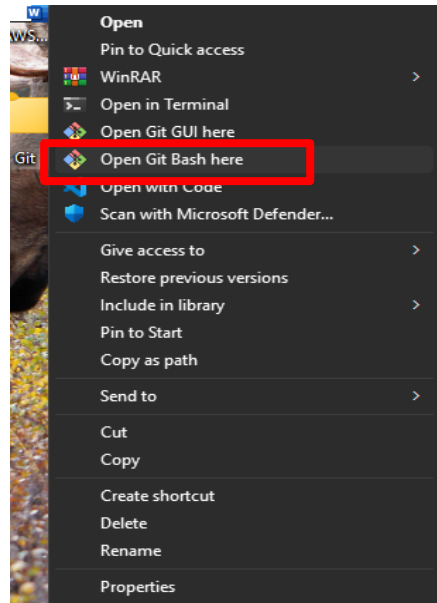
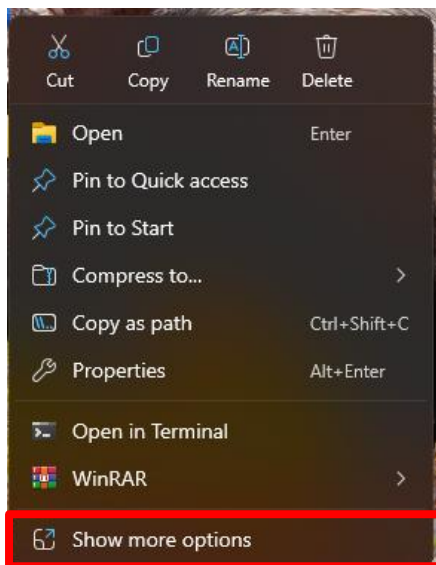


## Assignment No. – 8

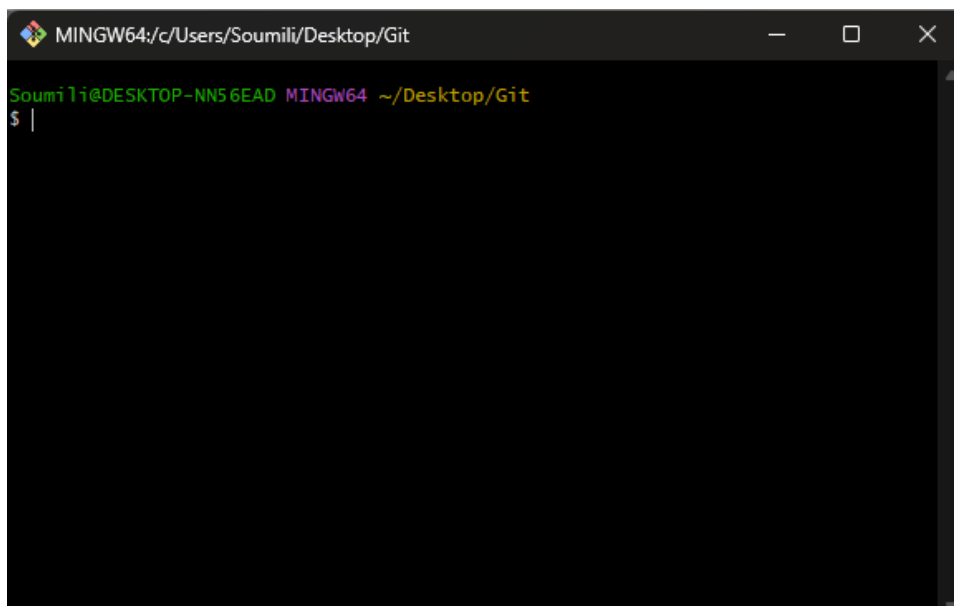
**Problem Statement:** Deploy a project from a local machine to GitHub and vice versa.

### **Procedure:**

1. Install **Git Bash** for Windows Application.
2. Now, **create a folder** anywhere in the computer. Give it a name. Then, right click on it and go to show more options, select “**Open Git Bash here**”.



3. It will open the **Git Bash Terminal**.



4. Now, type the following to **clone** the project required:
  - **git clone** <https://github.com/sudip7407/Repo1.git>

```
MINGW64:/c/Users/Soumili/Desktop/Git
Soumili@DESKTOP-NN56EAD MINGW64 ~/Desktop/Git
$ git clone https://github.com/sudip7407/Repo1.git
Cloning into 'Repo1'...
remote: Enumerating objects: 10, done.
remote: Counting objects: 100% (10/10), done.
remote: Compressing objects: 100% (9/9), done.
remote: Total 10 (delta 1), reused 0 (delta 0), pack-reused 0 (from 0)
Receiving objects: 100% (10/10), 49.46 KiB | 617.00 KiB/s, done.
Resolving deltas: 100% (1/1), done.

Soumili@DESKTOP-NN56EAD MINGW64 ~/Desktop/Git
$
```

- **ls**

```
MINGW64:/c/Users/Soumili/Desktop/Git
Soumili@DESKTOP-NN56EAD MINGW64 ~/Desktop/Git
$ git clone https://github.com/sudip7407/Repo1.git
Cloning into 'Repo1'...
remote: Enumerating objects: 10, done.
remote: Counting objects: 100% (10/10), done.
remote: Compressing objects: 100% (9/9), done.
remote: Total 10 (delta 1), reused 0 (delta 0), pack-reused 0 (from 0)
Receiving objects: 100% (10/10), 49.46 KiB | 617.00 KiB/s, done.
Resolving deltas: 100% (1/1), done.

Soumili@DESKTOP-NN56EAD MINGW64 ~/Desktop/Git
$ ls
Repo1/

Soumili@DESKTOP-NN56EAD MINGW64 ~/Desktop/Git
$
```

We see all the files are downloaded from the repository we just cloned. Now, our job is to remove **the .git/** files from all the folders.

- **cd Repo1/**
- **ls -A**

```
Soumili@DESKTOP-NN56EAD MINGW64 ~/Desktop/Git
$ cd Repo1/

Soumili@DESKTOP-NN56EAD MINGW64 ~/Desktop/Git/Repo1 (main)
$ ls -A
.git/ .gitignore 'New Text Document.txt' index.js package-lock.json package.json

Soumili@DESKTOP-NN56EAD MINGW64 ~/Desktop/Git/Repo1 (main)
$
```

- **rm -r .git/**
- **ls -A**

```
Soumiti@DESKTOP-NN56EAD MINGW64 ~/Desktop/Git/Repo1 (main)
$ rm -r .git/
rm: remove write-protected regular file '.git/objects/pack/pack-9679d62eda74046e82e5e6958e542216c3c91d54.idx'? y
rm: remove write-protected regular file '.git/objects/pack/pack-9679d62eda74046e82e5e6958e542216c3c91d54.pack'? y
rm: remove write-protected regular file '.git/objects/pack/pack-9679d62eda74046e82e5e6958e542216c3c91d54.rev'? y

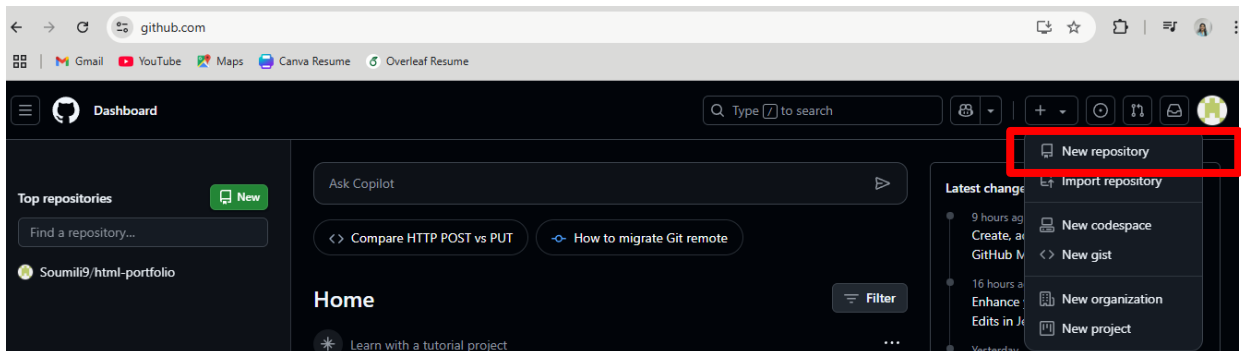
Soumiti@DESKTOP-NN56EAD MINGW64 ~/Desktop/Git/Repo1
$ ls -A
.gitignore 'New Text Document.txt' index.js package-lock.json package.json

Soumiti@DESKTOP-NN56EAD MINGW64 ~/Desktop/Git/Repo1
$ |
```

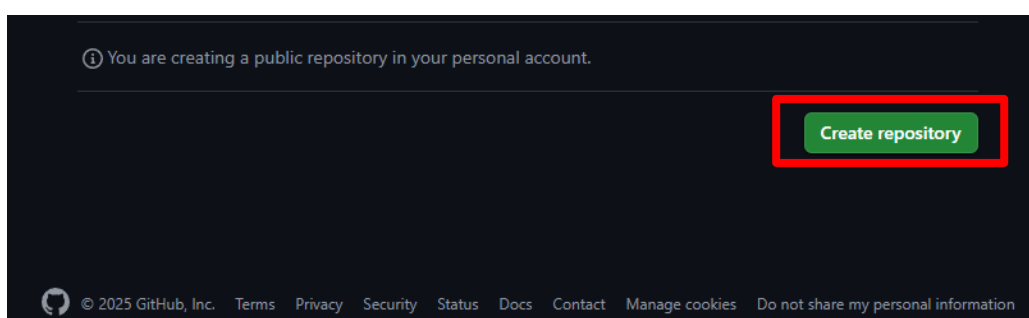
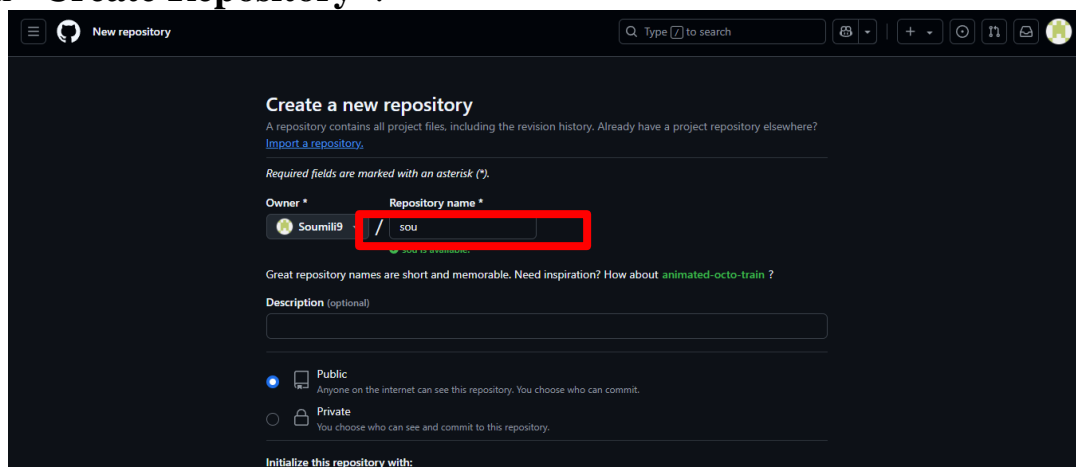
5. Now, go to **GitHub Website** and **Sign In** to the account. After successfully signing in to GitHub, click on the ‘+’ button present on the top right corner of the website.



6. After clicking a menu will appear. Click on “**New Repository**”. This will create a New Repository where we can deploy our project folders and files.



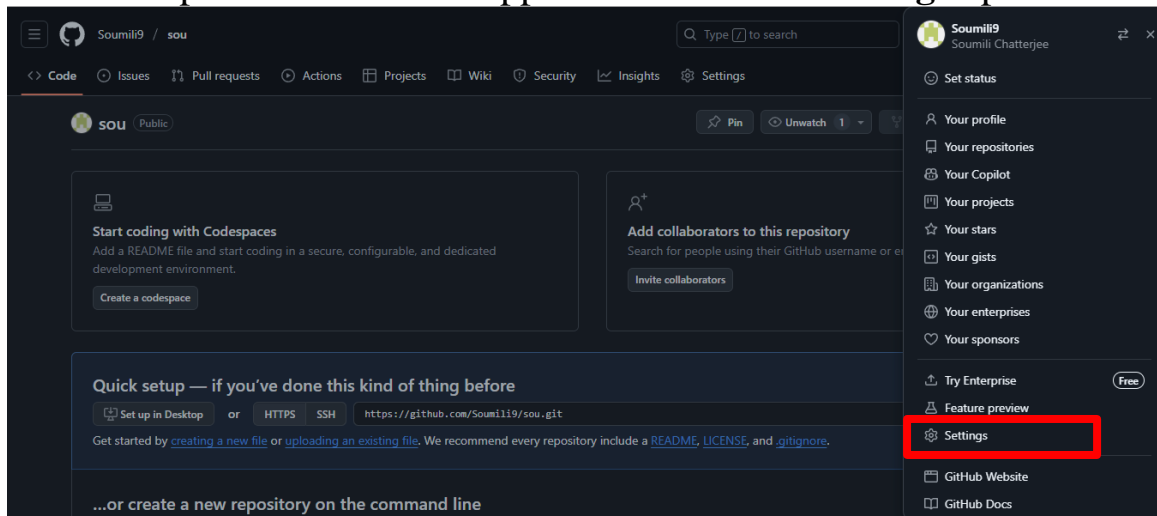
7. Next, Enter the **name** of the Repository then scroll-down and click on “**Create Repository**”.



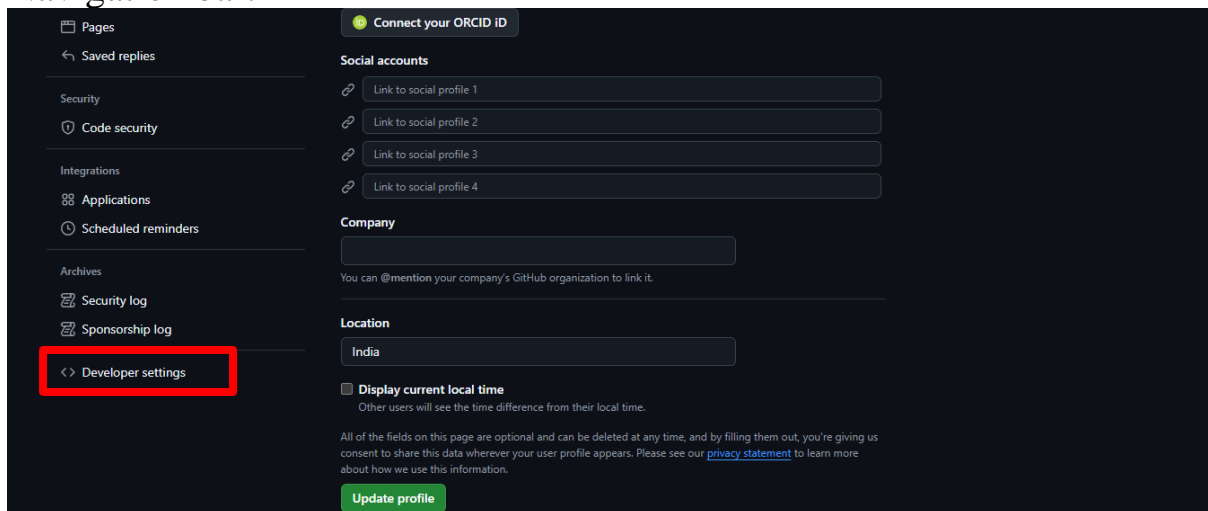
8. It will be redirected to the **Repository** code page. Now, while adding the project to the GitHub repository, we need to provide credentials of the account and sign-in every time, but there is another way, and that is by generating Tokens for the account.

9. So, for **generating token** for an account follow the steps:

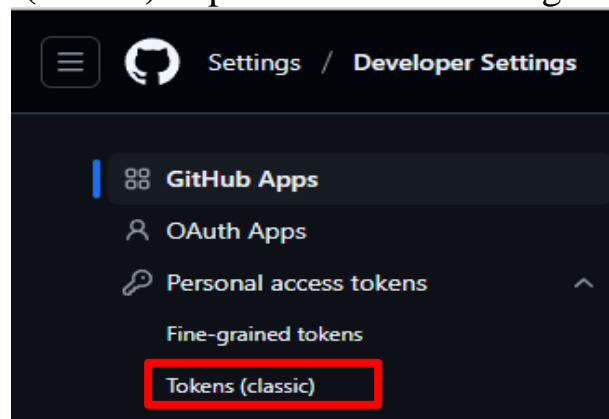
- a. Click on the **profile** at the top right corner of the web page.
- b. A drop-down menu will appear. Click on the **Settings** option.



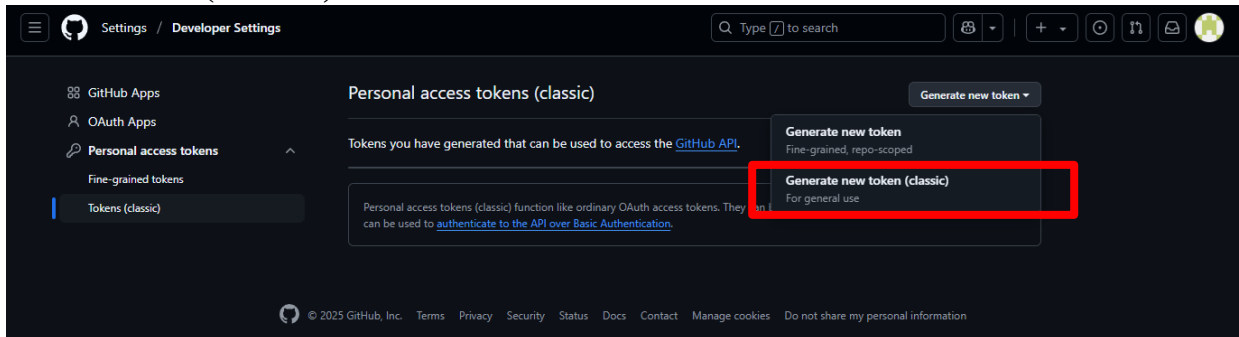
c. Now, scroll down and click on “**Developer Settings**” on the left Navigation bar.



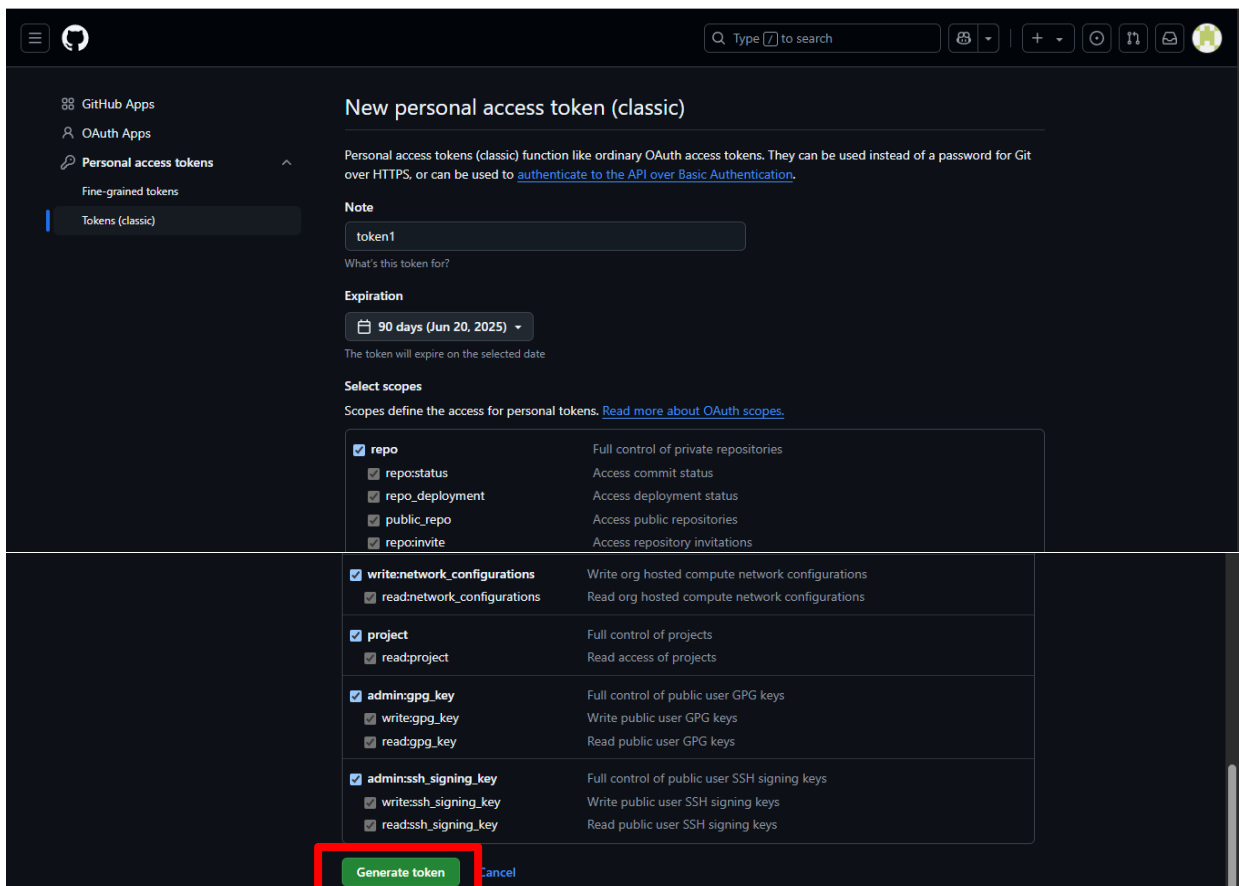
d. Next, click on the down arrow beside **Personal Access Tokens** and click on “**Tokens(classic)**” option in the left Navigation bar.



e. Next, click on “**Generate New Token**” and then click on “**Generate New Token(classic)**”.



f. Enter **Token Name**, select the **expiration time**, check all the **parent boxes** below and then click on “**Generate Token**”.



g. Now, a token will be generated. Copy it and save it in a text file.

10. Click on the icon on the top left corner of the web page. This will redirect to the home page. Now, minimize the browser.

11. Next, open the folder in which we have cloned the project.

12. Click on “**Repo1**” file and then right click, select “**Git bash here option**”. Again, a **Git bash terminal** will open.

13. Type the following commands but, now we will upload this cloned project to our created repository on GitHub:

- **git init**

```
MINGW64:/c/Users/Soumili/Desktop/Git/Repo1

Soumili@DESKTOP-NN56EAD MINGW64 ~/Desktop/Git/Repo1
$ git init
Initialized empty Git repository in C:/Users/Soumili/Desktop/Git/Repo1/.git/

Soumili@DESKTOP-NN56EAD MINGW64 ~/Desktop/Git/Repo1 (master)
$ |
```

- **git config --global user.name “Write GitHub account username here”**
- **git config --global user.email “Write email here”**

```
Soumili@DESKTOP-NN56EAD MINGW64 ~/Desktop/Git/Repo1 (master)
$ git config --global user.name "Soumili9"

Soumili@DESKTOP-NN56EAD MINGW64 ~/Desktop/Git/Repo1 (master)
$ git config --global user.email "csoumili9@gmail.com"

Soumili@DESKTOP-NN56EAD MINGW64 ~/Desktop/Git/Repo1 (master)
$
```

- **git config --global --list**

```
Soumili@DESKTOP-NN56EAD MINGW64 ~/Desktop/Git/Repo1 (master)
$ git config --global --list
user.email="csoumili9@gmail.com"
user.name="Soumili9"

Soumili@DESKTOP-NN56EAD MINGW64 ~/Desktop/Git/Repo1 (master)
$ |
```

- **git add .**
- **git status**

```
Soumili@DESKTOP-NN56EAD MINGW64 ~/Desktop/Git/Repo1 (master)
$ git add .

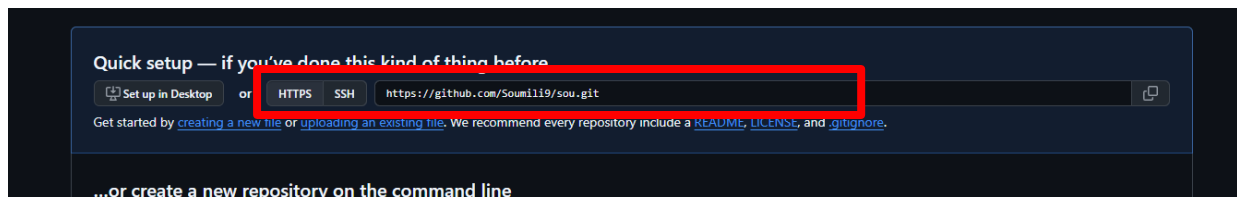
Soumili@DESKTOP-NN56EAD MINGW64 ~/Desktop/Git/Repo1 (master)
$ git status
On branch master

No commits yet

Changes to be committed:
  (use "git rm --cached <file>..." to unstage)
    new file:   .gitignore
    new file:   index.js
    new file:   package-lock.json
    new file:   package.json

Soumili@DESKTOP-NN56EAD MINGW64 ~/Desktop/Git/Repo1 (master)
$ |
```

- **git commit -m “type any message here”**
- **git remote add origin**  
<https://github.com/ownusername/ownrepositoryname.git>  
(The https address is the address of the repository. To get it maximize the browser where the GitHub repository is open and copy the **https address**)



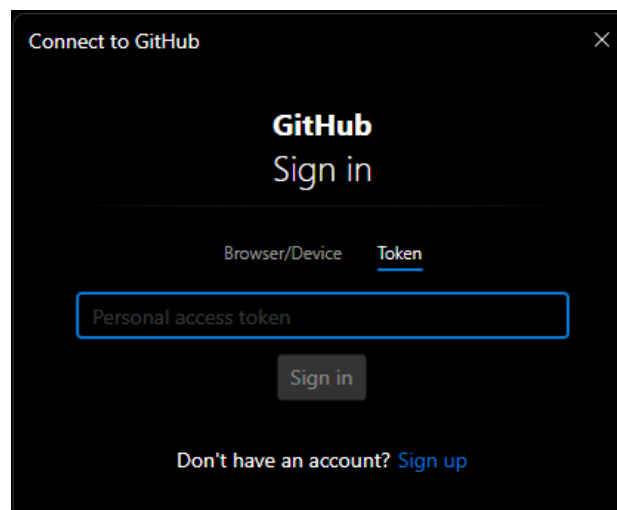
```
Soumili@DESKTOP-NN56EAD MINGW64 ~/Desktop/Git/Repo1 (master)
$ git commit -m "done"
[master (root-commit) b26891e] "done"
4 files changed, 4587 insertions(+)
create mode 100644 .gitignore
create mode 100644 index.js
create mode 100644 package-lock.json
create mode 100644 package.json

Soumili@DESKTOP-NN56EAD MINGW64 ~/Desktop/Git/Repo1 (master)
$ git remote add origin https://github.com/Soumili9/sou.git

Soumili@DESKTOP-NN56EAD MINGW64 ~/Desktop/Git/Repo1 (master)
$
```

- **git push -u origin master**  
(This is the final command. A pop-up window will open named **Connect to GitHub**. We will be using our Generated token for our account to Sign-In to our account. Click on **Token** option beside **Browser/Device**. Paste the token in the placeholder. Then, click on **Sign-In**.)

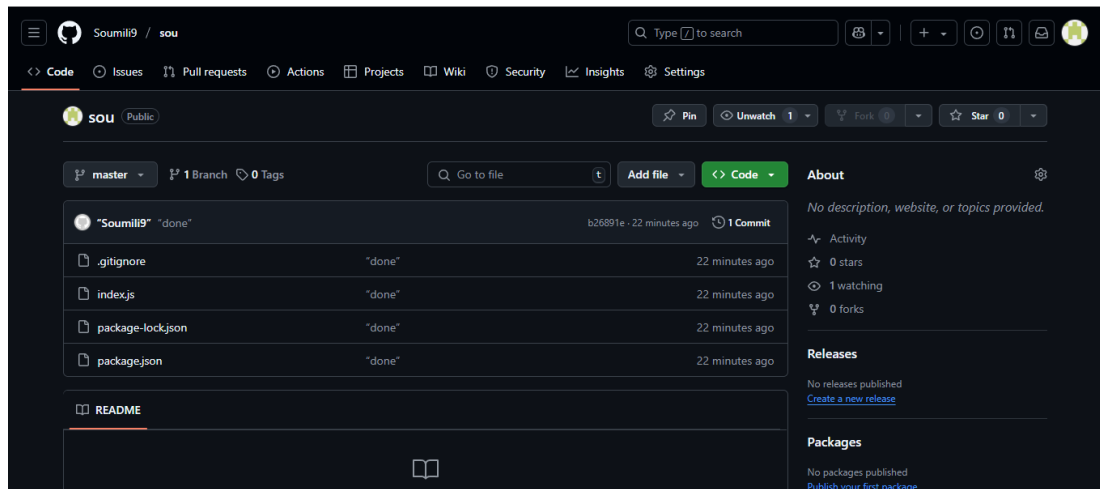
```
Soumili@DESKTOP-NN56EAD MINGW64 ~/Desktop/Git/Repo1 (master)
$ git push -u origin master
```



```
Soumili@DESKTOP-NN56EAD MINGW64 ~/Desktop/Git/Repo1 (master)
$ git push -u origin master
Enumerating objects: 6, done.
Counting objects: 100% (6/6), done.
Delta compression using up to 12 threads
Compressing objects: 100% (6/6), done.
Writing objects: 100% (6/6), 48.09 KiB | 12.02 MiB/s, done.
Total 6 (delta 0), reused 0 (delta 0), pack-reused 0 (from 0)
To https://github.com/Soumili9/sou.git
 * [new branch]      master -> master
branch 'master' set up to track 'origin/master'.

Soumili@DESKTOP-NN56EAD MINGW64 ~/Desktop/Git/Repo1 (master)
$ |
```

14. Now go to your browser where the **GitHub repository** is open. Refresh the page. Now we will see all the files uploaded in your repository.



We have successfully **cloned** and **uploaded** a project to **GitHub** using **Git** and **Git Bash terminal**.



