline --graph --decorate --all
git diff master..GitWork # shows textual differences
git diff --name-only master..GitWork
* fb38919 (HEAD -> master) Master: Added conflicting hello.xml
* f48396a Add hello.xml on master with different content
| * 1b217c5 (GitWork) GitWork: Added and updated hello.xml
| * 470b175 Add/modify hello.xml on GitWork branch
|/
| * 3146df3 (newbranch) new file is added to branch
|/
* f2a8fcc (origin/master) commit changes
* 26b8741 Fix: ignore log files and folder
* 1207258 commit changes
* 3f75ae7 Add welcome.txt
diff --git a/hello.xml b/hello.xml
index d803d48..12a40ae 100644
--- a/hello.xml
+++ b/hello.xml
@@ 1,1,2 @@
```



```

Hariprasad@HITMANS MINGW64 ~/GitDemo (master)
$ git merge GitWork
Auto-merging hello.xml
CONFLICT (add/add): Merge conflict in hello.xml
Automatic merge failed; fix conflicts and then commit the result.

Hariprasad@HITMANS MINGW64 ~/GitDemo (master|MERGING)
$ git status
# will show: both added or both modified: hello.xml (UNMERGED)
On branch master
Your branch is ahead of 'origin/master' by 2 commits.
(use "git push" to publish your local commits)

You have unmerged paths.
  (fix conflicts and run "git commit")
  (use "git merge --abort" to abort the merge)

Unmerged paths:
  (use "git add <file>..." to mark resolution)
    both added:      hello.xml

no changes added to commit (use "git add" and/or "git commit -a")

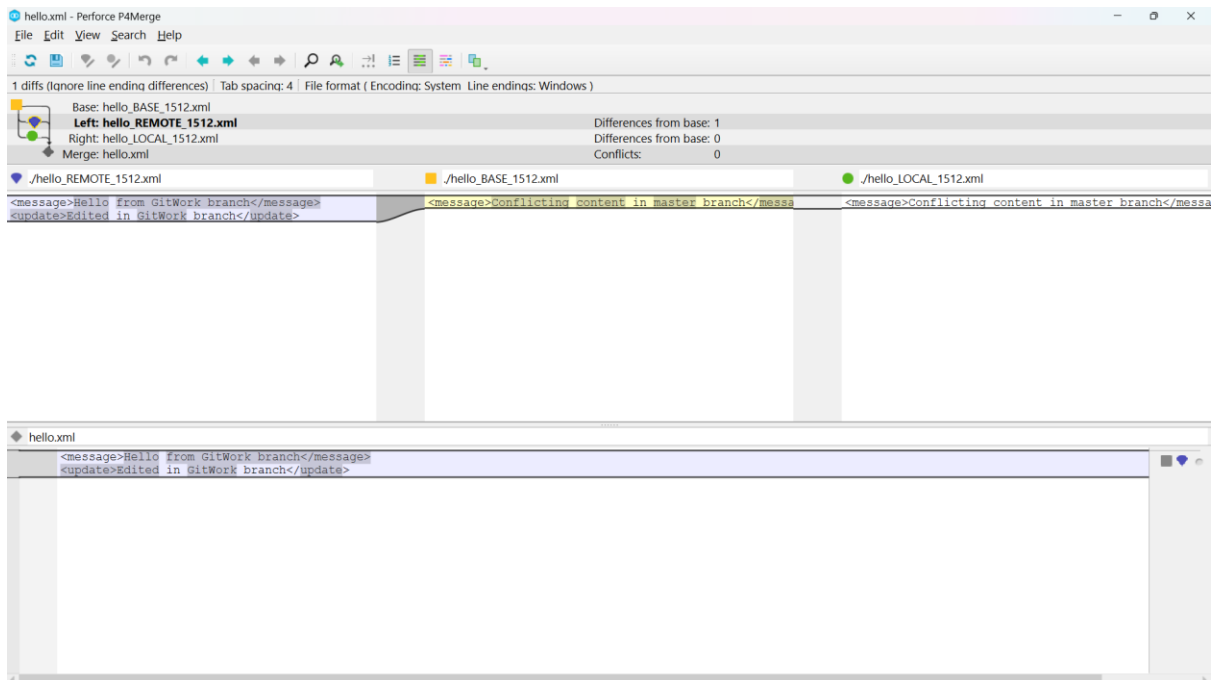
Hariprasad@HITMANS MINGW64 ~/GitDemo (master|MERGING)
$ git config --global merge.tool p4merge
git config --global diff.tool p4merge
git config --global mergetool.prompt false

Hariprasad@HITMANS MINGW64 ~/GitDemo (master|MERGING)
$ git mergetool
Merging:
hello.xml

Normal merge conflict for 'hello.xml':
  {local}: created file
  {remote}: created file
error: invalid path './hello_BASE_1512.xml'

```

P4merge



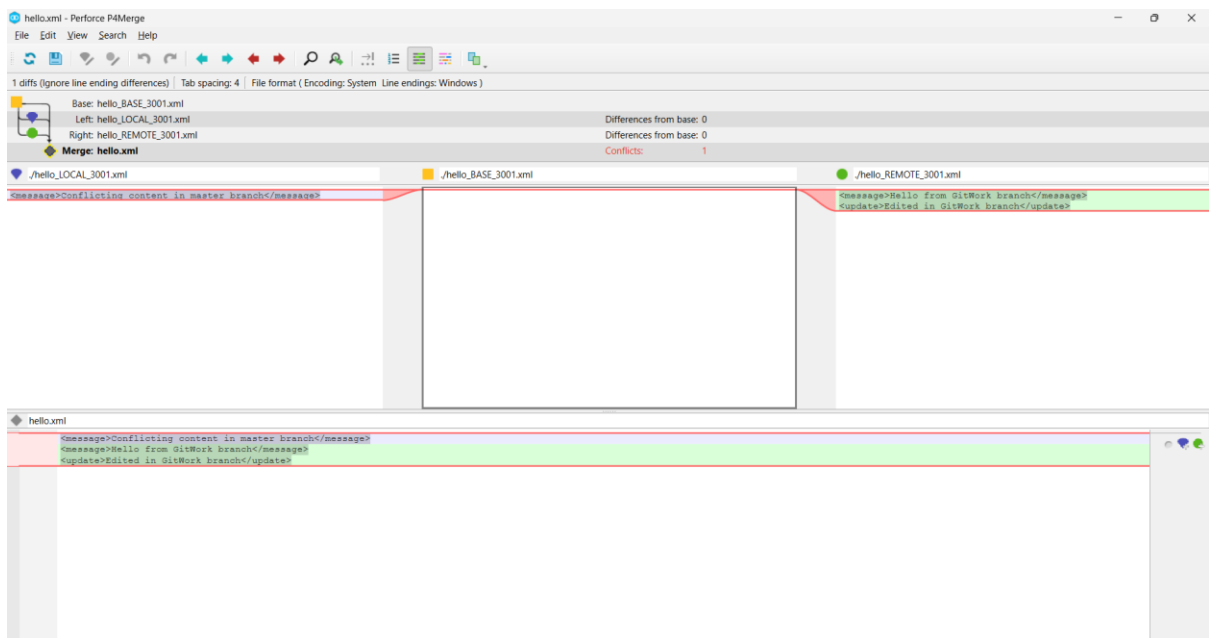
Merging Conflict

```

Hariprasad@HITMANS MINGW64 ~/GitDemo (master |MERGING)
$ git add hello.xml
git commit -m "Resolved merge conflict in hello.xml"
[master 8751b67] Resolved merge conflict in hello.xml

Hariprasad@HITMANS MINGW64 ~/GitDemo (master)
$ git log --oneline --graph --decorate --all
git show HEAD:hello.xml # view merged file content
* 8751b67 (HEAD -> master) Resolved merge conflict in hello.xml
|
| * 1b217c5 (GitWork) GitWork: Added and updated hello.xml
| * 470b175 Add/modify hello.xml on GitWork branch
| * fb38919 Master: Added conflicting hello.xml
| * f48396a Add hello.xml on master with different content
|/
| * 3146df3 (newbranch) new file is added to branch
|/
* f2a8fcc (origin/master) commit changes
* 26b8741 Fix: ignore log files and folder
* 1207258 commit changes
* 3f75ae7 Add welcome.txt
<<<<<< HEAD
<message>Conflicting content in master branch</message>
=====
<message>Hello from GitWork branch</message>
<update>Edited in GitWork branch</update>
>>>>>> GitWork

```



Pushed to master branch

```

<message>Conflicting content in master branch</message>
=====
<message>Hello from GitWork branch</message>
<update>Edited in GitWork branch</update>
>>>>>> GitWork

Hariprasad@HITMANS MINGW64 ~/GitDemo (master)
$ git merge --abort
fatal: There is no merge to abort (MERGE_HEAD missing).

Hariprasad@HITMANS MINGW64 ~/GitDemo (master)
$ git diff --name-only --diff-filter=U

Hariprasad@HITMANS MINGW64 ~/GitDemo (master)
$ git mergetool
No files need merging

Hariprasad@HITMANS MINGW64 ~/GitDemo (master)
$

```

5. Git-HOL

```
Hariprasad@HITMANS MINGW64 ~/GitDemo (master)
$ git branch
* GitWork
  master
  newbranch

Hariprasad@HITMANS MINGW64 ~/GitDemo (master)
$ git pull origin master
From https://github.com/J-k-Hariprasad/GitDemo
* branch      master       -> FETCH_HEAD
Already up to date.

Hariprasad@HITMANS MINGW64 ~/GitDemo (master)
$ git remove -v
git: 'remove' is not a git command. See 'git --help'.

The most similar command is
    remote

Hariprasad@HITMANS MINGW64 ~/GitDemo (master)
$ git remote -v
origin  https://github.com/J-k-Hariprasad/GitDemo.git (fetch)
origin  https://github.com/J-k-Hariprasad/GitDemo.git (push)

Hariprasad@HITMANS MINGW64 ~/GitDemo (master)
$ git push origin master
Enumerating objects: 16, done.
Counting objects: 100% (16/16), done.
Delta compression using up to 12 threads
Compressing objects: 100% (14/14), done.
Writing objects: 100% (15/15), 1.59 KiB | 812.00 KiB/s, done.
Total 15 (delta 6), reused 0 (delta 0), pack-reused 0 (from 0)
remote: Resolving deltas: 100% (6/6), completed with 1 local object.
To https://github.com/J-k-Hariprasad/GitDemo.git
   f2a8fcc..8751b67  master -> master

Hariprasad@HITMANS MINGW64 ~/GitDemo (master)
$
```

Pushed the code from local to github

The screenshot shows the GitHub interface for a repository. At the top, a notification bar states "master had recent pushes 51 seconds ago" with a "Compare & pull request" button. Below this, the repository name "J-k-Hariprasad" is visible, along with "2 Branches" and "0 Tags". A search bar and buttons for "Add file" and "Code" are present. A status bar indicates "This branch is 8 commits ahead of main". The commit history table shows the following details:

Commit Message	Commit Hash	Time
-wait	Fix: ignore log files and folder	yesterday
debug.log	commit changes	6 hours ago
hello.xml	Resolved merge conflict in hello.xml	5 minutes ago
wel.txt	commit changes	yesterday
welcome.txt	Add welcome.txt	yesterday

Changes are displayed

