

GitHub assignment

Q. Create a file. Make changes to the file using different branches, merge all the branches to the main branch, and resolve the conflicts.

1. To make changes to the file harini.txt, create a new branch sample and checkout the branch.

```
harini@LAPTOP-65RQKFGU: /mnt/c/Users/Harini Pravin/Desktop/Grp_8
(base) harini@LAPTOP-65RQKFGU:/mnt/c/Users/Harini Pravin/Desktop/Grp_8$ git branch
develop
example
* master
(base) harini@LAPTOP-65RQKFGU:/mnt/c/Users/Harini Pravin/Desktop/Grp_8$ git checkout -b sample
M   harini.txt
Switched to a new branch 'sample'
(base) harini@LAPTOP-65RQKFGU:/mnt/c/Users/Harini Pravin/Desktop/Grp_8$
```

2. Make some changes to the file harini.txt

```
harini@LAPTOP-65RQKFGU: /mnt/c/Users/Harini Pravin/Desktop/Grp_8
(base) harini@LAPTOP-65RQKFGU:/mnt/c/Users/Harini Pravin/Desktop/Grp_8$ git branch
develop
example
* master
(base) harini@LAPTOP-65RQKFGU:/mnt/c/Users/Harini Pravin/Desktop/Grp_8$ git checkout -b sample
M   harini.txt
Switched to a new branch 'sample'
(base) harini@LAPTOP-65RQKFGU:/mnt/c/Users/Harini Pravin/Desktop/Grp_8$ ls
sample harini.txt  Olamide_first.txt  README.md  shishi.txt
(base) harini@LAPTOP-65RQKFGU:/mnt/c/Users/Harini Pravin/Desktop/Grp_8$ cat harini.txt
this is our first git assignment
this is develop phase
this is second line
Harini added a line as an example
(base) harini@LAPTOP-65RQKFGU:/mnt/c/Users/Harini Pravin/Desktop/Grp_8$ echo "adding a last line for the assignment" >>
harini.txt
(base) harini@LAPTOP-65RQKFGU:/mnt/c/Users/Harini Pravin/Desktop/Grp_8$
```

3. Git add and commit the changes. You can check the status with git status.

```
harini@LAPTOP-65RQKFGU: /mnt/c/Users/Harini Pravin/Desktop/Grp_8
(base) harini@LAPTOP-65RQKFGU:/mnt/c/Users/Harini Pravin/Desktop/Grp_8$ git branch
  develop
  example
* master
(base) harini@LAPTOP-65RQKFGU:/mnt/c/Users/Harini Pravin/Desktop/Grp_8$ git checkout -b sample
M
  harini.txt
Switched to a new branch 'sample'
(base) harini@LAPTOP-65RQKFGU:/mnt/c/Users/Harini Pravin/Desktop/Grp_8$ ls
Grp_8  harini.txt  Olamide_first.txt  README.md  shishi.txt
(base) harini@LAPTOP-65RQKFGU:/mnt/c/Users/Harini Pravin/Desktop/Grp_8$ cat harini.txt
this is our first git assignment
this is develop phase
this is second line
Harini added a line as an example
(base) harini@LAPTOP-65RQKFGU:/mnt/c/Users/Harini Pravin/Desktop/Grp_8$ echo "adding a last line for the assignment" >>
harini.txt
(base) harini@LAPTOP-65RQKFGU:/mnt/c/Users/Harini Pravin/Desktop/Grp_8$ git add .
(base) harini@LAPTOP-65RQKFGU:/mnt/c/Users/Harini Pravin/Desktop/Grp_8$ git commit -m "last changes"
[sample d175d86] last changes
1 file changed, 2 insertions(+)
(base) harini@LAPTOP-65RQKFGU:/mnt/c/Users/Harini Pravin/Desktop/Grp_8$ git status
On branch sample
nothing to commit, working directory clean
(base) harini@LAPTOP-65RQKFGU:/mnt/c/Users/Harini Pravin/Desktop/Grp_8$
```

4. Push the changes to the remote repo (The remote repo has already been added using git remote add origin 'url')

```
harini@LAPTOP-65RQKFGU: /mnt/c/Users/Harini Pravin/Desktop/Grp_8
(base) harini@LAPTOP-65RQKFGU:/mnt/c/Users/Harini Pravin/Desktop/Grp_8$ git push origin sample
Counting objects: 9, done.
Delta compression using up to 4 threads.
Compressing objects: 100% (9/9), done.
Writing objects: 100% (9/9), 965 bytes | 0 bytes/s, done.
Total 9 (delta 4), reused 0 (delta 0)
remote: Resolving deltas: 100% (4/4), completed with 1 local object.
remote:
remote: Create a pull request for 'sample' on GitHub by visiting:
remote:   https://github.com/xrander/Grp_8/pull/new/sample
remote:
To git@github.com:xrander/Grp_8.git
 * [new branch]      sample -> sample
(base) harini@LAPTOP-65RQKFGU:/mnt/c/Users/Harini Pravin/Desktop/Grp_8$
```

5. Create a pull request and try to merge the branch to the master branch. We encounter a merge conflict since all the team members are working on the same file using different branches.

```
harini@LAPTOP-65RQKFGU: /mnt/c/Users/Harini Pravin/Desktop/Grp_8
remote: Total 4 (delta 2), reused 0 (delta 0), pack-reused 0
Unpacking objects: 100% (4/4), done.
From github.com:xrander/Grp_8
  7ecc2b3..699711f  example -> origin/example
  d9edbc4..a30f667  master  -> origin/master
There is no tracking information for the current branch.
Please specify which branch you want to merge with.
See git-pull(1) for details.

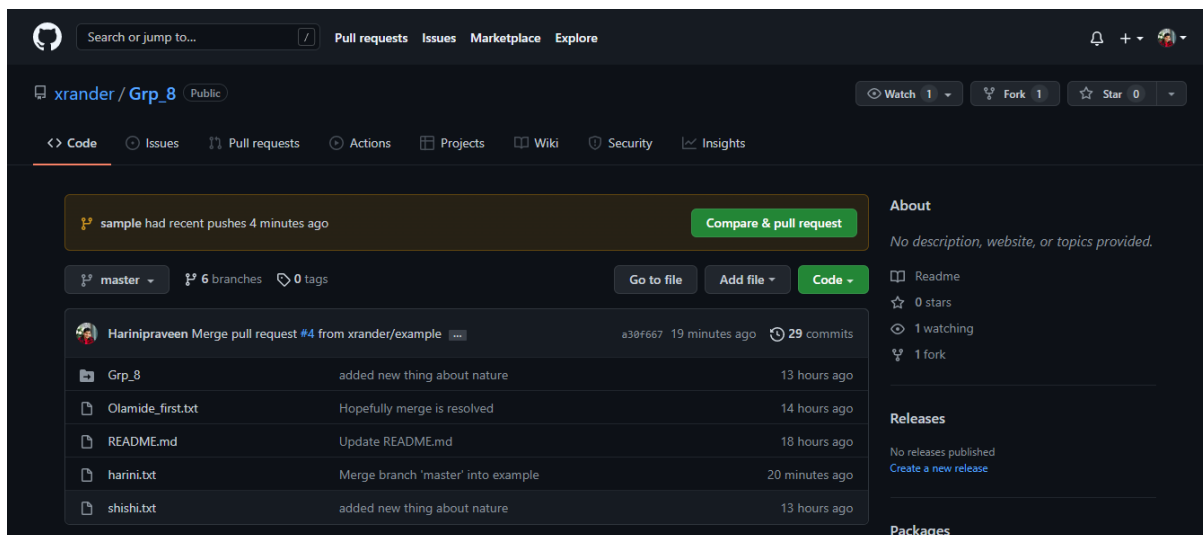
    git pull <remote> <branch>

If you wish to set tracking information for this branch you can do so with:

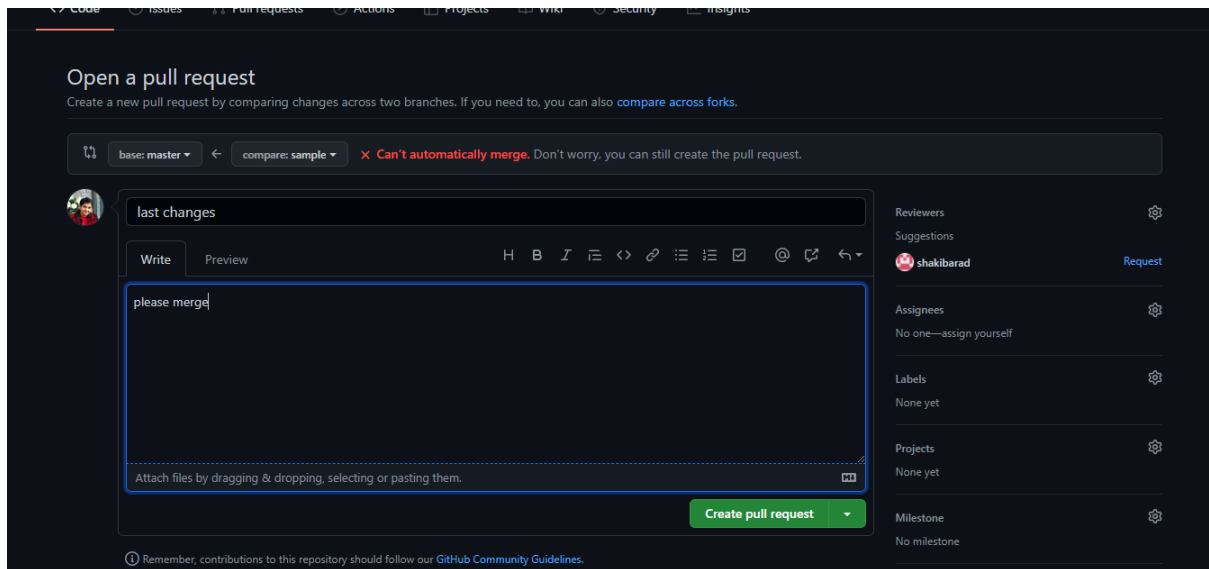
    git branch --set-upstream-to=origin/<branch> sample

(base) harini@LAPTOP-65RQKFGU:/mnt/c/Users/Harini Pravin/Desktop/Grp_8$ git checkout master
Switched to branch 'master'
Your branch is behind 'origin/master' by 15 commits, and can be fast-forwarded.
(use "git pull" to update your local branch)
(base) harini@LAPTOP-65RQKFGU:/mnt/c/Users/Harini Pravin/Desktop/Grp_8$ git merge sample
Updating 7ecc2b3..d175d86
Fast-forward
 harini.txt | 2 ++
 1 file changed, 2 insertions(+)
(base) harini@LAPTOP-65RQKFGU:/mnt/c/Users/Harini Pravin/Desktop/Grp_8$ git pull --commit
Auto-merging harini.txt
CONFLICT (content): Merge conflict in harini.txt
Removing .shishi.txt.swp
Automatic merge failed; fix conflicts and then commit the result.
(base) harini@LAPTOP-65RQKFGU:/mnt/c/Users/Harini Pravin/Desktop/Grp_8$
```

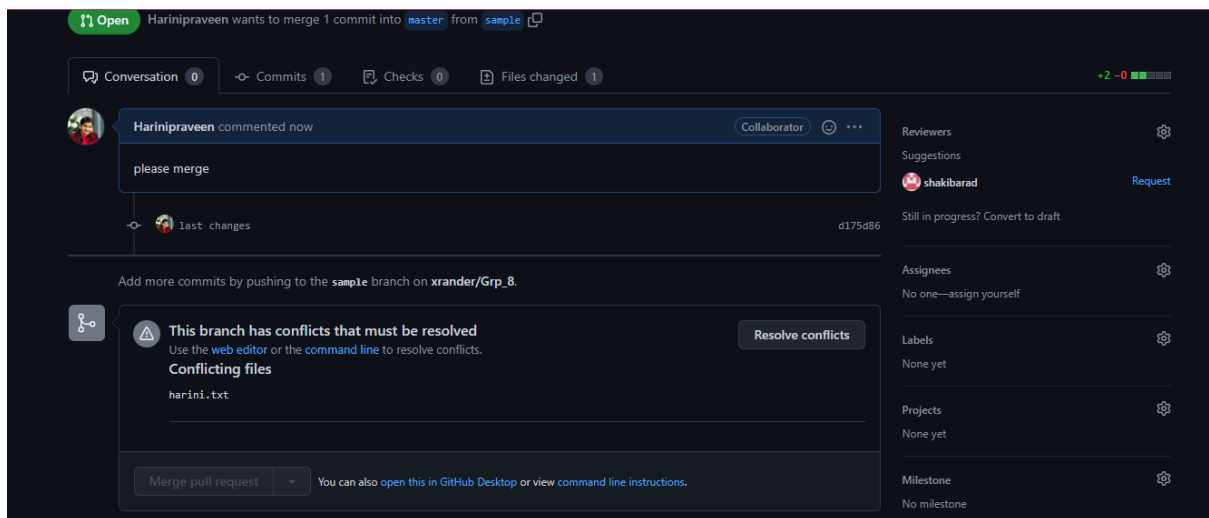
6. Let's use the GitHub to resolve the conflicts. Click compare & pull request.



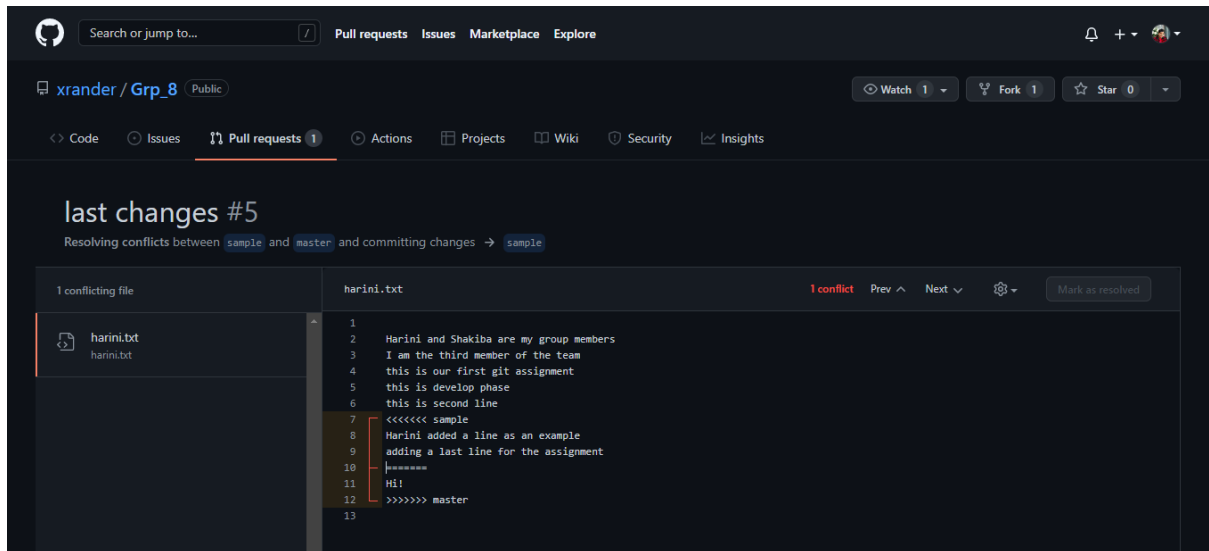
7. Create pull request.



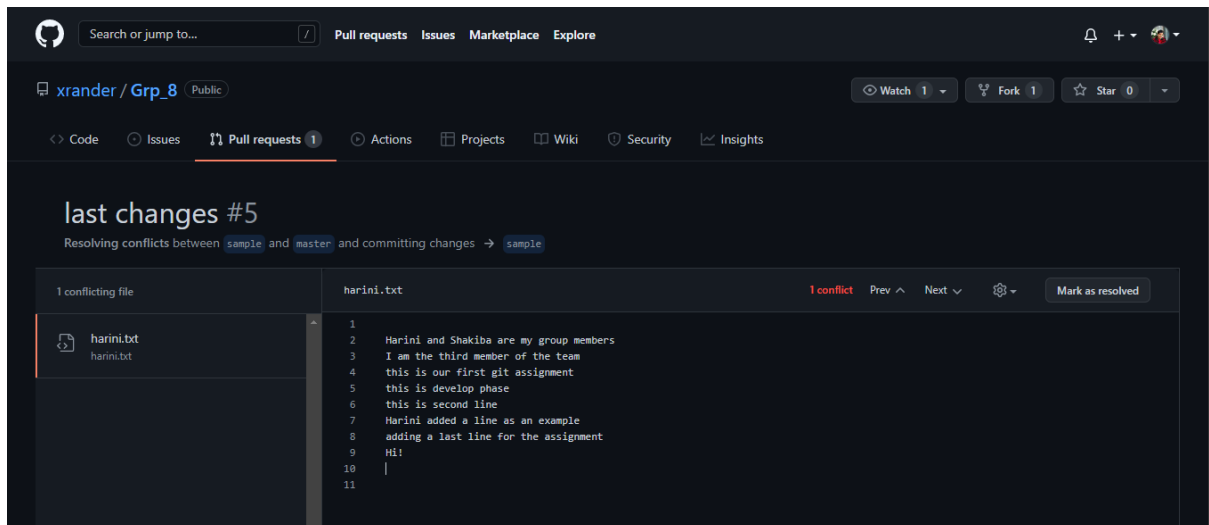
8. Resolve conflicts.



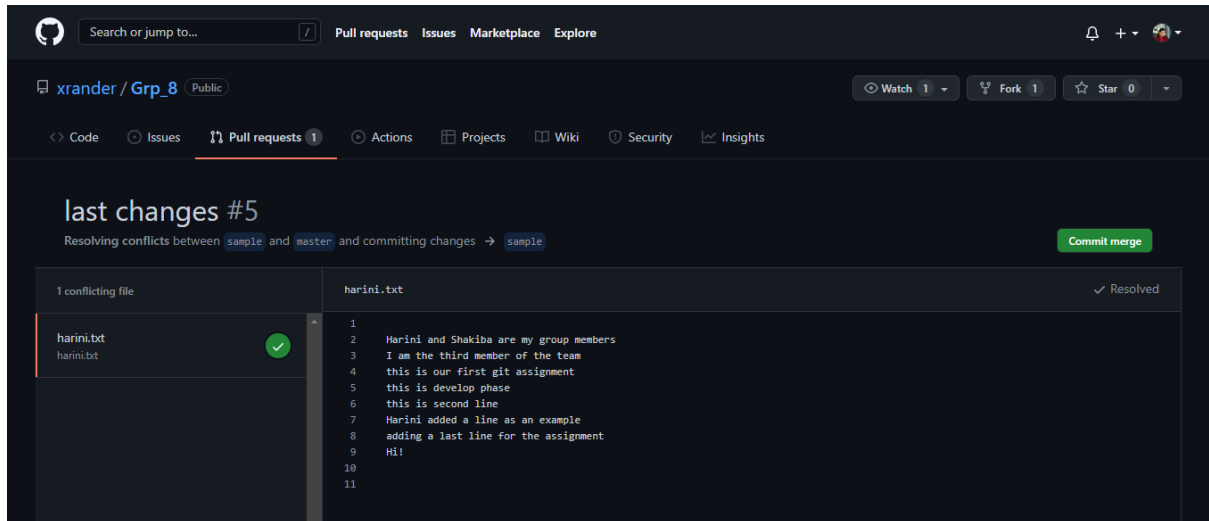
9. Use in built text editor to delete unwanted <<<<<< and ===== lines.



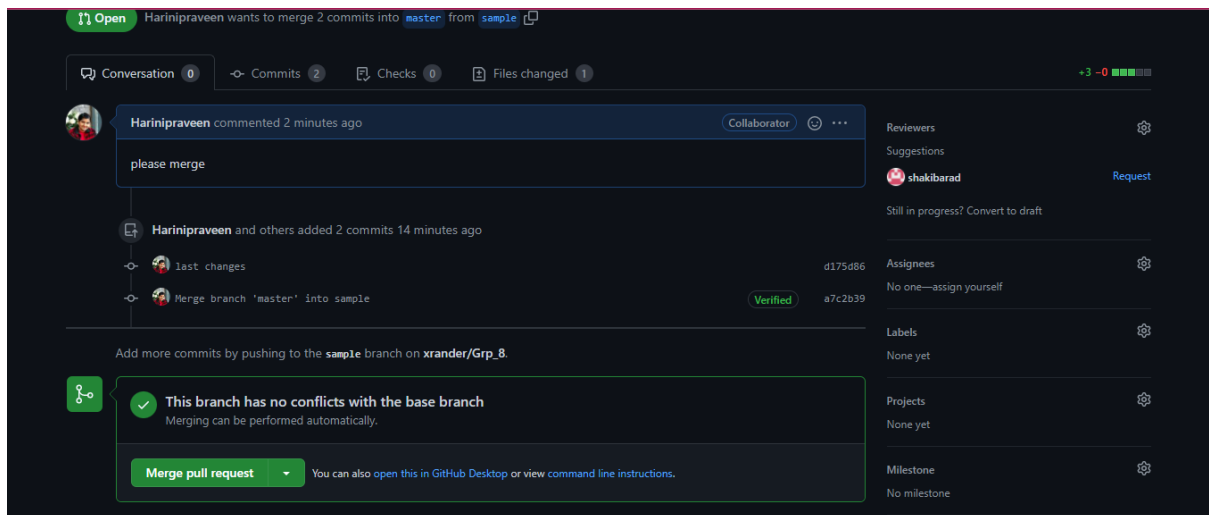
10. Mark as resolved.



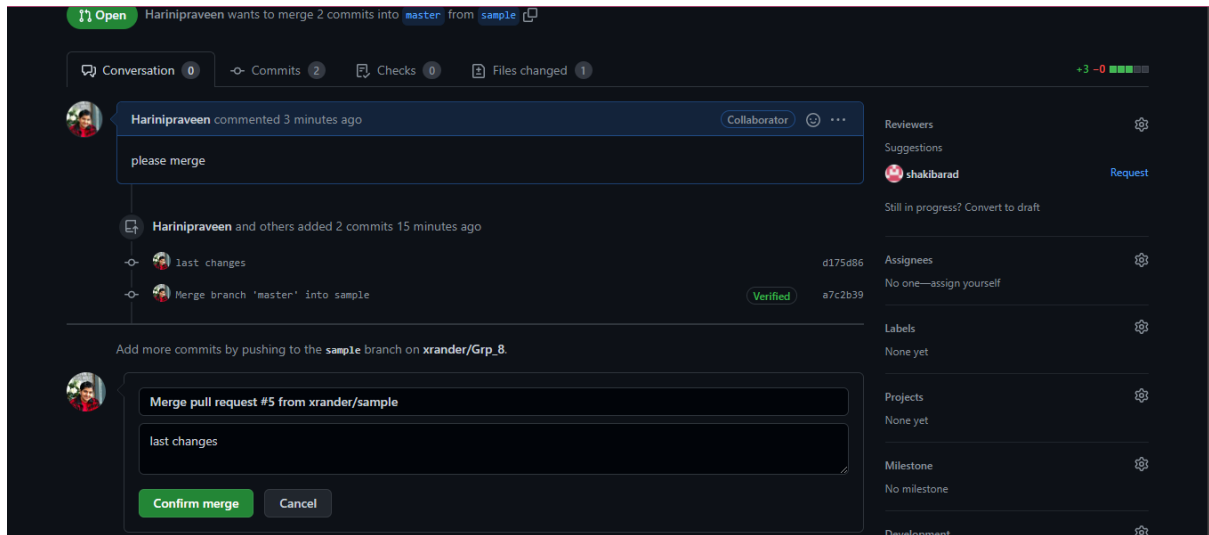
11. Commit merge



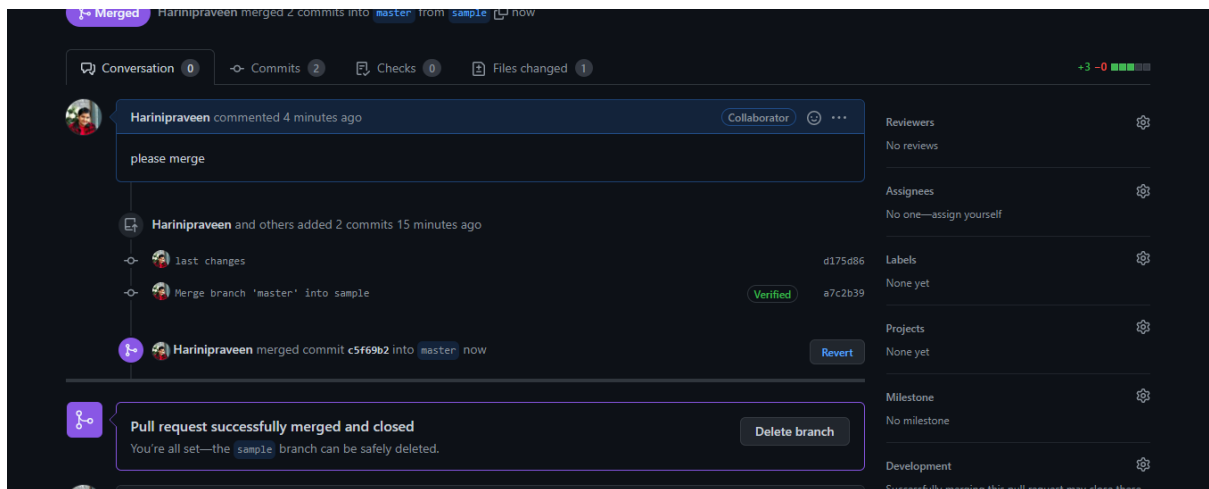
12. Merge pull request.



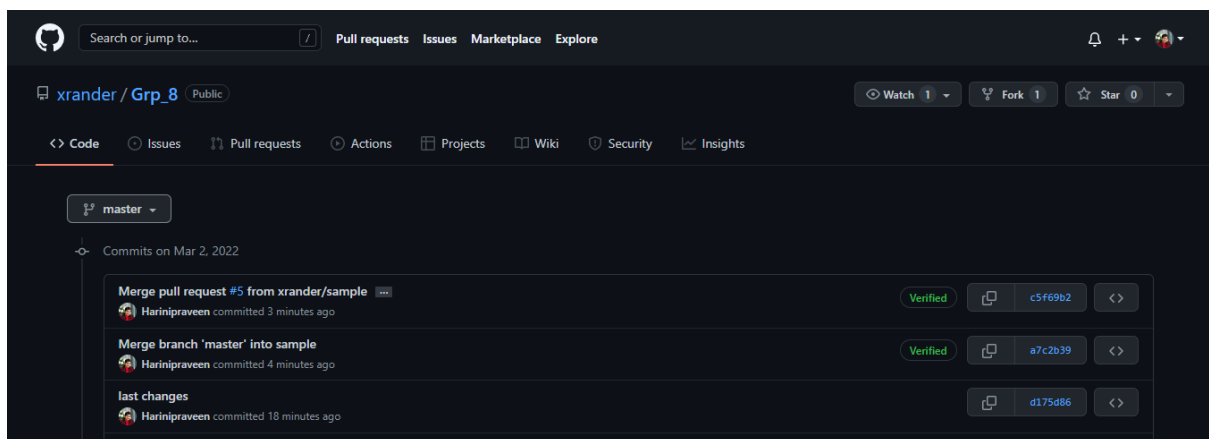
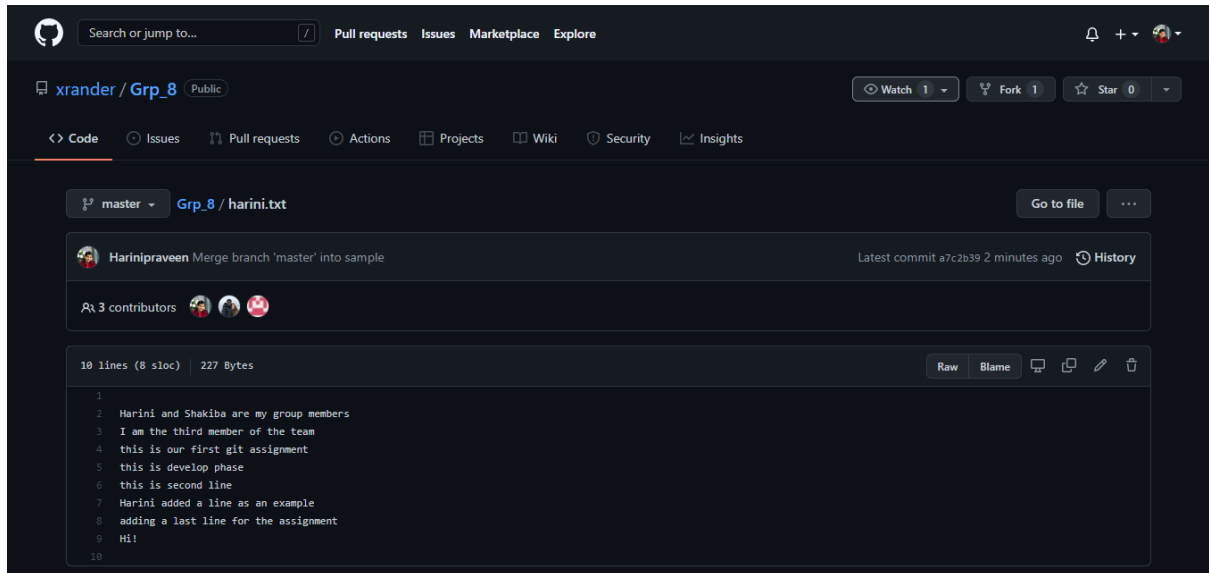
13. Confirm merge.



14. Merge successful



15. All the changes are now in the master branch.



16. We can fork the repository of the main creator and have the repo in our GitHub page. Click fetch and merge to keep the repo updated as per the main repo.

