

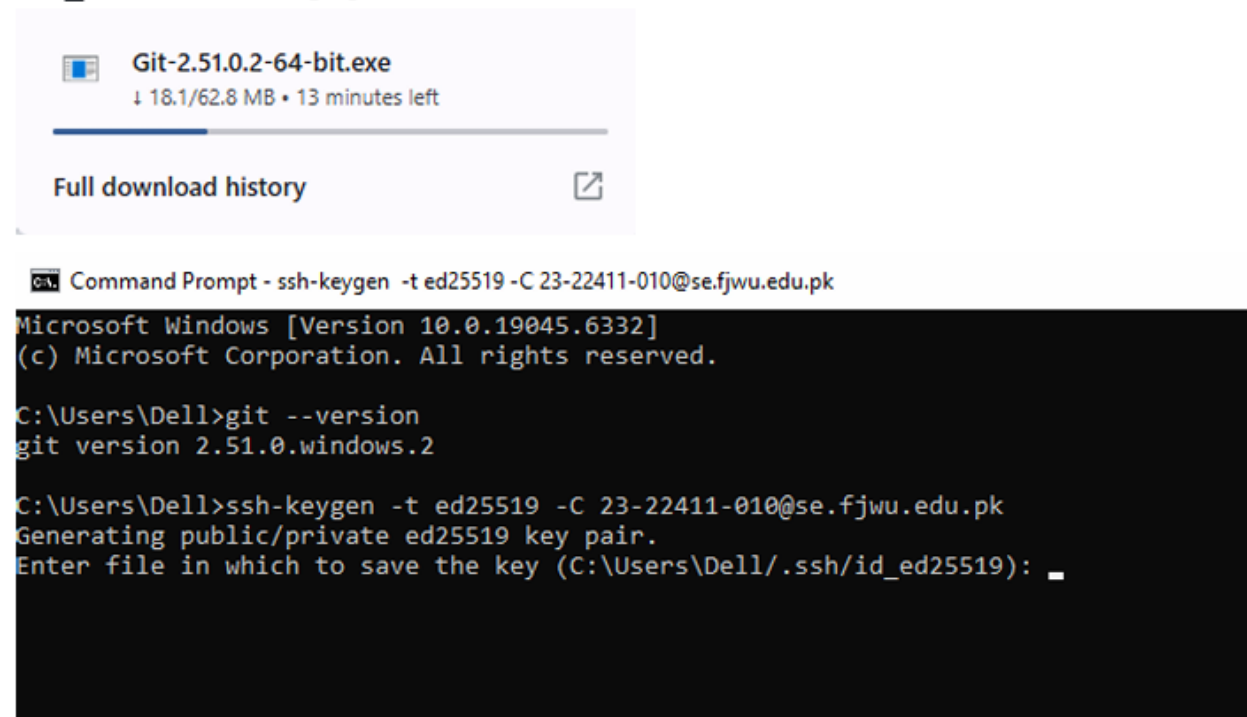
Cloud computing

Lab 2

Arshia Jadoon

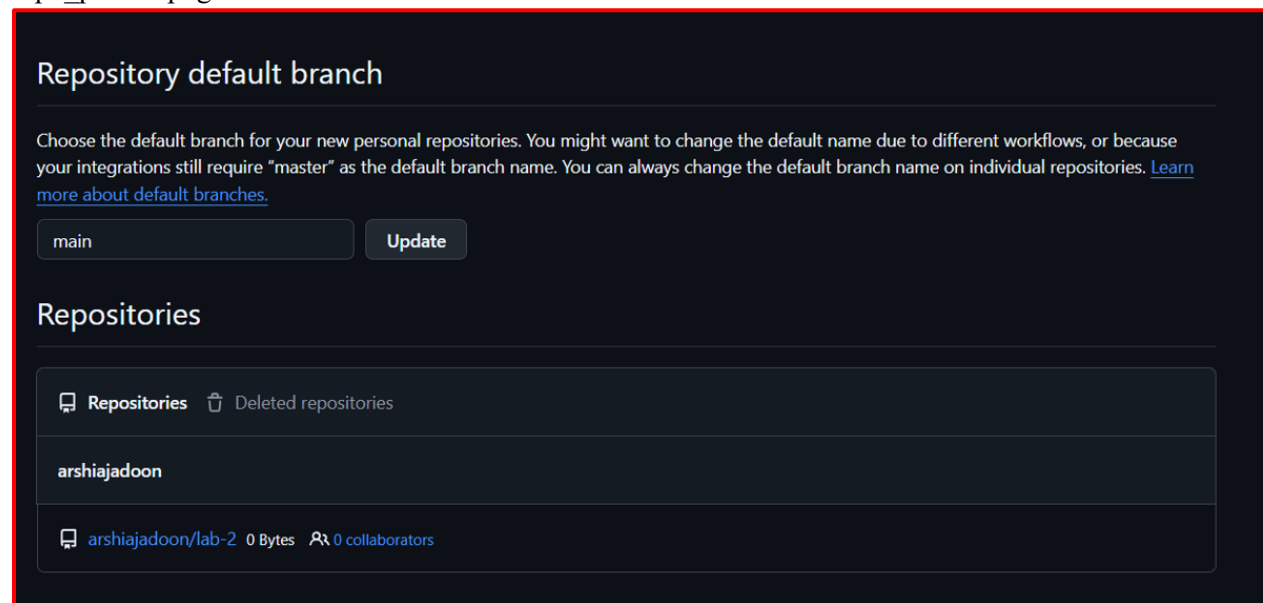
Bse-2023-014

Git_installation.png



Task 1:

repo_private.png



Task 2:

Ssh_keygen.png,

ssh_clone.png

```
MINGW64:/c/Users/hp

hp@DESKTOP-44CCB99 MINGW64 ~
$ ssh-keygen -t ed25519 -C "arshiajadoon1@gmail.com"
Generating public/private ed25519 key pair.
Enter file in which to save the key (/c/Users/hp/.ssh/id_ed25519):
```

```
hp@DESKTOP-44CCB99 MINGW64 ~ (master)
$ cat ~/.ssh/id_ed25519.pub
ssh-ed25519 AAAAC3NzaC1lZDI1NTE5AAAAIAxVffdgxvhKedMpxRve2lSvK6bOqLmV6YV1iA+aFgzW
arshiajadoon1@gmail.com


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

SSH keys

New SSH key

This is a list of SSH keys associated with your account. Remove any keys that you do not recognize.

Authentication keys



hp830
SHA256:kMnZm9j+45DGeXC9G4104LhMgruIBV559bG0ahJ+Kwk
Added on Oct 11, 2025
Never used — Read/write

Delete

Check out our guide to [connecting to GitHub using SSH keys](#) or troubleshoot [common SSH problems](#).

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)
$ l
```

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/
    .lessht
    .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
    java-compiler-in-pycharm-5564-7a

```

Task 6

commit_notes.png

```
hp@DESKTOP-44CCB99 MINGW64 ~ (main)
$ git add notes.txt
git commit -m "Add notes.txt"
fatal: pathspec 'notes.txt' 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 main
Your branch is up to date with 'origin/main'.
```

Task 7

bugfix_branch_gui.png

The screenshot shows the GitHub interface for a repository named 'lab-2' (Public). The repository is currently on the 'bugfix/user-auth-error' branch, which is up to date with the 'main' branch. The repository was created by 'arshiajadoon' and has 2 branches and 0 tags. The commit history shows an initial commit by 'arshiajadoon' 36 minutes ago, with a commit hash of 1b46afb. The repository contains a README.md file, which is displayed in the main content area. The README title is 'Lab2 Git Practice'. The right sidebar shows the repository's statistics: 0 stars, 0 watching, and 0 forks. The 'Releases' section indicates no releases have been published, and the 'Packages' section indicates no packages have been published.

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 remove
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-connection
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/
    .lessht
    .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/

```

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

Comparing changes

Choose two branches to see what's changed or to start a new pull request. If you need to, you can also [compare across forks](#) or [learn more about diff comparisons](#).

base: main ← compare: feature/db-connection



There isn't anything to compare.

main and feature/db-connection are entirely different commit histories.

Showing 1 changed file with 1 addition and 0 deletions.

Split Unified

1 notes.txt		
...	...	@@ -1,2 @@
1	1	This is my note for task 6.
2	+	This is updated note.

branch_deletion.png

feature/db-connection Deleted now 1 | 3

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'.

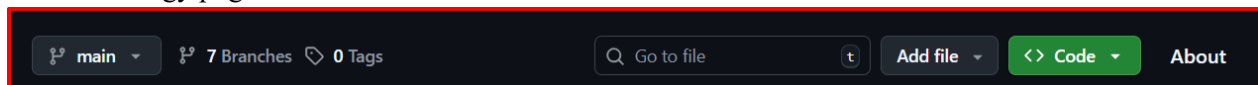
hp@DESKTOP-44CCB99 MINGW64 ~ (staging)
$ git checkout -b feature/new-login
Switched to a new branch 'feature/new-login'

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

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

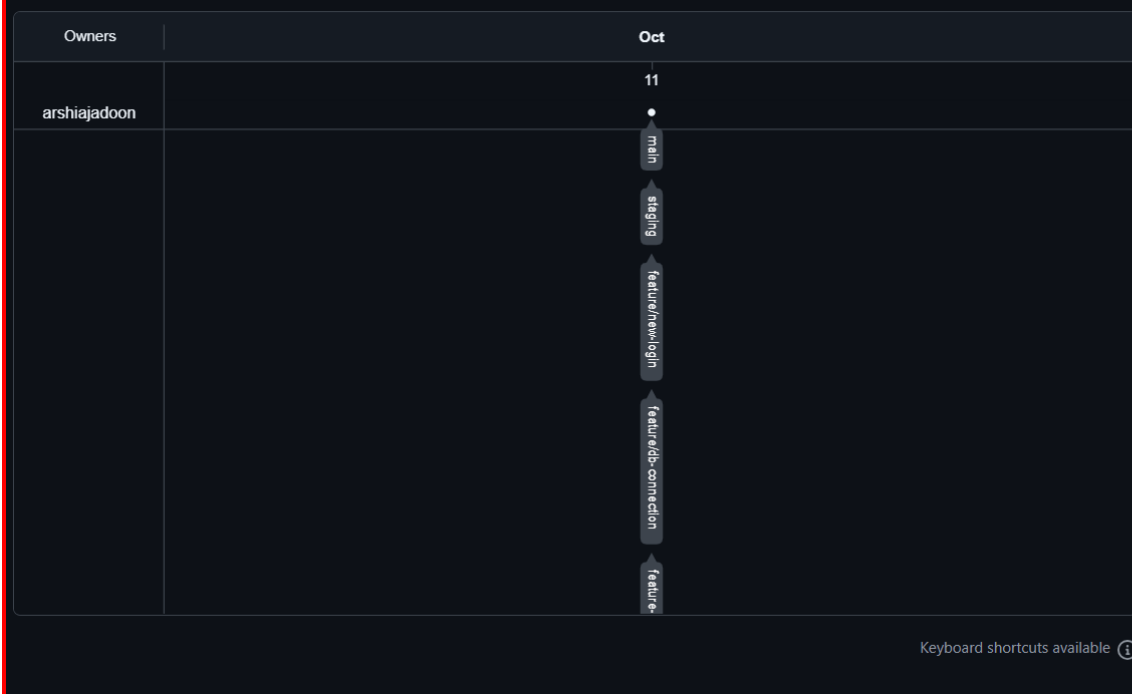
```

Branch strategy.png



Branch merges.png

Timeline of the most recent commits to this repository and its network ordered by most recently pushed to.



Bonus task : simulated team collaboraton

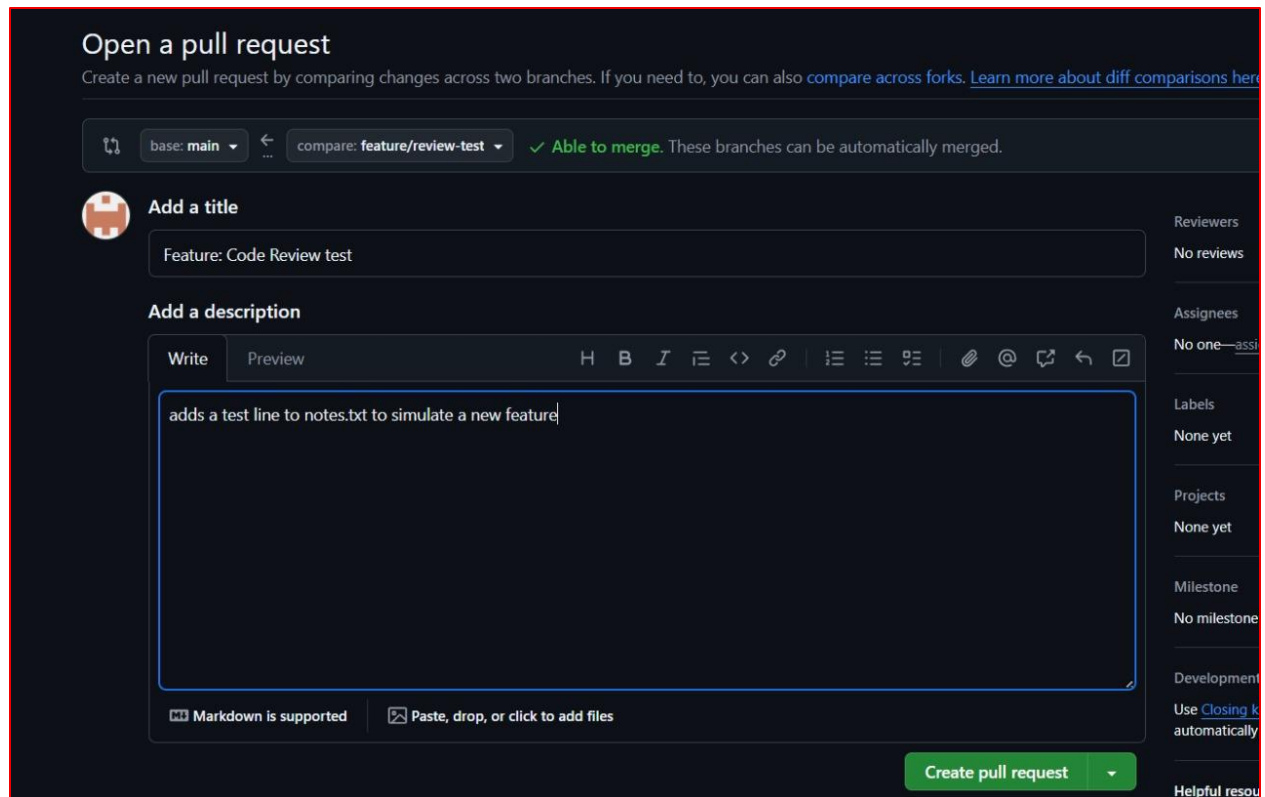
Colab_commit.png

```
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)
```

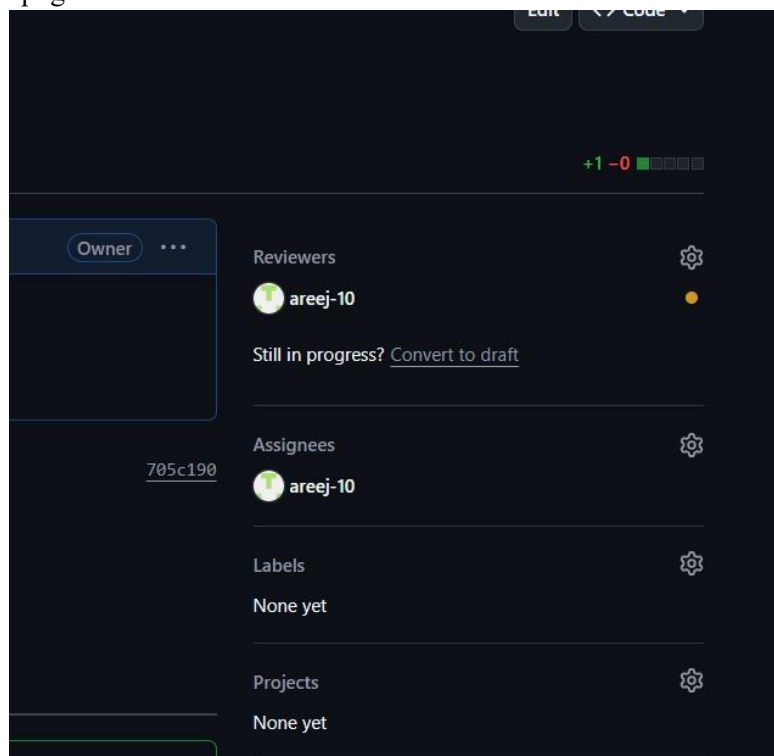
Collab_merge.png

Task 12

Pr_create_details.png

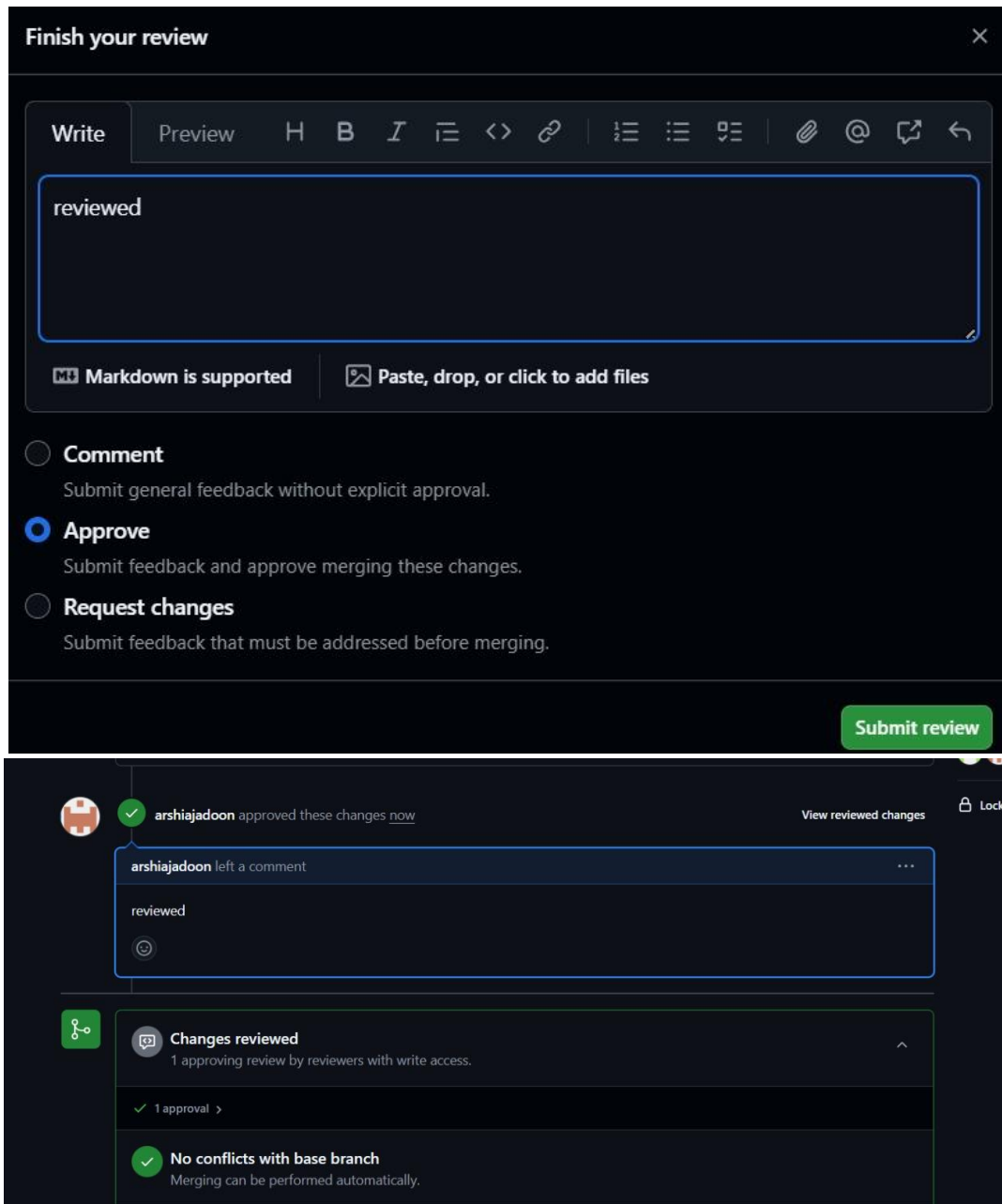


Pr assigned_reviewr.png



Reviewer Actions (capture screenshots for each):

Pr_approved.png Pr_request_changes.png



Pr request changes.png

Finish your review

Write

Preview

H

B

I

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🔗

@

🔗

↩

inline comment

Markdown is supported

Paste, drop, or click to add files

☐ Comment

Submit general feedback without explicit approval.

☐ Approve

Submit feedback and approve merging these changes.

☒ Request changes

Submit feedback that must be addressed before merging.

Submit review

Changes reviewed

1 change requested by reviewers with write access.

1 requested change >

✓

No conflicts with base branch

Merging can be performed automatically.

Merge pull request

You can also merge this with the command line. [View command line instructions.](#)

Pr_rejected.png

Closed

Feature: Code Review Test #1

areej-10 wants to merge 2 commits into master from feature/review-test

Reopen pull request

Comment

Open

Feature: Code Review Test #1

areej-10 wants to merge 2 commits into master from feature/review-test

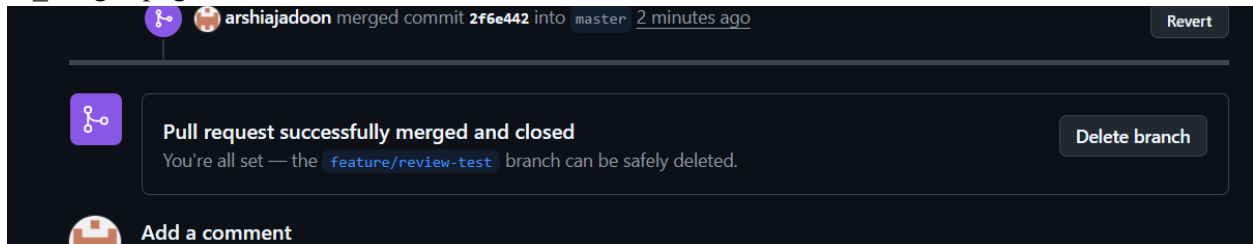
Author Actions:

Pr_updated_with_commits.png

Merge the PR:

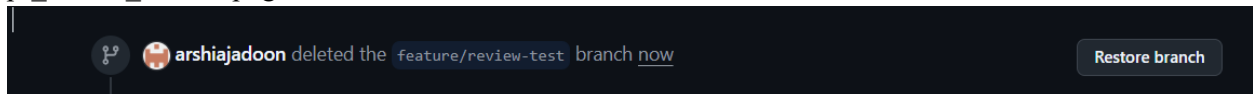
Pr_merge_confirm.png.

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
```