

# SWT11022: Practical for Fundamentals of Programming

Department of ICT

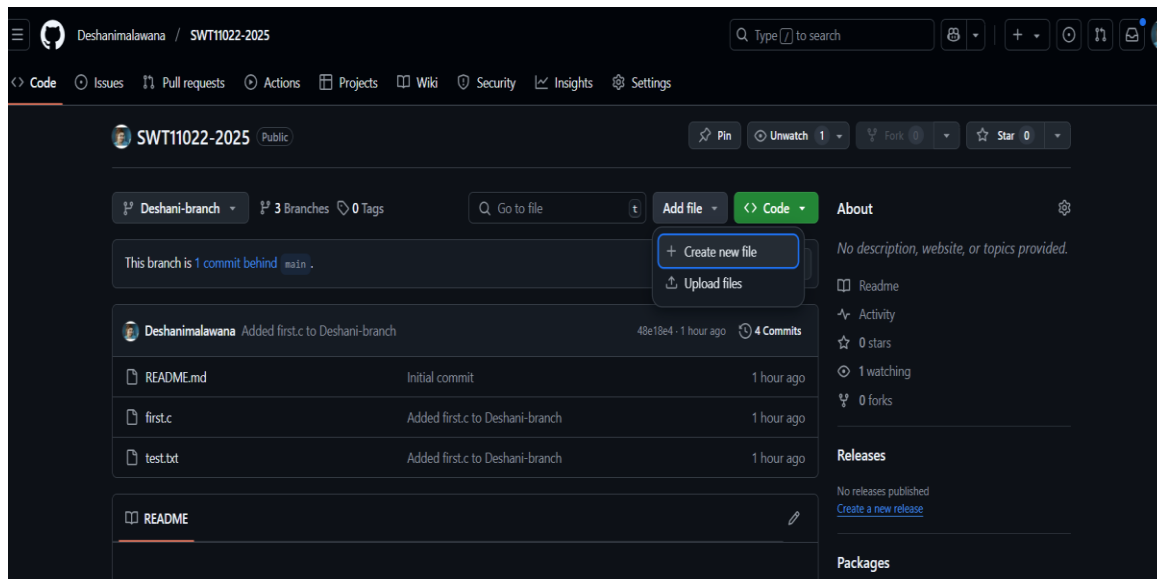
Faculty of Technology

South Eastern University of Sri Lanka

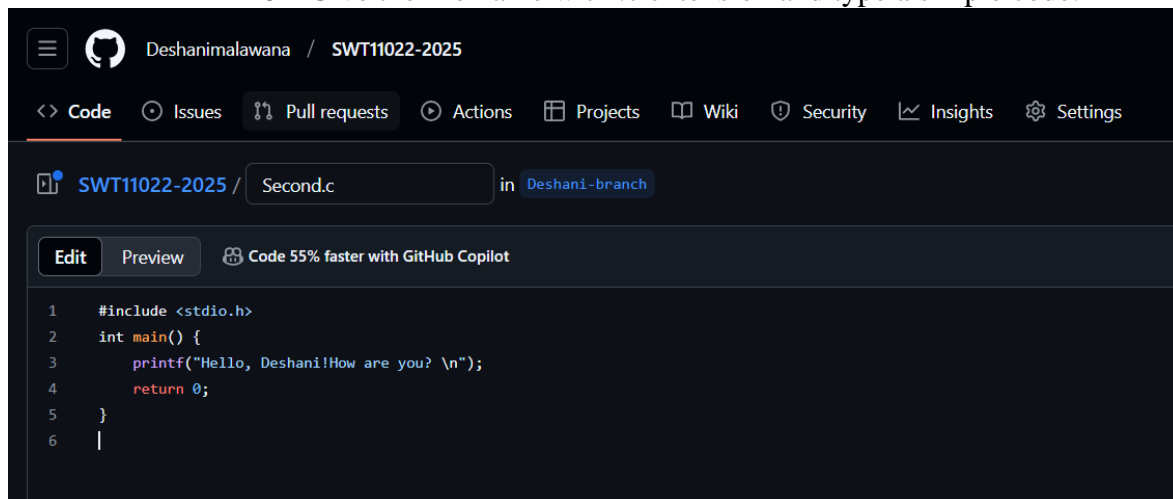
Academic Year: 2022/2023

## 1. Repository Initialization:

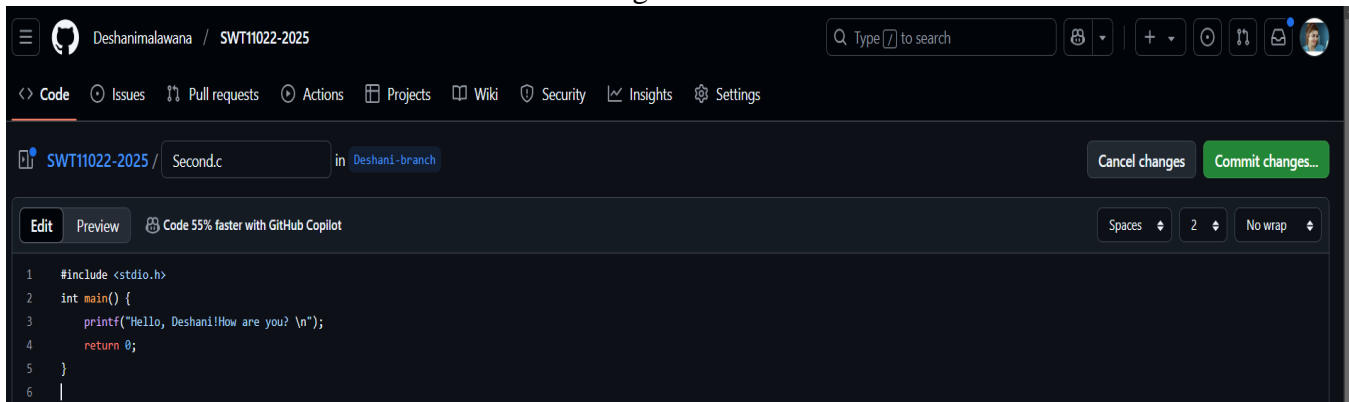
- After creating the repository, provide a simple code file
  - Click on Add file → + Create new file.



- Give the file name with .c extension and type a simple code.



- Click on Commit changes



- Click on Create new branch and give name for branch.

**Propose changes** ✕

**Commit message**

Create Second.c

**Extended description**

Add an optional extended description...

☐ Commit directly to the Deshani1-branch branch

☒ Create a **new branch** for this commit and start a pull request [Learn more about pull requests](#)

Cancel Propose changes

## ○ Click on Create Pull Request

Open a pull request

The change you just made was written to a new branch named `Deshani1`. Create a pull request below to propose these changes. [Learn more about diff comparisons here.](#)

base: Deshani-branch ← compare: Deshani1 ✓ Able to merge. These branches can be automatically merged.

**Add a title**

Create Second.c

**Add a description**

Write Preview H B I E < > P L I E W E @ M ↶ ↷

Add your description here...

Markdown is supported Paste, drop, or click to add files

**Reviewers** No reviews

**Assignees** No one—assign yourself

**Labels** None yet

**Projects** None yet

**Milestone** No milestone

**Development** Use [Closing keywords](#) in the description to automatically close issues

[Helpful resources](#)

[Create pull request](#)

## ○ Merge Pull request

Create Second.c #2

[Open](#) Deshanimalawana wants to merge 1 commit into Deshani-branch from Deshani1

Conversation 0 Commits 1 Checks 0 Files changed 1 +5 -0

**Deshanimalawana** commented now [Owner](#) ...

No description provided.

**Create Second.c** [Verified](#) 1c07d34

**Require approval from specific reviewers before merging** [Rulesets](#) ensure specific people approve pull requests before they're merged. [Add rule](#)

**Continuous integration has not been set up** [GitHub Actions](#) and [several other apps](#) can be used to automatically catch bugs and enforce style.

**This branch has no conflicts with the base branch** Merging can be performed automatically.

[Merge pull request](#) You can also [open this in GitHub Desktop](#) or view [command line instructions](#).

**Reviewers** No reviews Still in progress? [Convert to draft](#)

**Assignees** No one—assign yourself

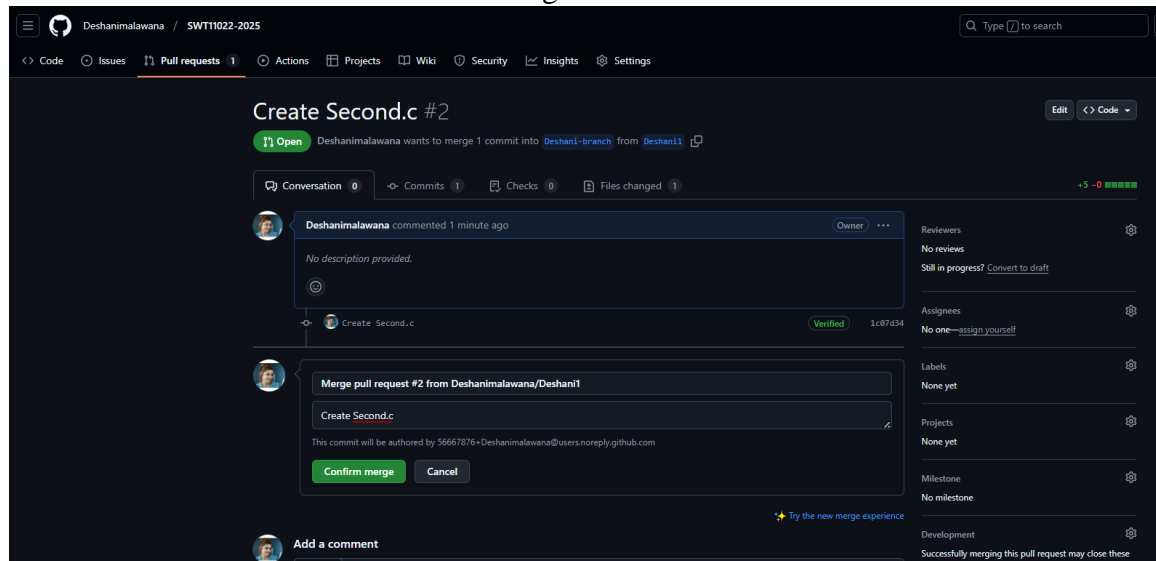
**Labels** None yet

**Projects** None yet

**Milestone** No milestone

**Development** Successfully merging this pull request may close these issues

## ○ Click Confirm merge

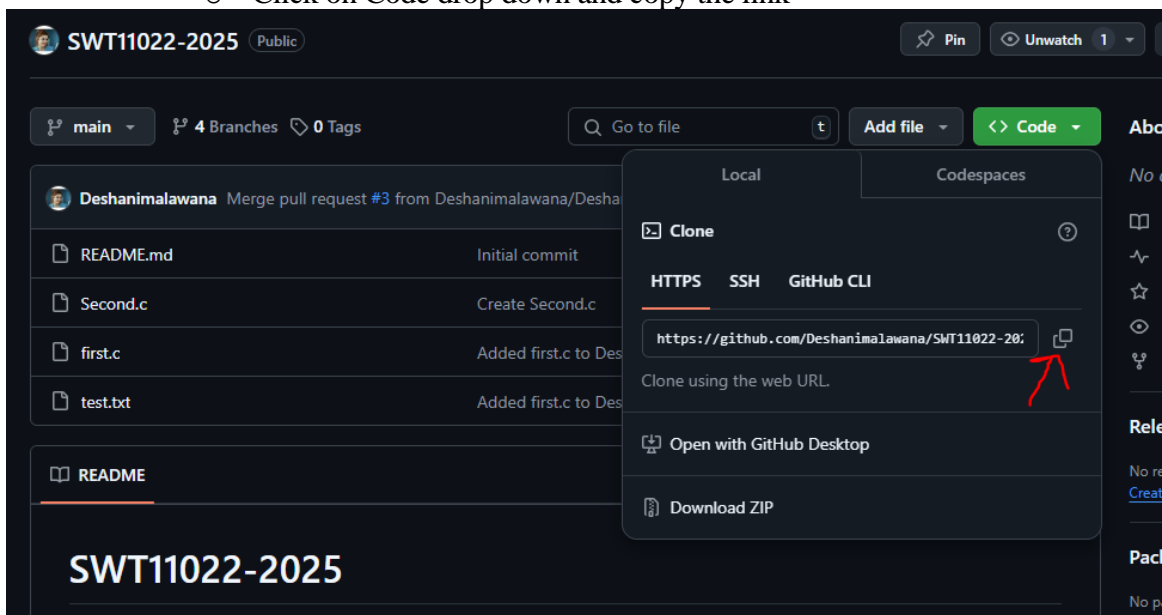


## 2. Cloning the Repository:

- Clone the repository to the local machine. Use the following command.

**git clone <repository-url>**

## ○ Click on Code drop down and copy the link



- Create a new folder called GithubPractice and open the cmd from it. Then run as below.

```

C:\Windows\System32\cmd.exe
Microsoft Windows [Version 10.0.19045.5440]
(c) Microsoft Corporation. All rights reserved.

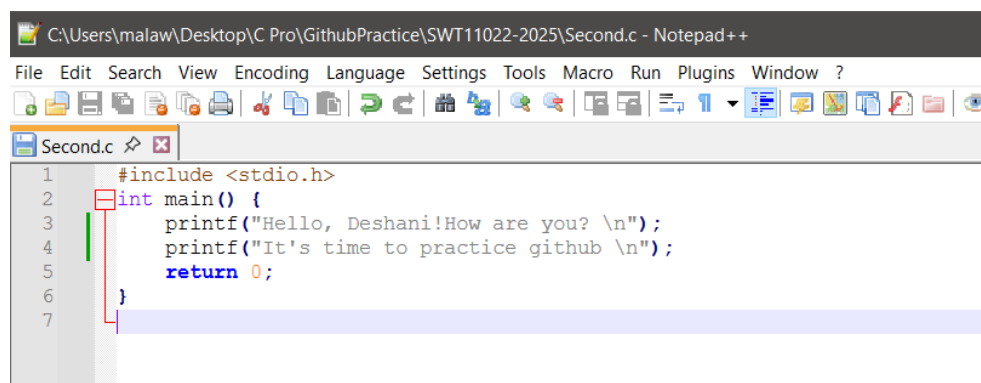
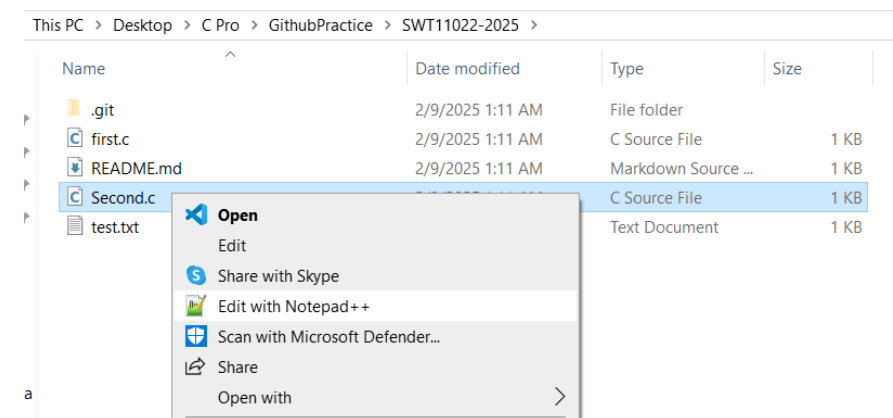
C:\Users\malaw\Desktop\C Pro\GithubPractice>git clone https://github.com/Deshanimalawana/SWT11022-2025.git
Cloning into 'SWT11022-2025'...
remote: Enumerating objects: 19, done.
remote: Counting objects: 100% (19/19), done.
remote: Compressing objects: 100% (14/14), done.
remote: Total 19 (delta 2), reused 7 (delta 1), pack-reused 0 (from 0)
Receiving objects: 100% (19/19), 6.13 KiB | 1.23 MiB/s, done.
Resolving deltas: 100% (2/2), done.

C:\Users\malaw\Desktop\C Pro\GithubPractice>

```

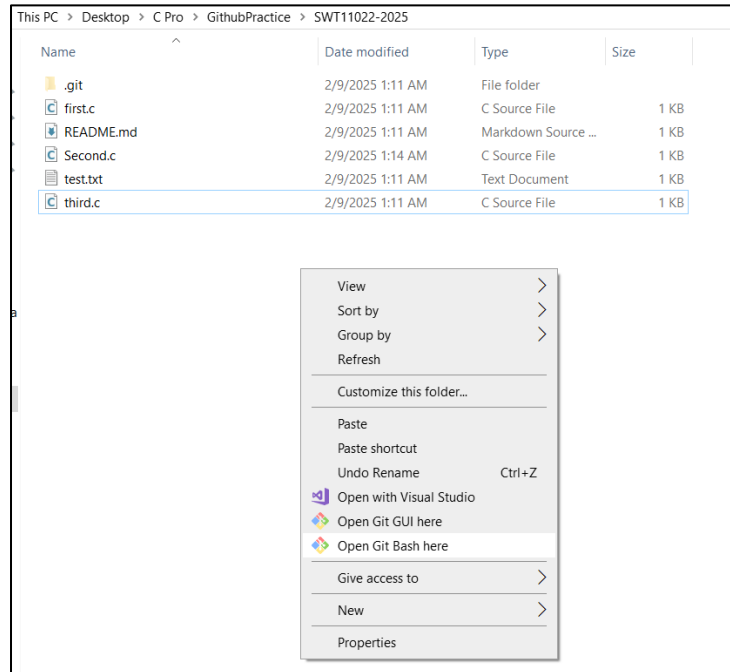
### 3. Making Changes:

- Make changes to the code file. You can add new lines, edit existing ones, or even create a new file.
  - Open the cloned file and edit it with new code lines.



#### 4. Adding and Committing Changes:

- Open git bash inside the cloned folder



- Check Git Configuration. If they are not set, configure them.

```

MINGW64/c:/Users/malaw/Desktop/C Pro/GithubPractice/SWT11022-2025
malaw@DESHANI MINGW64 ~/Desktop/C Pro/GithubPractice/SWT11022-2025 (main)
$ git config --global --list
gui.recentrepo=C:/Users/malaw/Desktop/NewFolder

malaw@DESHANI MINGW64 ~/Desktop/C Pro/GithubPractice/SWT11022-2025 (main)
$ git config --global user.name "Deshanimalawana"

malaw@DESHANI MINGW64 ~/Desktop/C Pro/GithubPractice/SWT11022-2025 (main)
$ git config --global user.email "malawanadeshaniseus198@gmail.com"

malaw@DESHANI MINGW64 ~/Desktop/C Pro/GithubPractice/SWT11022-2025 (main)
$ git config --global --list
gui.recentrepo=C:/Users/malaw/Desktop/NewFolder
user.name=Deshanimalawana
user.email=malawanadeshaniseus198@gmail.com

malaw@DESHANI MINGW64 ~/Desktop/C Pro/GithubPractice/SWT11022-2025 (main)
$ |

```

- If you need to remove existing configurations.

```

malaw@DESHANI MINGW64 ~
$ git config --global --unset user.name

malaw@DESHANI MINGW64 ~
$ git config --global --unset user.email

malaw@DESHANI MINGW64 ~
$ |

```

- Then do as below way

```

MINGW64~/c/Users/malaw/Desktop/C Pro/GithubPractice/SWT11022-2025
malaw@DESHANI MINGW64 ~/Desktop/C Pro/GithubPractice/SWT11022-2025 (main)
$ git branch
* main

malaw@DESHANI MINGW64 ~/Desktop/C Pro/GithubPractice/SWT11022-2025 (main)
$ git init
Reinitialized existing Git repository in C:/Users/malaw/Desktop/C Pro/GithubPractice/SWT11022-2025/.git/

malaw@DESHANI MINGW64 ~/Desktop/C Pro/GithubPractice/SWT11022-2025 (main)
$ git add .

malaw@DESHANI MINGW64 ~/Desktop/C Pro/GithubPractice/SWT11022-2025 (main)
$ git commit -m "Added files to DeshaniNew"
[main 1ad126d] Added files to DeshaniNew
 2 files changed, 2 insertions(+)
 create mode 100644 third.c

malaw@DESHANI MINGW64 ~/Desktop/C Pro/GithubPractice/SWT11022-2025 (main)
$ git remote -v
origin https://github.com/Deshanimalawana/SWT11022-2025.git (fetch)
origin https://github.com/Deshanimalawana/SWT11022-2025.git (push)

```

## 5. Pushing Changes to GitHub:

- To push their committed changes to the GitHub repository. Use the following command:

**git push origin master**

```

MINGW64~/c/Users/malaw/Desktop/C Pro/GithubPractice/SWT11022-2025
malaw@DESHANI MINGW64 ~/Desktop/C Pro/GithubPractice/SWT11022-2025 (main)
$ git checkout -b DeshaniNew
Switched to a new branch 'DeshaniNew'

malaw@DESHANI MINGW64 ~/Desktop/C Pro/GithubPractice/SWT11022-2025 (DeshaniNew)
$ git push -u origin DeshaniNew
Enumerating objects: 6, done.
Counting objects: 100% (6/6), done.
Delta compression using up to 4 threads
Compressing objects: 100% (3/3), done.
Writing objects: 100% (4/4), 459 bytes | 459.00 KiB/s, done.
Total 4 (delta 1), reused 0 (delta 0), pack-reused 0 (from 0)
remote: Resolving deltas: 100% (1/1), completed with 1 local object.
remote:
remote: Create a pull request for 'DeshaniNew' on GitHub by visiting:
remote:   https://github.com/Deshanimalawana/SWT11022-2025/pull/new/DeshaniNew
remote:
remote:
To https://github.com/Deshanimalawana/SWT11022-2025.git
 * [new branch]      DeshaniNew -> DeshaniNew
branch 'DeshaniNew' set up to track 'origin/DeshaniNew'.

malaw@DESHANI MINGW64 ~/Desktop/C Pro/GithubPractice/SWT11022-2025 (DeshaniNew)

```

## 6. Viewing Commit History:

- View the commit history. You can use:

**git log**



```

MINGW64:/c/Users/malaw/Desktop/C Pro/GithubPractice/SWT11022-2025
malaw@DESHANI MINGW64 ~/Desktop/C Pro/GithubPractice/SWT11022-2025 (DeshaniNew)
$ git log
commit 1ad126db65813c55a1f87004cc4420a84aa55bca (HEAD -> DeshaniNew, origin/DeshaniNew, main)
Author: Deshanimalawana <malawanadeshaniseus198@gmail.com>
Date: Sun Feb 9 01:27:14 2025 +0530

    Added files to DeshaniNew

commit 9e2acf2de3bc518b522c87eaae697a2f2531e80b (origin/main, origin/HEAD)
Merge: e0c6ea5 cef8381
Author: Deshani Malawana <56667876+Deshanimalawana@users.noreply.github.com>
Date: Sun Feb 9 01:06:45 2025 +0530

    Merge pull request #3 from Deshanimalawana/Deshani-branch

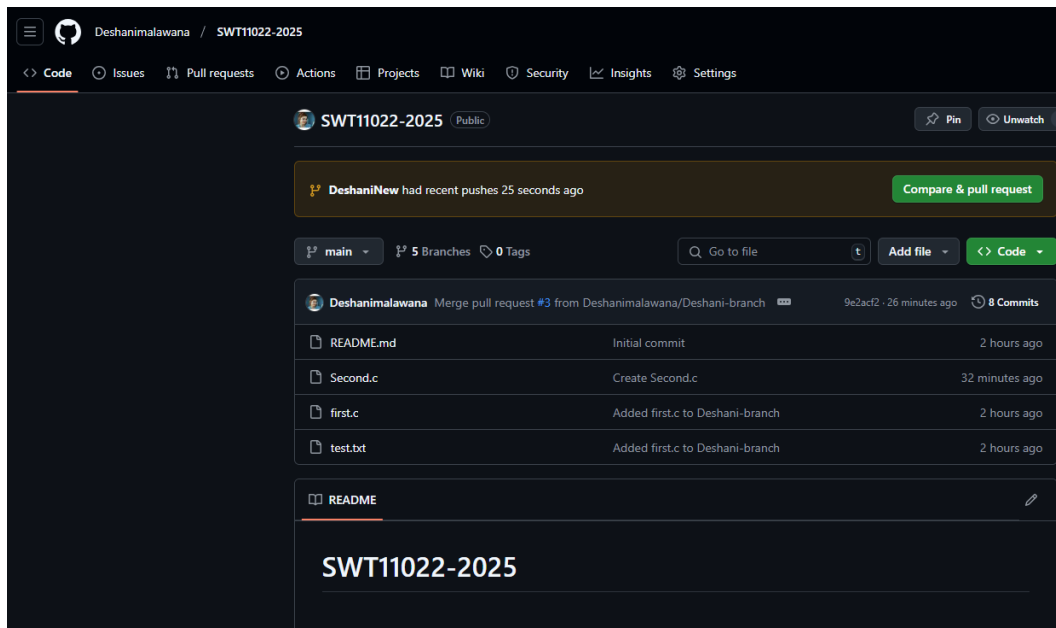
    Deshani branch

commit cef83819db06adfdb40f36946f5b1d1351a75255 (origin/Deshani-branch)
Merge: 48e18e4 1c07d34
Author: Deshani Malawana <56667876+Deshanimalawana@users.noreply.github.com>
Date: Sun Feb 9 01:06:23 2025 +0530

    Merge pull request #2 from Deshanimalawana/Deshani1
  
```

## 7. Creating a Pull Request:

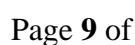
- You should initiate a pull request to merge the changes into the main branch.

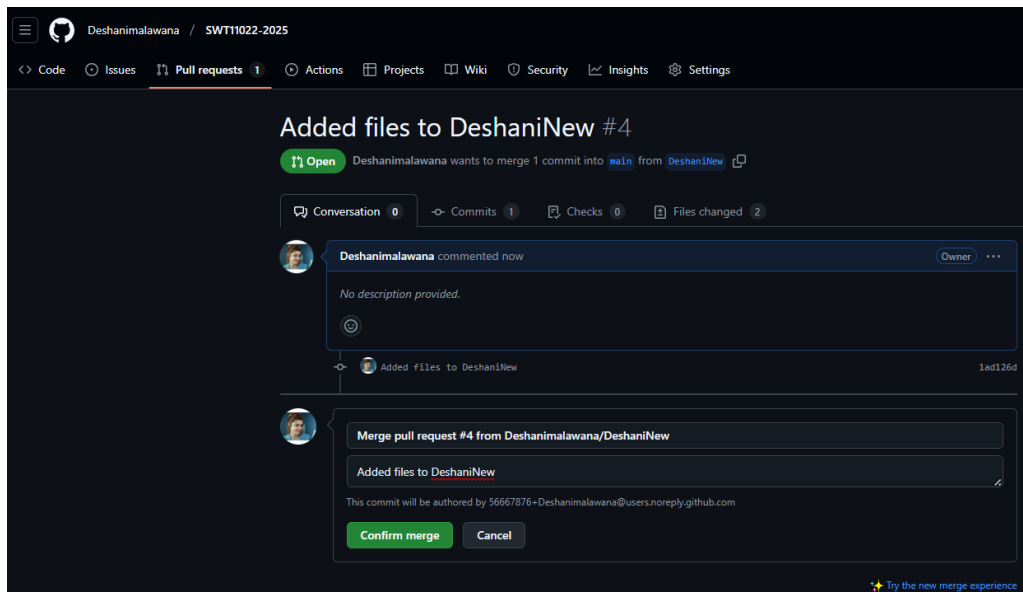




- Collaborative nature of GitHub. We can add multiple people who can work on the same project and contribute by creating branches, making changes, and merging them through pull requests.

- To merge their pull request to incorporate the changes into the main branch.



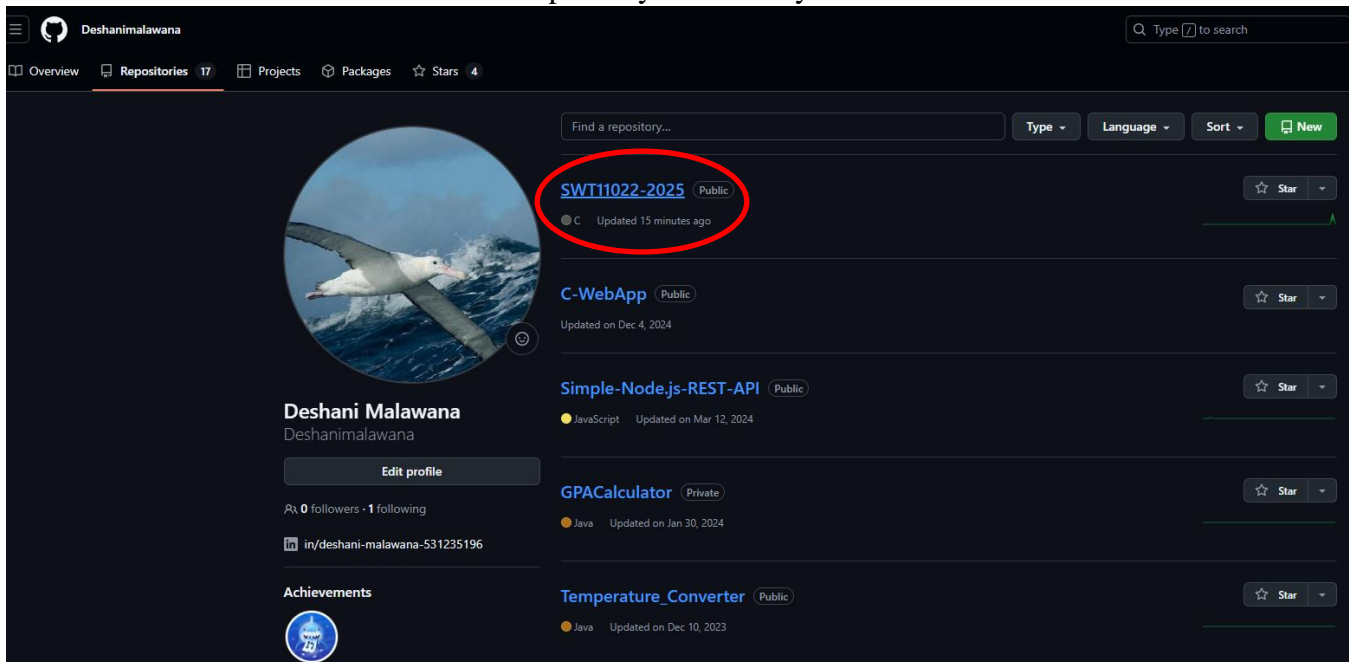


## 10. Collaboration and Forking:

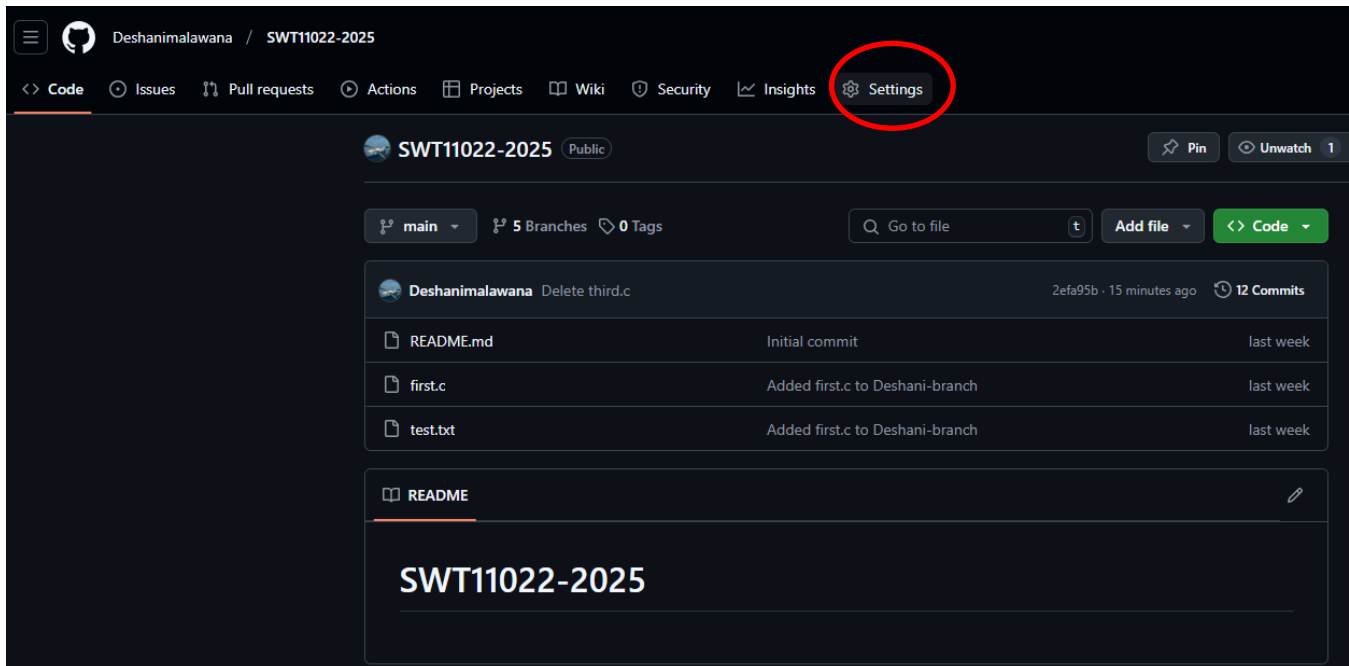
- Concept of forking and showing how we can fork repositories to contribute to open-source projects.

## 11. Delete a repository

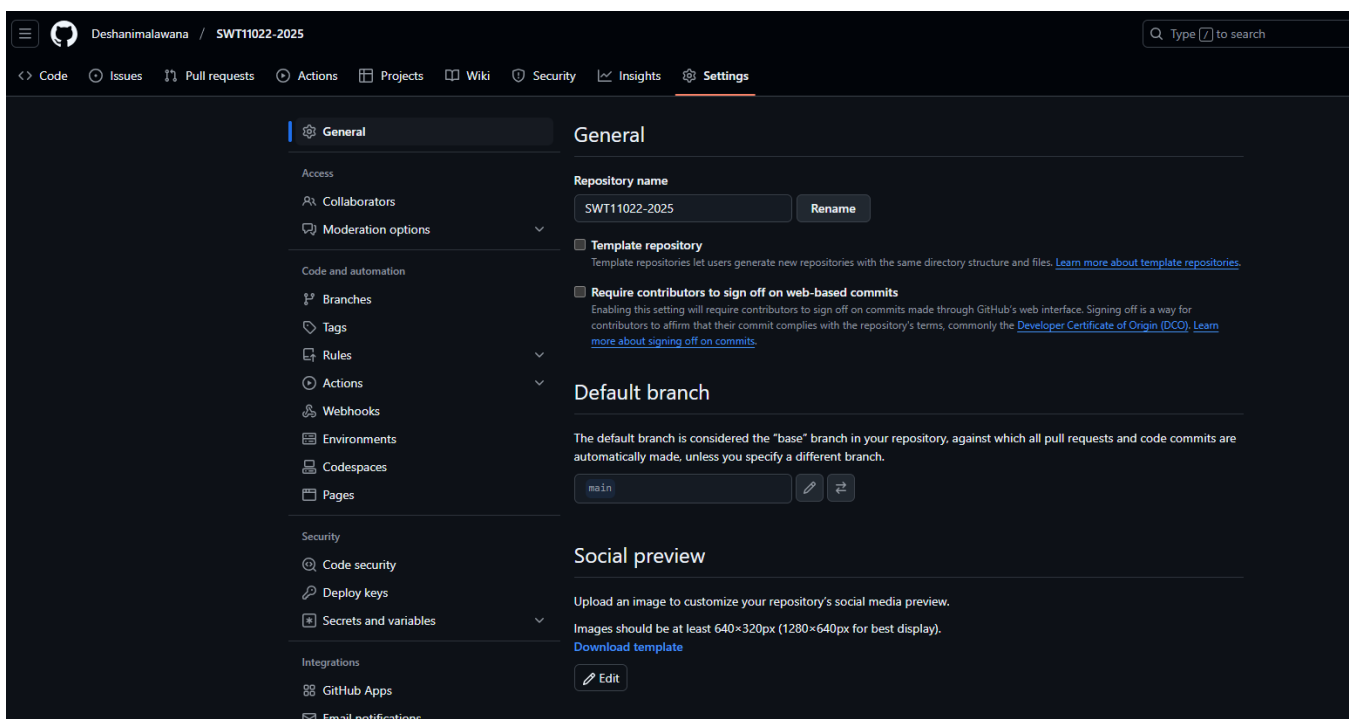
- First need to click on repository name that you want to delete.



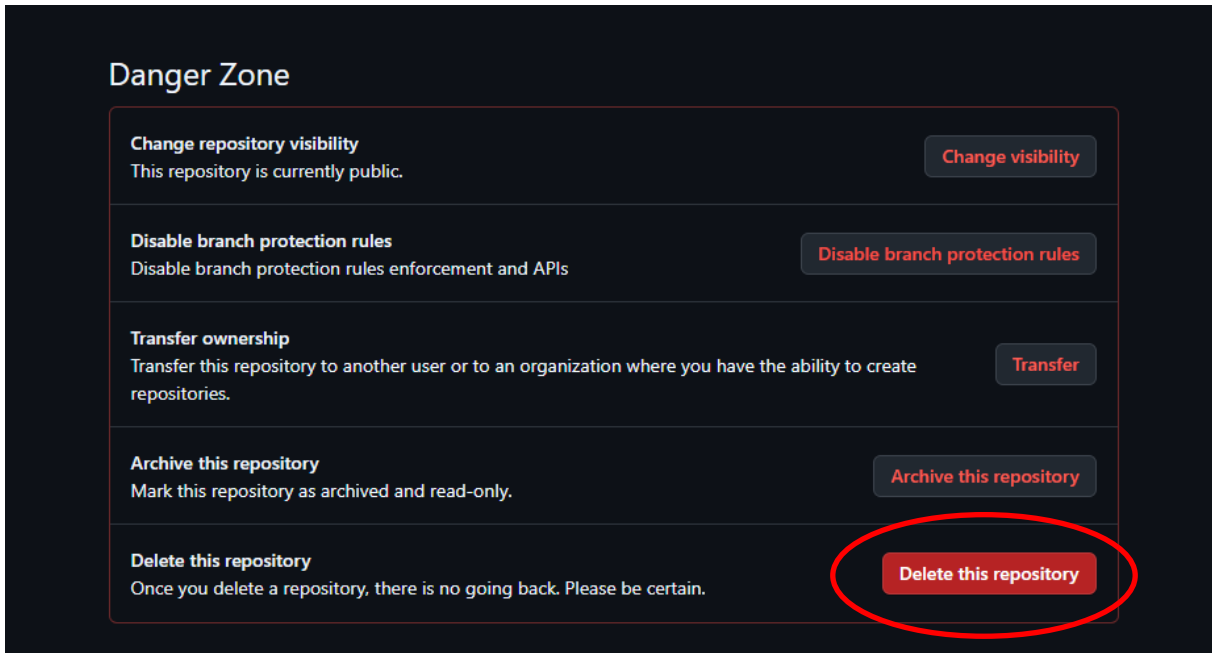
- Go to setting.



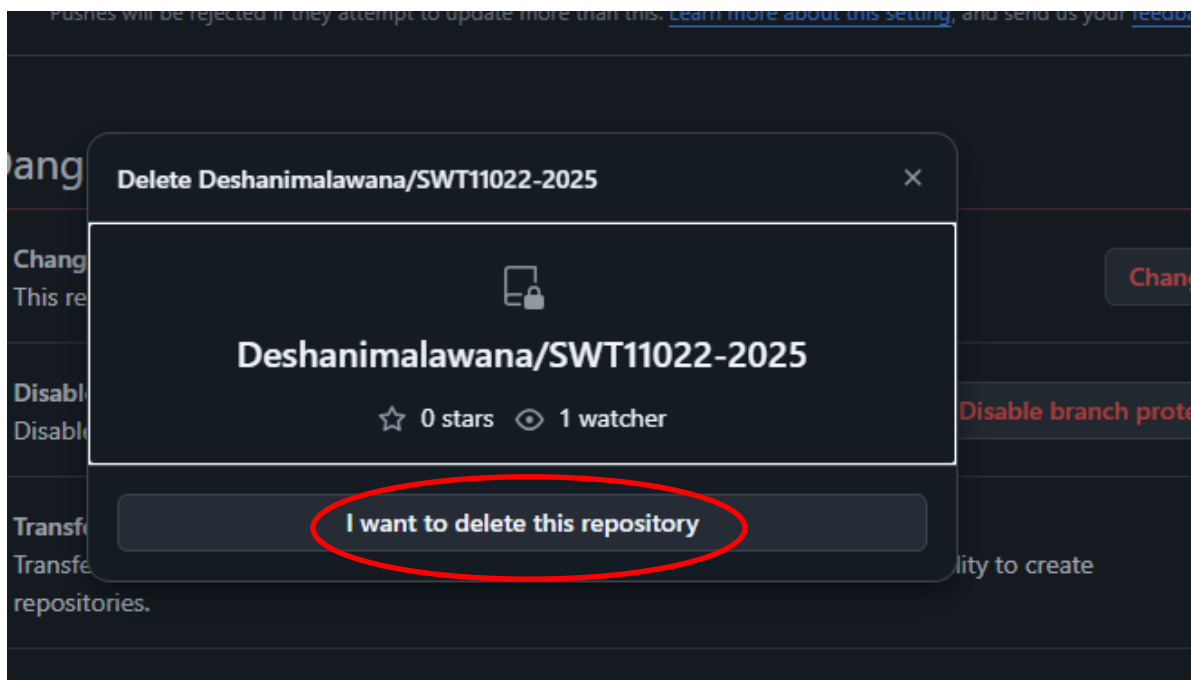
- It will show as below way.



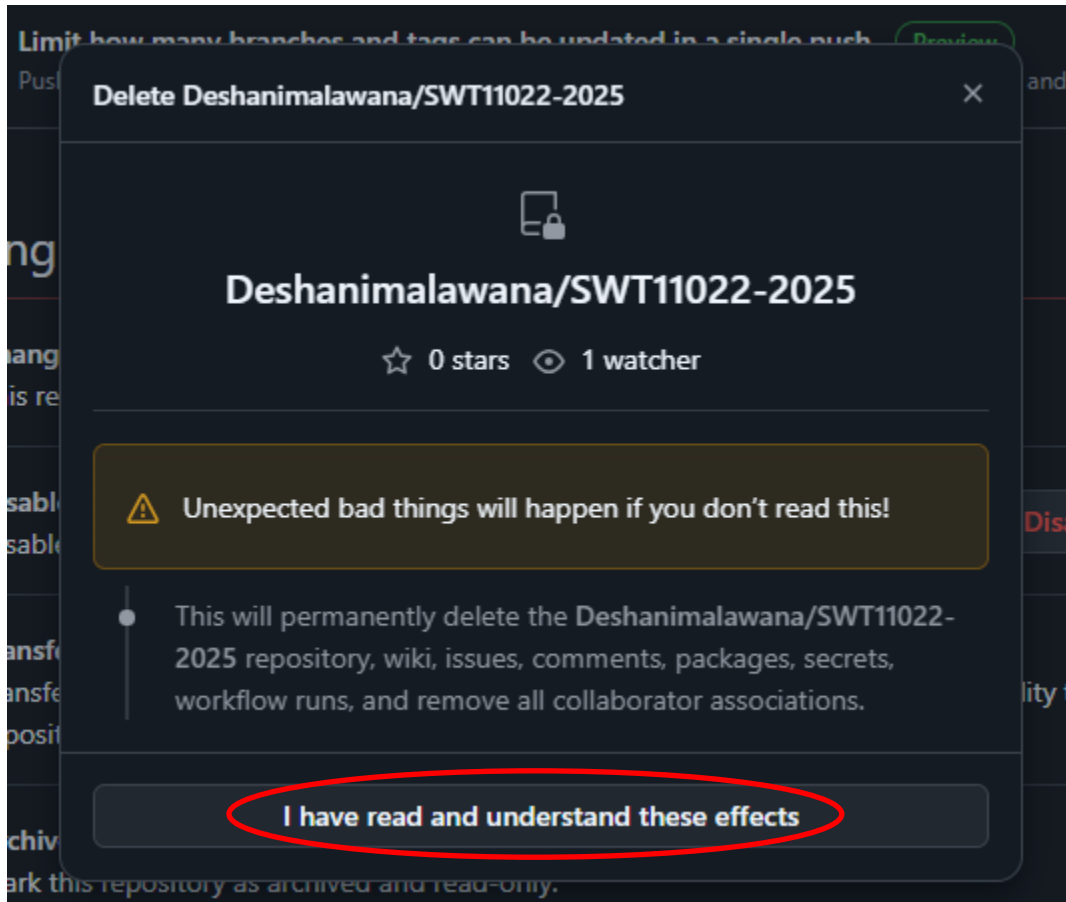
- Scroll down and click on Delete this repository



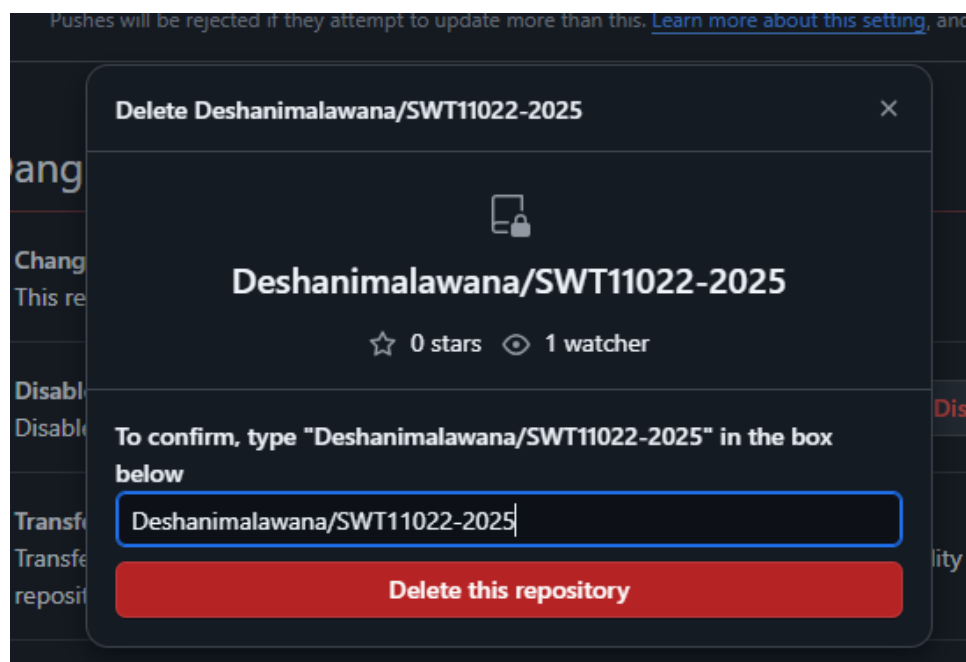
- Then click on I want to delete this repository.



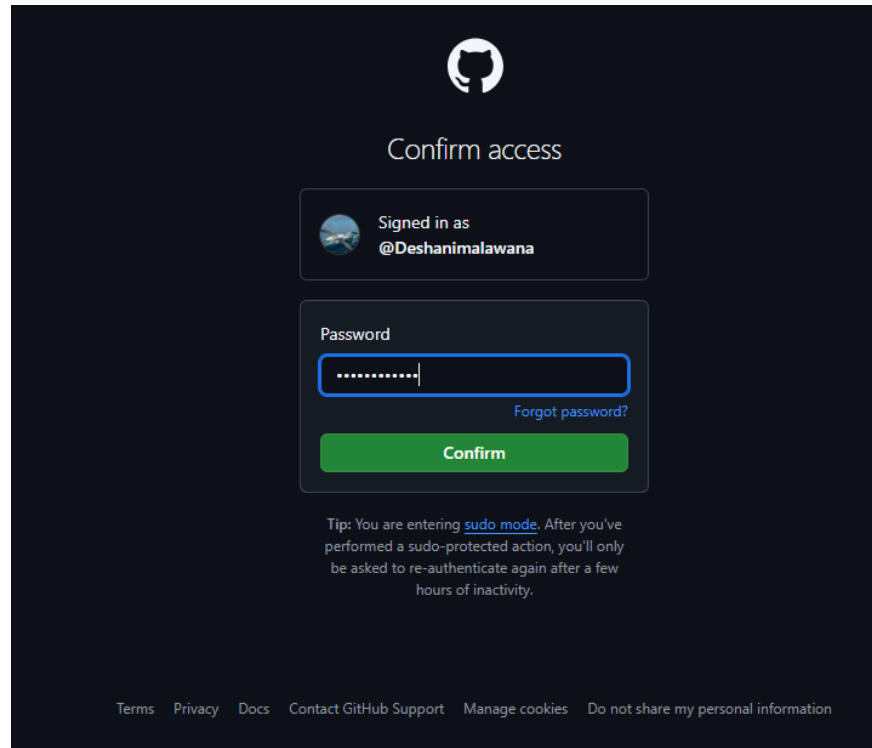
- Then click on I have read and understand these effects.



- Then do according to the window guideline.



- Then type you GitHub password



- Then you will see that deleted repository is no longer available in the list.

