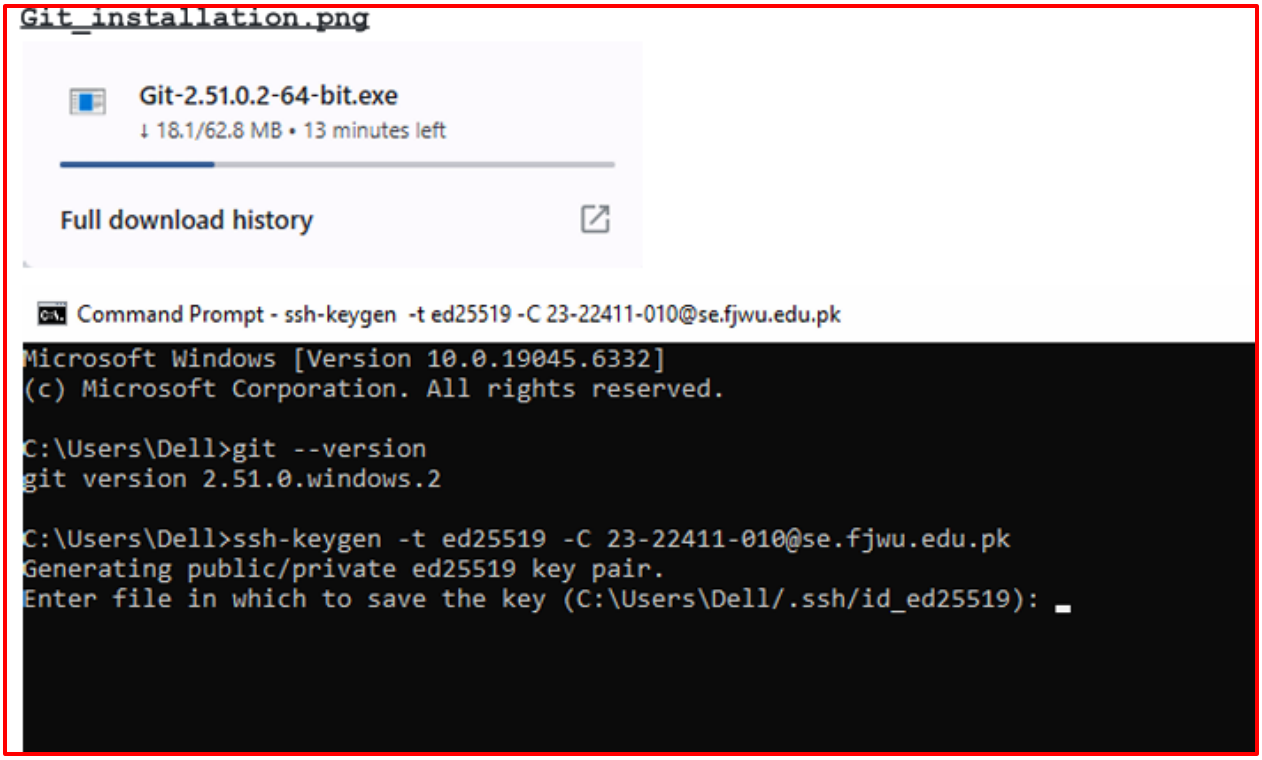
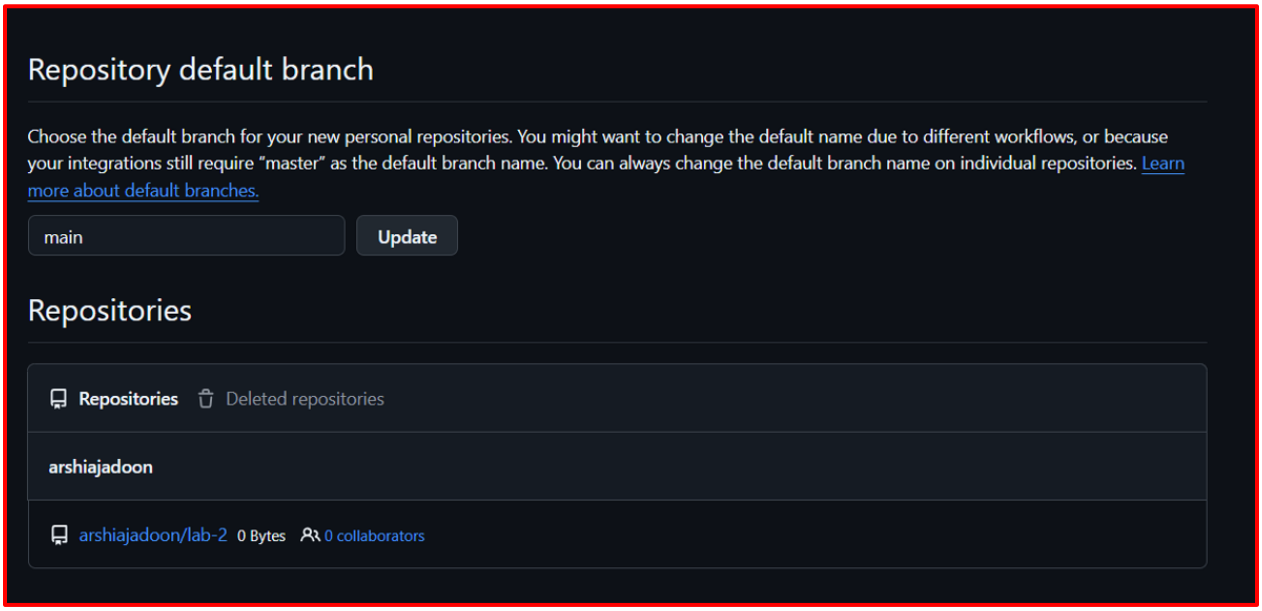
Cloud computing
Lab 2
Arshia Jadoon
Bse-2023-014

Git_installation.png



Task 1:

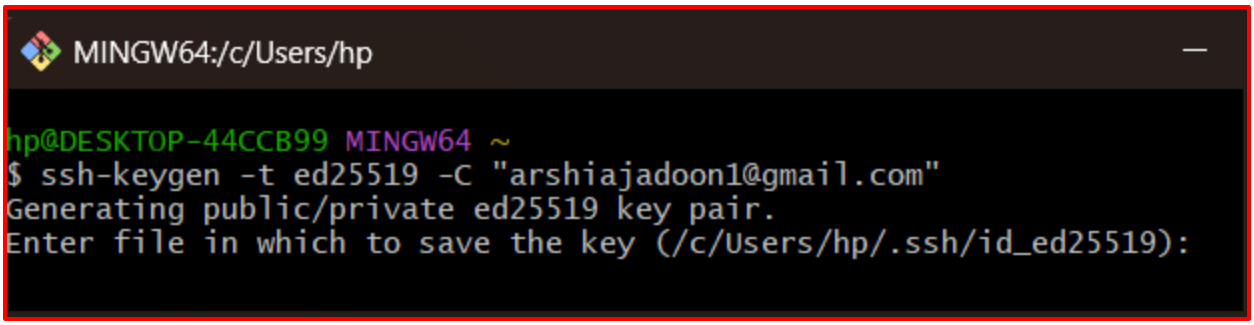
repo_private.png

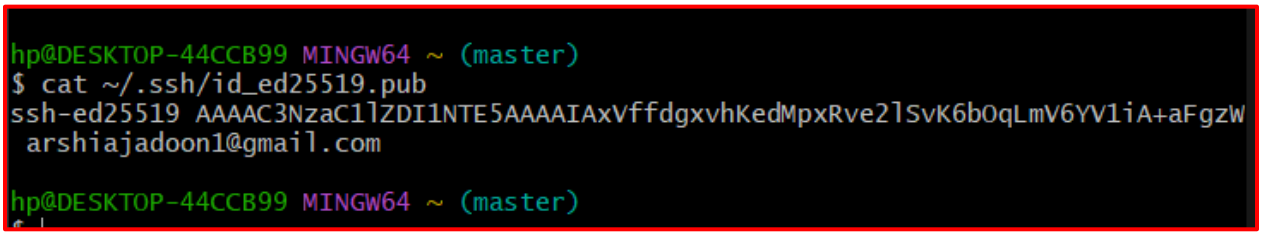


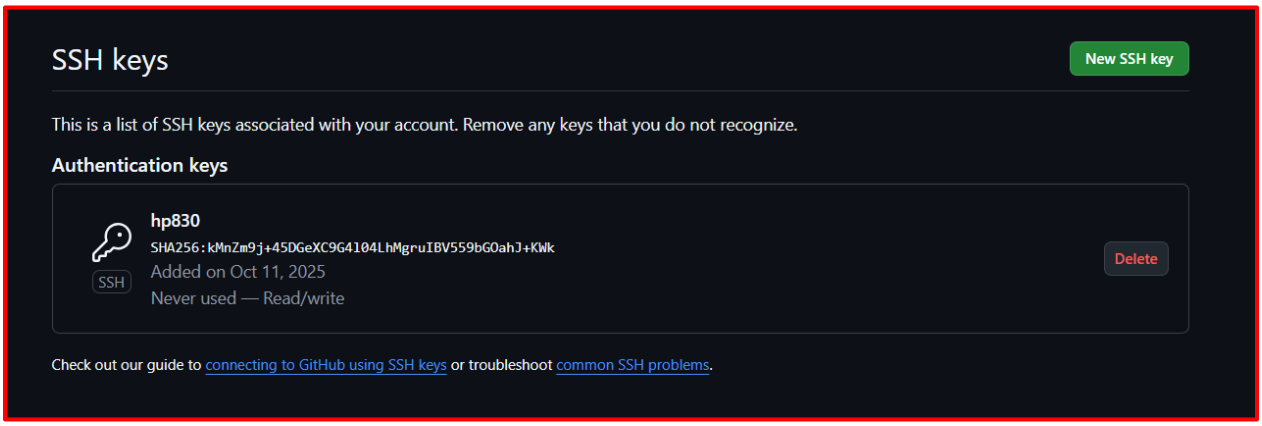
Task 2:

Ssh_keygen.png

ssh_clone.png







Task 3:

Git_identity.png

git_config_list.png

git_config_list.png

```
hp@DESKTOP-44CCB99 MINGW64 ~ (master)
$ git config --list
diff.astextplain.textconv=astextplain
filter.lfs.clean=git-lfs clean -- %f
filter.lfs.smudge=git-lfs smudge -- %f
filter.lfs.process=git-lfs filter-process
filter.lfs.required=true
http.sslbackend=schannel
core.autocrlf=true
core.fscache=true
core.symlinks=false
pull.rebase=false
credential.helper=manager
credential.https://dev.azure.com.usehttppath=true
init.defaultbranch=master
user.name=arshiajadoon
user.email=arshiajadoon1@gmail.com
core.repositoryformatversion=0
core.filemode=false
core.bare=false
core.logallrefupdates=true
core.symlinks=false
core.ignorecase=true
```

Task 4

git_folder.png.

```
hp@DESKTOP-44CCB99 MINGW64 ~ (master)
$ ls -a .git
./   COMMIT_EDITMSG  config       hooks/  info/  objects/
../  HEAD           description  index   logs/  refs/
```

Task 5

Delete_git.png
Git_init.png
first_commit.png

```
hp@DESKTOP-44CCB99 MINGW64 ~
$ git init
Initialized empty Git repository in C:/Users/hp/.git/

hp@DESKTOP-44CCB99 MINGW64 ~ (master)
$
```

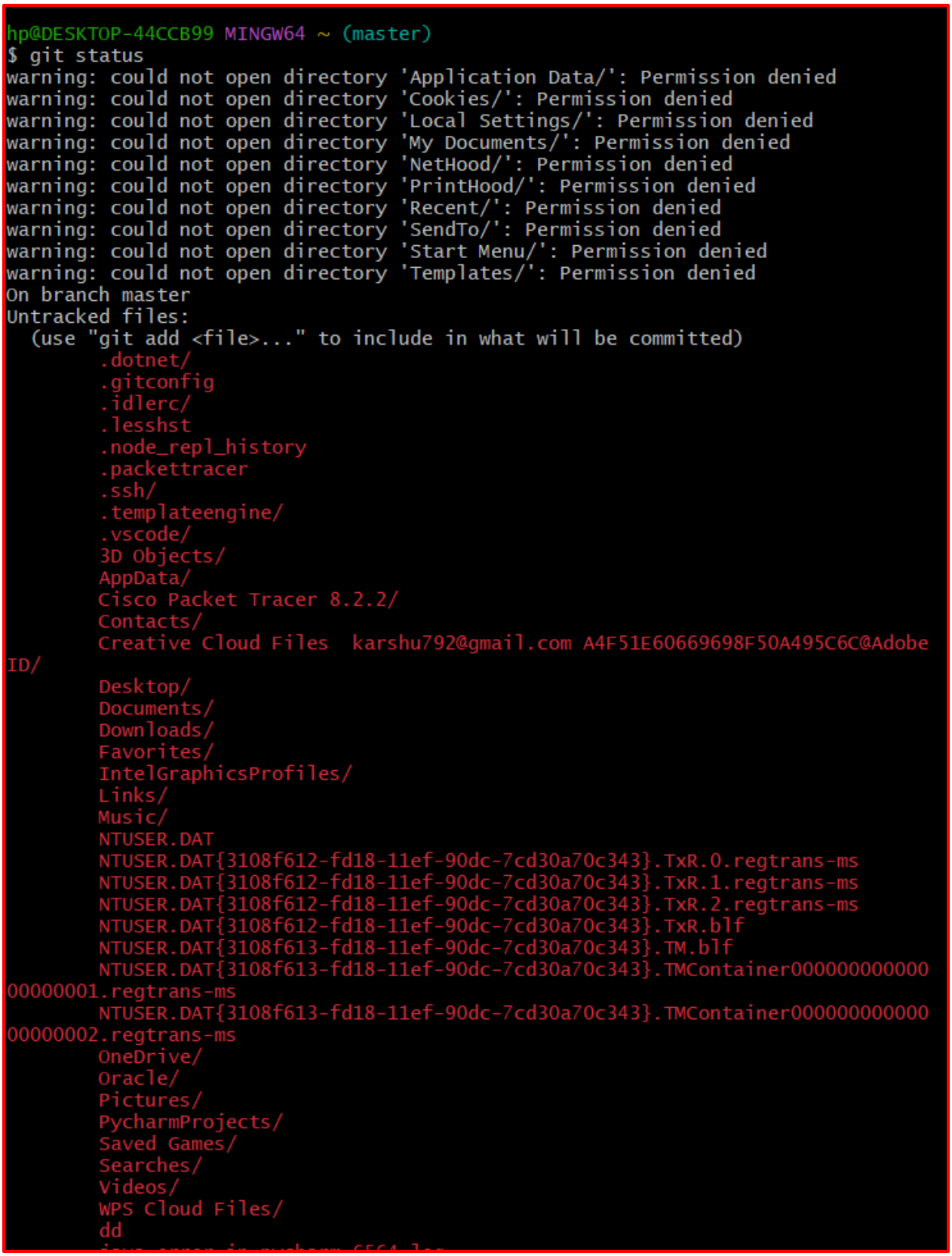
Task 5

first_push.png

```
hp@DESKTOP-44CCB99 MINGW64 ~ (master)
$ echo "# Lab2 Git Practice" > README.md
git add README.md
git commit -m "Initial commit"
warning: in the working copy of 'README.md', LF will be replaced by CRLF the ne
t time Git touches it
[master (root-commit) 1b46afb] Initial commit
 1 file changed, 1 insertion(+)
 create mode 100644 README.md
```

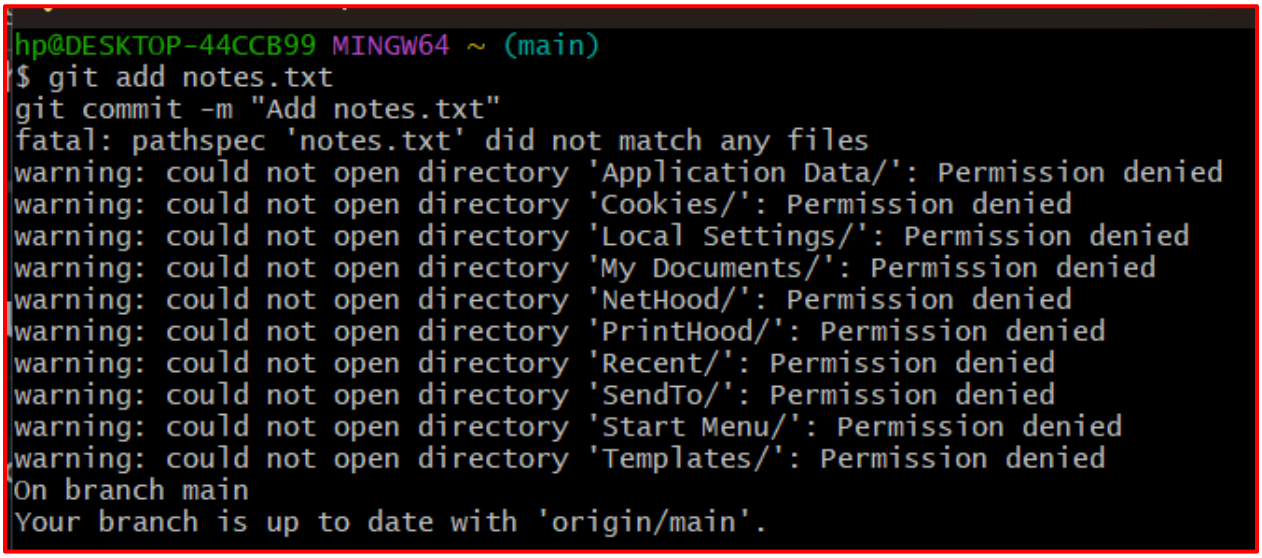
Task 6

status1.png


hp@DESKTOP-44CCB99 MINGW64 ~ (master)
$ git status
warning: could not open directory 'Application Data/': Permission denied
warning: could not open directory 'Cookies/': Permission denied
warning: could not open directory 'Local Settings/': Permission denied
warning: could not open directory 'My Documents/': Permission denied
warning: could not open directory 'NetHood/': Permission denied
warning: could not open directory 'PrintHood/': Permission denied
warning: could not open directory 'Recent/': Permission denied
warning: could not open directory 'SendTo/': Permission denied
warning: could not open directory 'Start Menu/': Permission denied
warning: could not open directory 'Templates/': Permission denied
On branch master
Untracked files:
(use "git add <file>..." to include in what will be committed)
.dotnet/
.gitconfig
.idlerc/
.lesshst
.node_repl_history
.packettracer
.ssh/
.templateengine/
.vscode/
3D Objects/
AppData/
Cisco Packet Tracer 8.2.2/
Contacts/
Creative Cloud Files karshu792@gmail.com A4F51E60669698F50A495C6C@Adobe
ID/
Desktop/
Documents/
Downloads/
Favorites/
IntelGraphicsProfiles/
Links/
Music/
NTUSER.DAT
NTUSER.DAT{3108f612-fd18-11ef-90dc-7cd30a70c343}.TxR.0.regtrans-ms
NTUSER.DAT{3108f612-fd18-11ef-90dc-7cd30a70c343}.TxR.1.regtrans-ms
NTUSER.DAT{3108f612-fd18-11ef-90dc-7cd30a70c343}.TxR.2.regtrans-ms
NTUSER.DAT{3108f612-fd18-11ef-90dc-7cd30a70c343}.TxR.blf
NTUSER.DAT{3108f613-fd18-11ef-90dc-7cd30a70c343}.TM.blf
NTUSER.DAT{3108f613-fd18-11ef-90dc-7cd30a70c343}.TMContainer000000000000
00000001.regtrans-ms
NTUSER.DAT{3108f613-fd18-11ef-90dc-7cd30a70c343}.TMContainer000000000000
00000002.regtrans-ms
OneDrive/
Oracle/
Pictures/
PycharmProjects/
Saved Games/
Searches/
Videos/
WPS Cloud Files/
dd

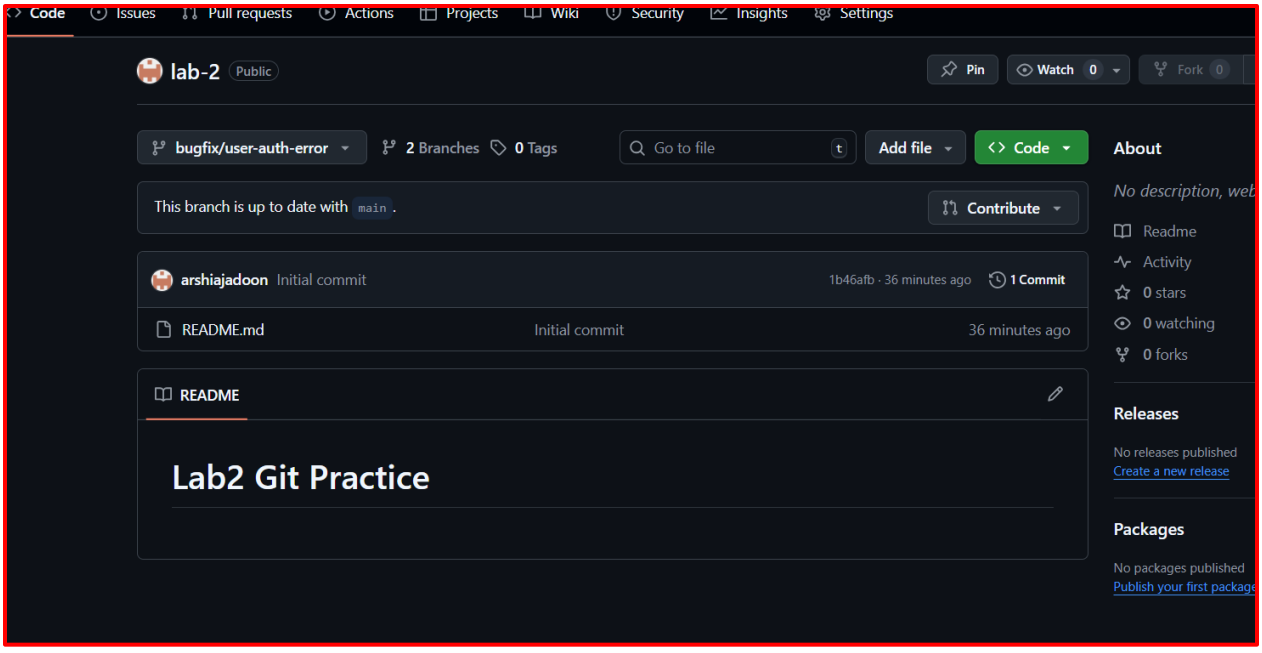
Task 6

commit_notes.png



Task 7

bugfix_branch_gui.png



bugfix_branch_local.png

```
hp@DESKTOP-44CCB99 MINGW64 ~ (main)
$ git pull origin bugfix/user-auth-error
From github.com:arshiajadoon/lab-2
 * branch            bugfix/user-auth-error -> FETCH_HEAD
 * [new branch]      bugfix/user-auth-error -> origin/bugfix/user-auth-error
Auto packing the repository for optimum performance.
See "git help gc" for manual housekeeping.
Enumerating objects: 3, done.
Counting objects: 100% (3/3), done.
Writing objects: 100% (3/3), done.
Total 3 (delta 0), reused 0 (delta 0), pack-reused 0 (from 0)
Checking connectivity: 13327, done.
warning: There are too many unreachable loose objects; run 'git prune' to remov
 them.
Already up to date.
```

Task 8

feature_db_branch.png

```
hp@DESKTOP-44CCB99 MINGW64 ~ (main)
$ git checkout -b feature/db-connection
Switched to a new branch 'feature/db-connection'
```

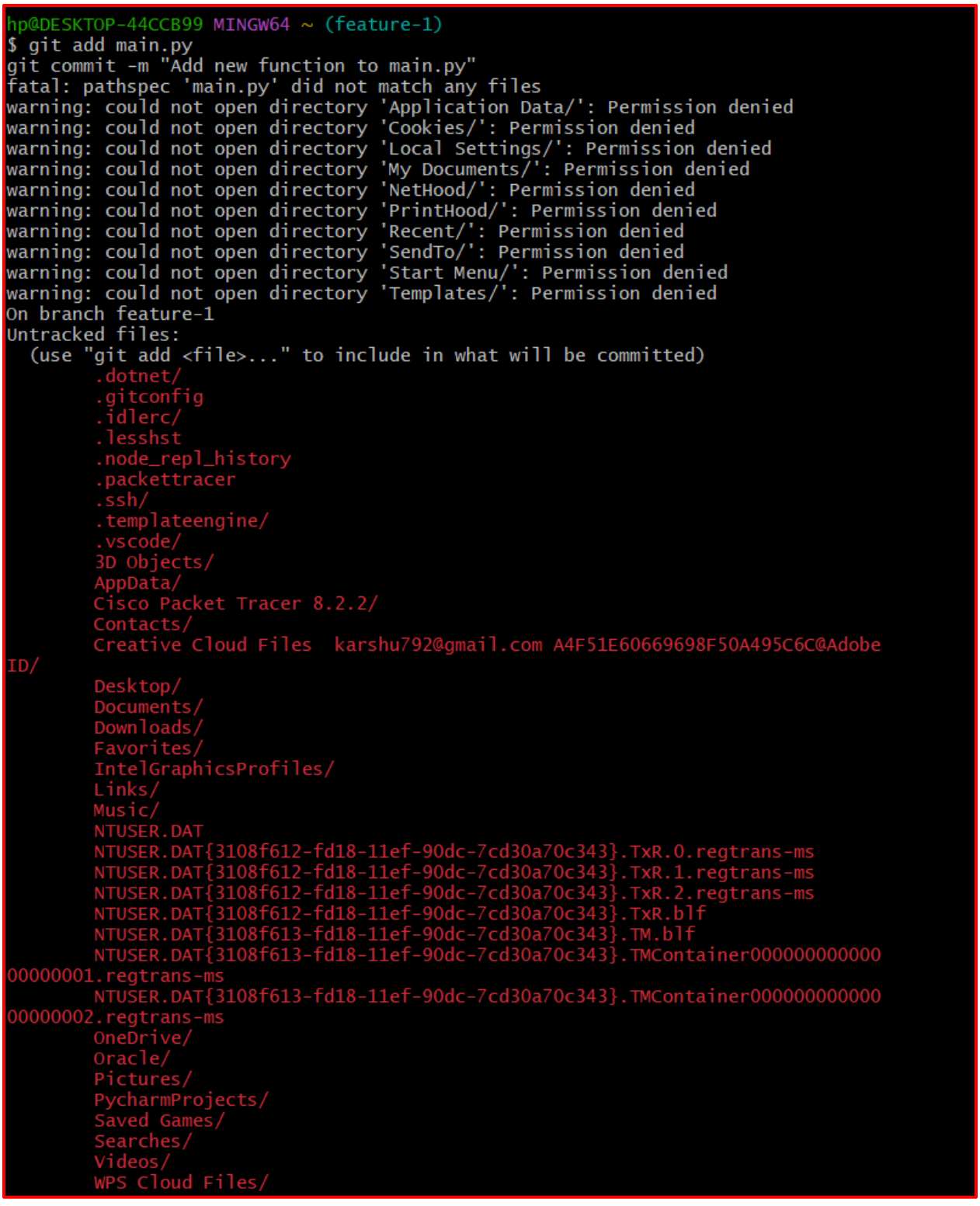
```
hp@DESKTOP-44CCB99 MINGW64 ~ (feature/db-connection)
$ git push origin feature/db-connection
Total 0 (delta 0), reused 0 (delta 0), pack-reused 0 (from 0)
remote:
remote: Create a pull request for 'feature/db-connection' on GitHub by visiting
remote:      https://github.com/arshiajadoon/lab-2/pull/new/feature/db-connectio
n
remote:
To github.com:arshiajadoon/lab-2.git
 * [new branch]      feature/db-connection -> feature/db-connection

hp@DESKTOP-44CCB99 MINGW64 ~ (feature/db-connection)
$
```

Task 9

branch_create.png

```
hp@DESKTOP-44CCB99 MINGW64 ~ (feature/db-connection)
$ git checkout -b feature-1
Switched to a new branch 'feature-1'

hp@DESKTOP-44CCB99 MINGW64 ~ (feature-1)
$
```

Feature_commit.png


hp@DESKTOP-44CCB99 MINGW64 ~ (feature-1)
$ git add main.py
git commit -m "Add new function to main.py"
fatal: pathspec 'main.py' did not match any files
warning: could not open directory 'Application Data/': Permission denied
warning: could not open directory 'Cookies/': Permission denied
warning: could not open directory 'Local Settings/': Permission denied
warning: could not open directory 'My Documents/': Permission denied
warning: could not open directory 'NetHood/': Permission denied
warning: could not open directory 'PrintHood/': Permission denied
warning: could not open directory 'Recent/': Permission denied
warning: could not open directory 'SendTo/': Permission denied
warning: could not open directory 'Start Menu/': Permission denied
warning: could not open directory 'Templates/': Permission denied
On branch feature-1
Untracked files:
(use "git add <file>..." to include in what will be committed)
.dotnet/
.gitconfig
.idlerc/
.lesshst
.node_repl_history
.packettracer
.ssh/
.templateengine/
.vscode/
3D Objects/
AppData/
Cisco Packet Tracer 8.2.2/
Contacts/
Creative Cloud Files karshu792@gmail.com A4F51E60669698F50A495C6C@AdobeID/
Desktop/
Documents/
Downloads/
Favorites/
IntelGraphicsProfiles/
Links/
Music/
NTUSER.DAT
NTUSER.DAT{3108f612-fd18-11ef-90dc-7cd30a70c343}.TxR.0.regtrans-ms
NTUSER.DAT{3108f612-fd18-11ef-90dc-7cd30a70c343}.TxR.1.regtrans-ms
NTUSER.DAT{3108f612-fd18-11ef-90dc-7cd30a70c343}.TxR.2.regtrans-ms
NTUSER.DAT{3108f612-fd18-11ef-90dc-7cd30a70c343}.TxR.blf
NTUSER.DAT{3108f613-fd18-11ef-90dc-7cd30a70c343}.TM.blf
NTUSER.DAT{3108f613-fd18-11ef-90dc-7cd30a70c343}.TMContainer00000000000000000001.regtrans-ms
NTUSER.DAT{3108f613-fd18-11ef-90dc-7cd30a70c343}.TMContainer00000000000000000002.regtrans-ms
OneDrive/
Oracle/
Pictures/
PycharmProjects/
Saved Games/
Searches/
Videos/
WPS Cloud Files/

merge.png

```
hp@DESKTOP-44CCB99 MINGW64 ~ (feature-1)
$ git checkout main
Switched to branch 'main'
Your branch is up to date with 'origin/main'.

hp@DESKTOP-44CCB99 MINGW64 ~ (main)
$ git merge feature-1
Already up to date.

hp@DESKTOP-44CCB99 MINGW64 ~ (main)
$
```

push_branches.png

```
hp@DESKTOP-44CCB99 MINGW64 ~ (main)
$ git push origin main
Everything up-to-date

hp@DESKTOP-44CCB99 MINGW64 ~ (main)
$ git push origin feature-1
Total 0 (delta 0), reused 0 (delta 0), pack-reused 0 (from 0)
remote:
remote: Create a pull request for 'feature-1' on GitHub by visiting:
remote:      https://github.com/arshiajadoon/lab-2/pull/new/feature-1
remote:
To github.com:arshiajadoon/lab-2.git
 * [new branch]      feature-1 -> feature-1
```

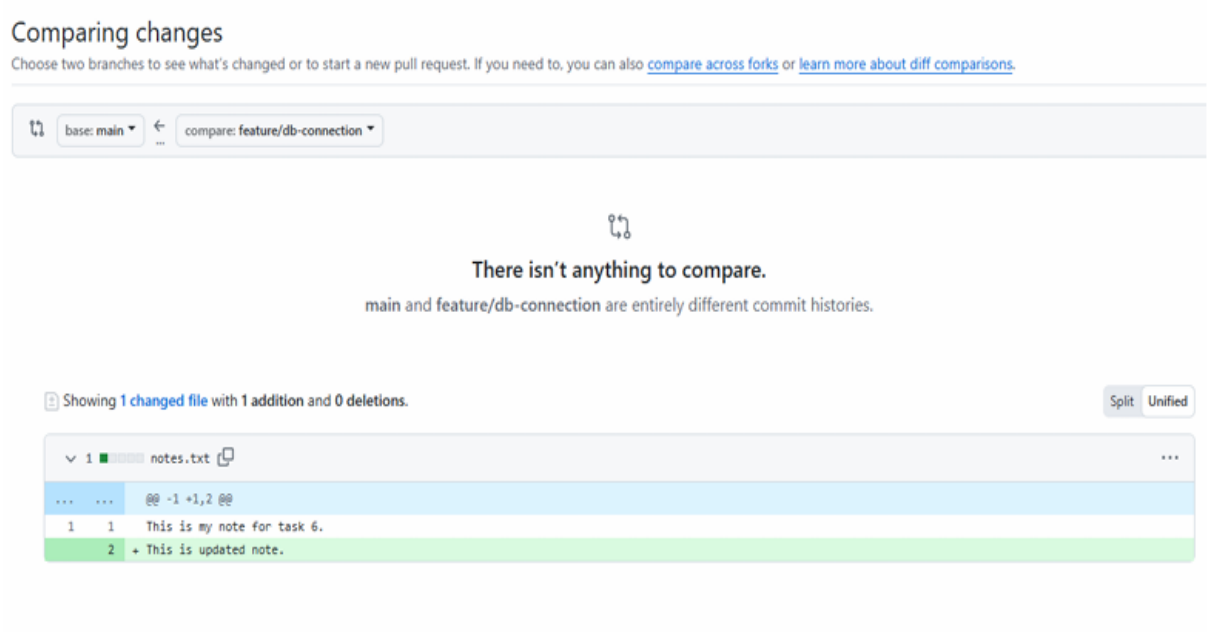
Task 10

(pr_creation.png)

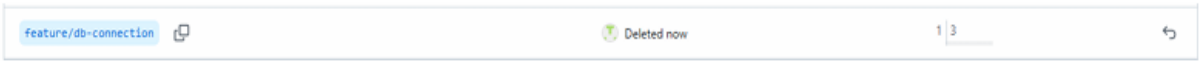
pr_merge.png)

branch_delete.png)

Pr_creation.png
Pr_merge.png



branch_deletion.png

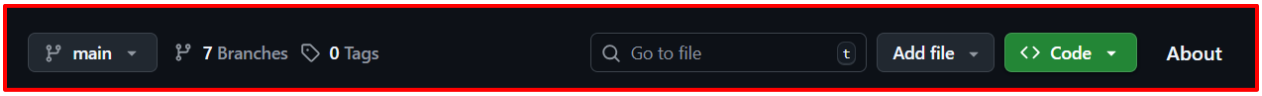


Task 11:

final_merge.png

```
hp@DESKTOP-44CCB99 MINGW64 ~ (feature/db-connection)
$ git push -u origin feature/db-connection
branch 'feature/db-connection' set up to track 'origin/feature/db-connection'.
Everything up-to-date

hp@DESKTOP-44CCB99 MINGW64 ~ (feature/db-connection)
$ git checkout -b develop
Switched to a new branch 'develop'

hp@DESKTOP-44CCB99 MINGW64 ~ (develop)
$ git checkout -b develop
fatal: a branch named 'develop' already exists

hp@DESKTOP-44CCB99 MINGW64 ~ (develop)
$ git push -u origin develop
Total 0 (delta 0), reused 0 (delta 0), pack-reused 0 (from 0)
remote:
remote: Create a pull request for 'develop' on GitHub by visiting:
remote:      https://github.com/arshiajadoon/lab-2/pull/new/develop
remote:
To github.com:arshiajadoon/lab-2.git
 * [new branch]      develop -> develop
branch 'develop' set up to track 'origin/develop'.

hp@DESKTOP-44CCB99 MINGW64 ~ (develop)
$ git checkout -b staging
Switched to a new branch 'staging'

hp@DESKTOP-44CCB99 MINGW64 ~ (staging)
$ git push -u origin staging
Total 0 (delta 0), reused 0 (delta 0), pack-reused 0 (from 0)
remote:
remote: Create a pull request for 'staging' on GitHub by visiting:
remote:      https://github.com/arshiajadoon/lab-2/pull/new/staging
remote:
To github.com:arshiajadoon/lab-2.git
 * [new branch]      staging -> staging
branch 'staging' set up to track 'origin/staging'.

hp@DESKTOP-44CCB99 MINGW64 ~ (staging)
$ git checkout -b feature/new-login
Switched to a new branch 'feature/new-login'

hp@DESKTOP-44CCB99 MINGW64 ~ (feature/new-login)
$ echo "New login feature code" >> login.txt

hp@DESKTOP-44CCB99 MINGW64 ~ (feature/new-login)
$
```

Branch strategy.png



Branch merges.png

Bonus task : simulated team collaboraton

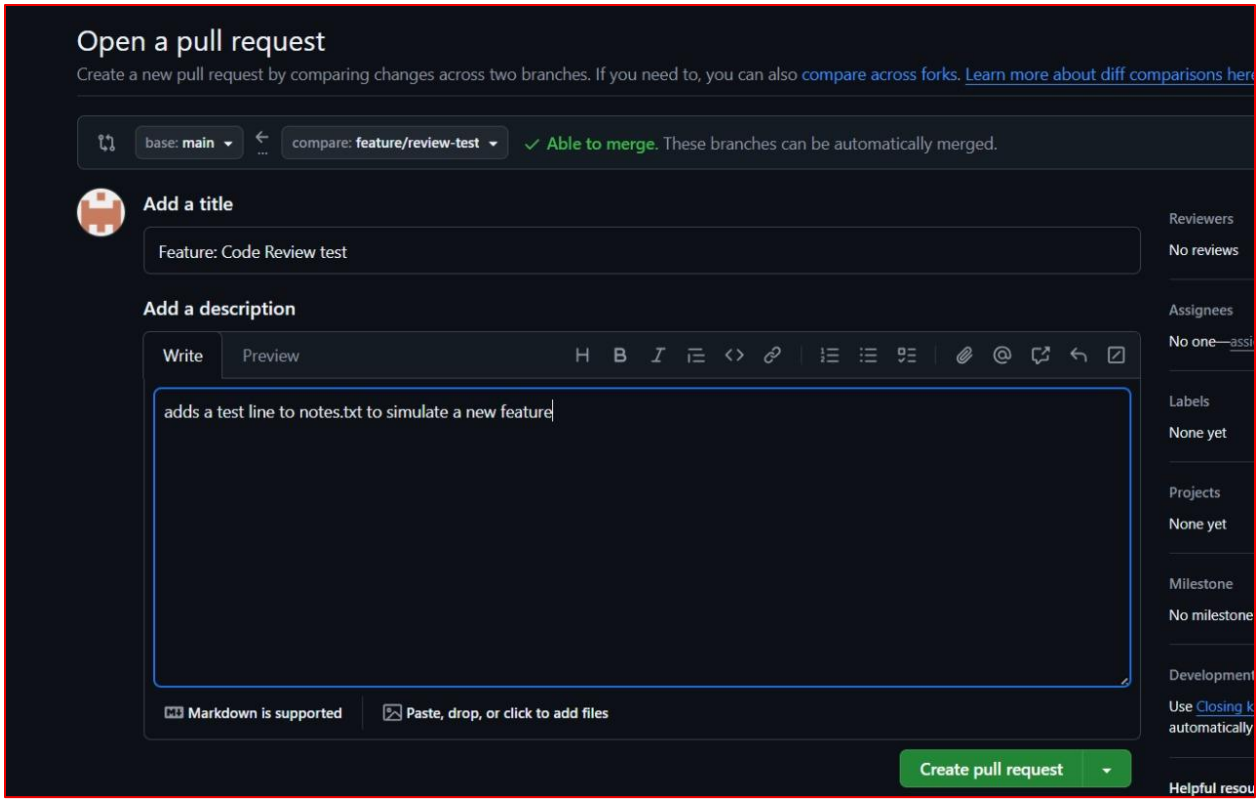
Colab_commit.png

```
Dell@DESKTOP-JNCVEJH MINGW64 ~/lab-2 (master)
$ git checkout -b collab
git push origin collab
Switched to a new branch 'collab'
Total 0 (delta 0), reused 0 (delta 0), pack-reused 0 (from 0)
remote:
remote: Create a pull request for 'collab' on GitHub by visiting:
remote:      https://github.com/areej-10/lab-2/pull/new/collab
remote:
To github.com:areej-10/lab-2.git
 * [new branch]      collab -> collab

Dell@DESKTOP-JNCVEJH MINGW64 ~/lab-2 (collab)
```

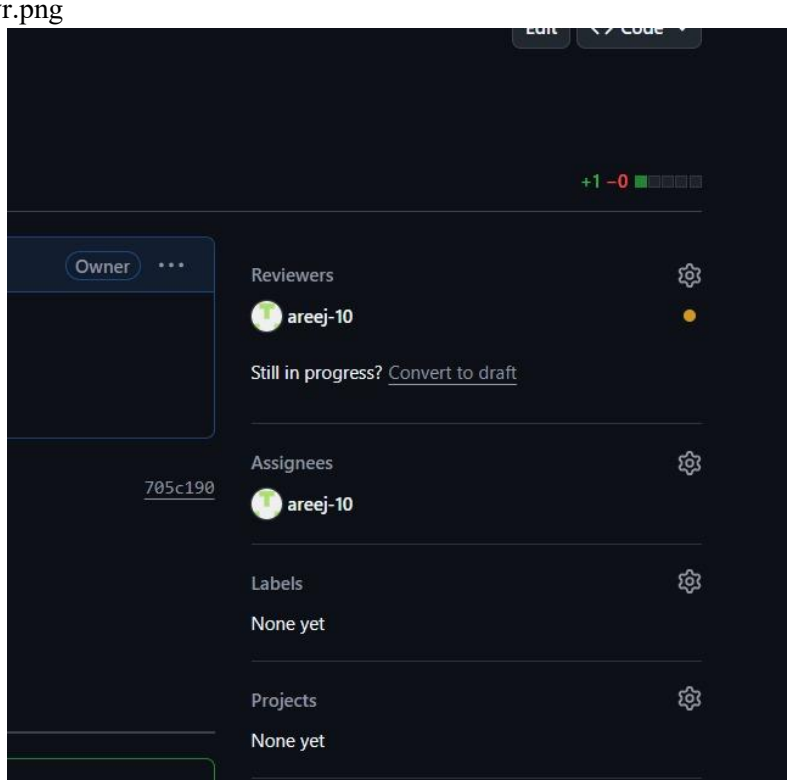
Collab_merge.png

Task 12

Pr_create_details.png

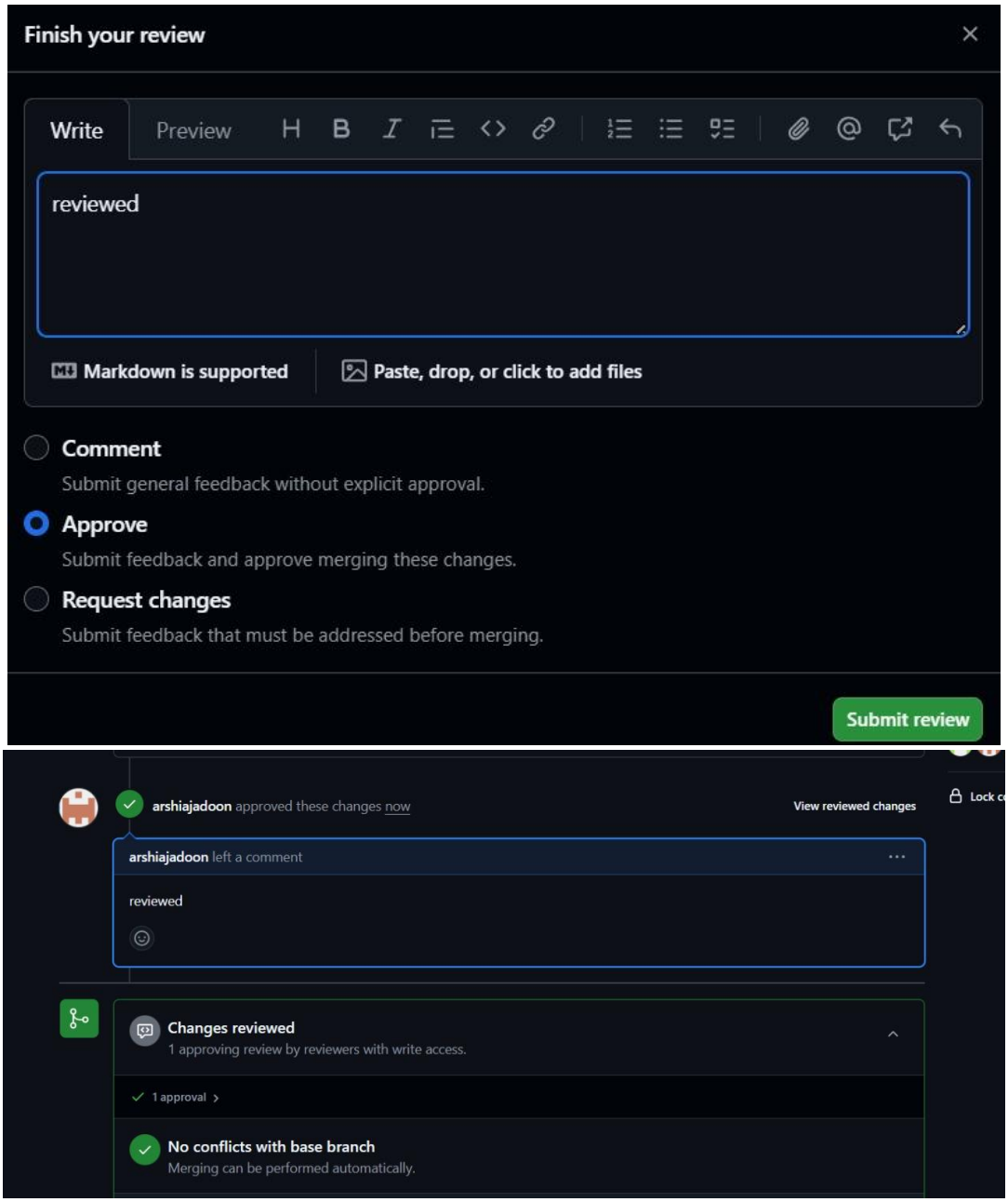


Pr assigned_reviewr.png

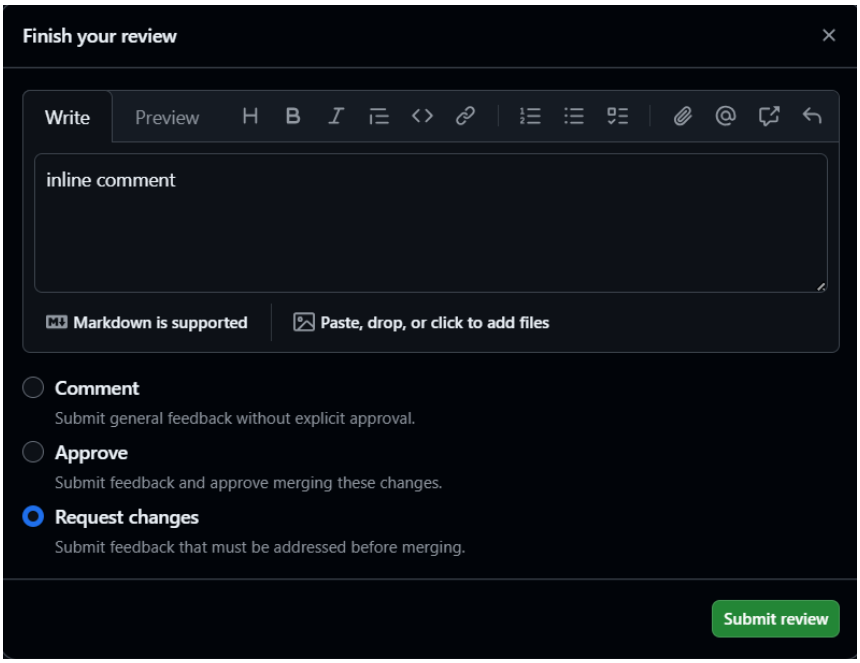


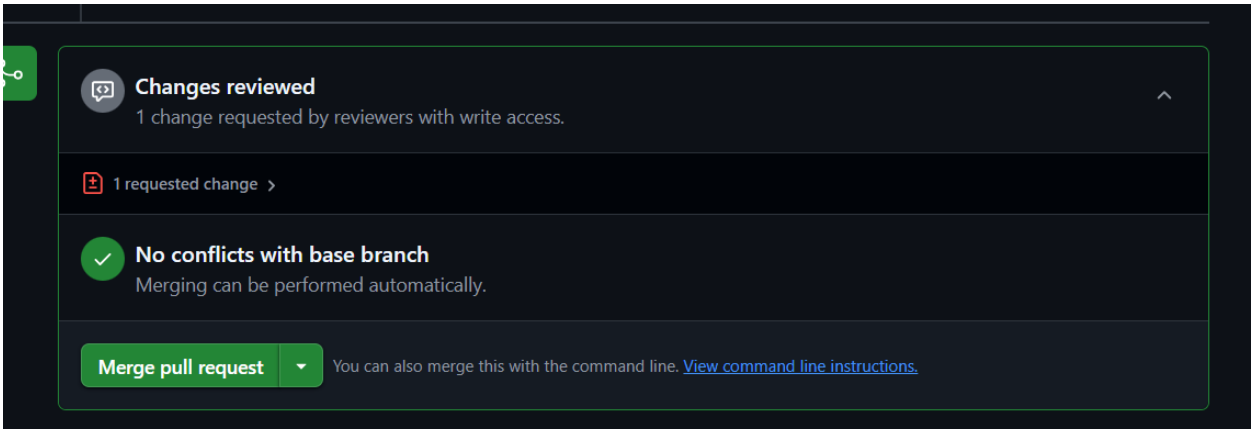
Reviewer Actions (capture screenshots for each):

Pr_approved.png Pr_request_changes.png

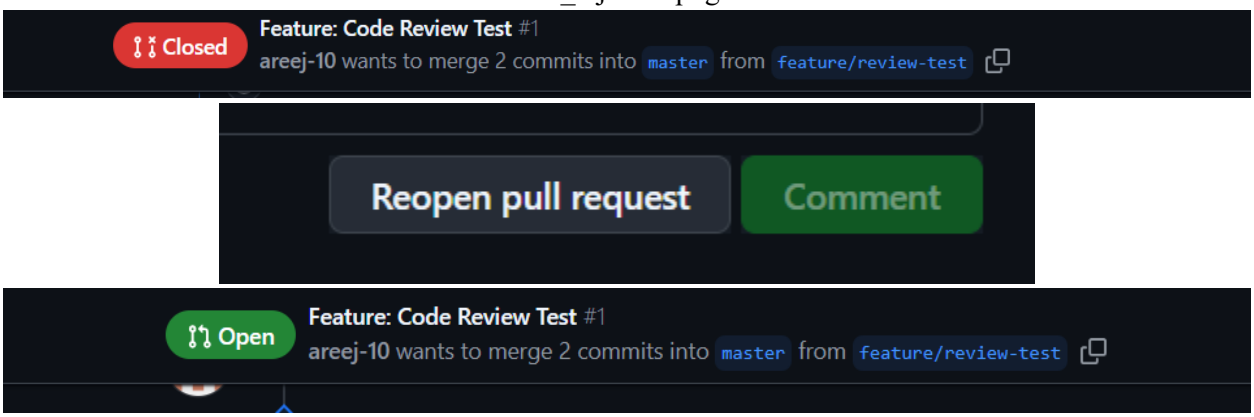


Pr request changes.png



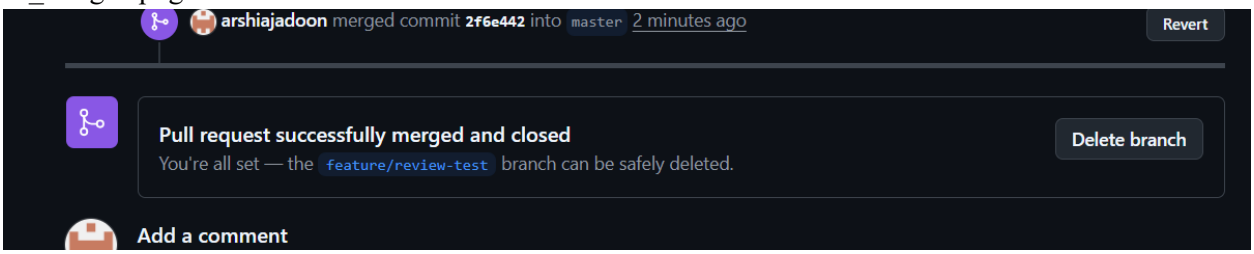


Pr_rejected.png

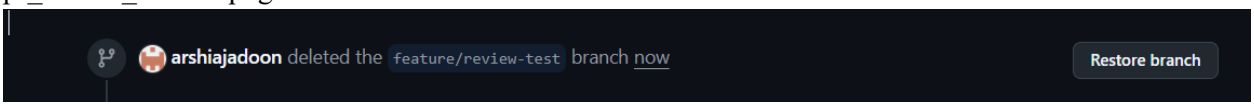


Author Actions:
Pr_updated_with_commits.png
Merge the PR:

Pr_merge_confirm.png.
Pr_merged.png.



Branch Handling After Merge:
pr_branch_deleted.png.



REVIEW_NOTES.md.
Task 13: Branch Cleanup Best Practices]
Remote_branch_delete_cmd.png
arshiajadoon/lab-2

```
hp@DESKTOP-44CCB99 MINGW64 ~ (main)
$ git checkout main

git pull origin main

git branch -d feature/db-connection

git branch
Already on 'main'
Your branch is up to date with 'origin/main'.
From github.com:arshiajadoon/lab-2
 * branch            main       -> FETCH_HEAD
Auto packing the repository for optimum performance.
See "git help gc" for manual housekeeping.
Nothing new to pack.
Checking connectivity: 13328, done.
warning: There are too many unreachable loose objects; run 'git prune' to remove
 them.
Already up to date.
error: branch 'feature/db-connection' not found
  collab
  develop
  feature-1
  feature/new-login
* main
  staging
```