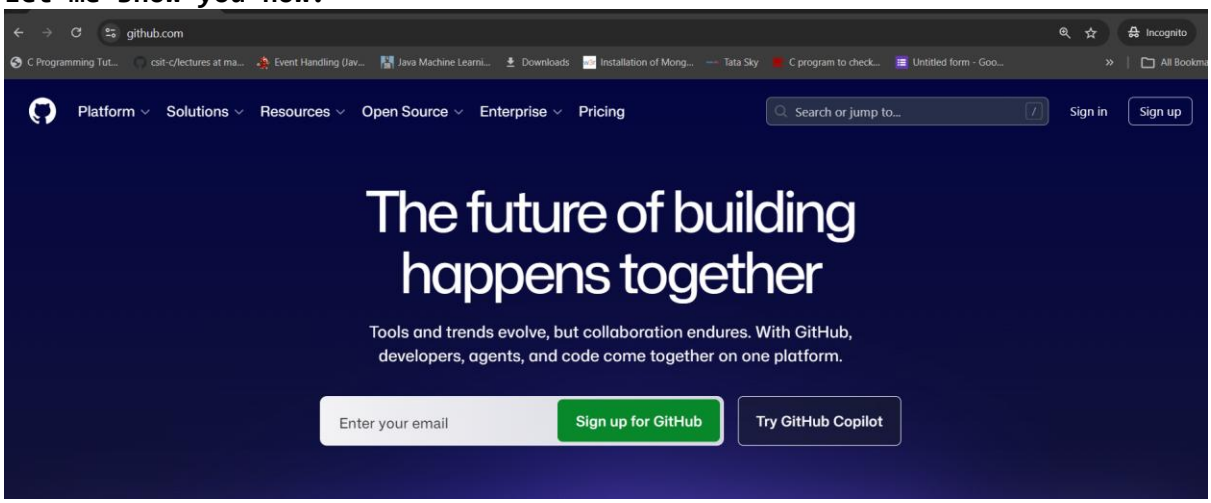
Dear Students
Today lets learn how to work with git.

Step 1: What is Git
Git is a version control subsystem to manage and collaborate the code among multiple developers in a project while developing any application.

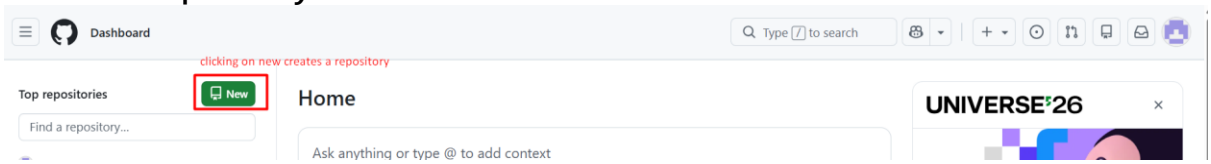
Step 2: How to use?
So to use git students you need to create a github account.
Let me show you now.

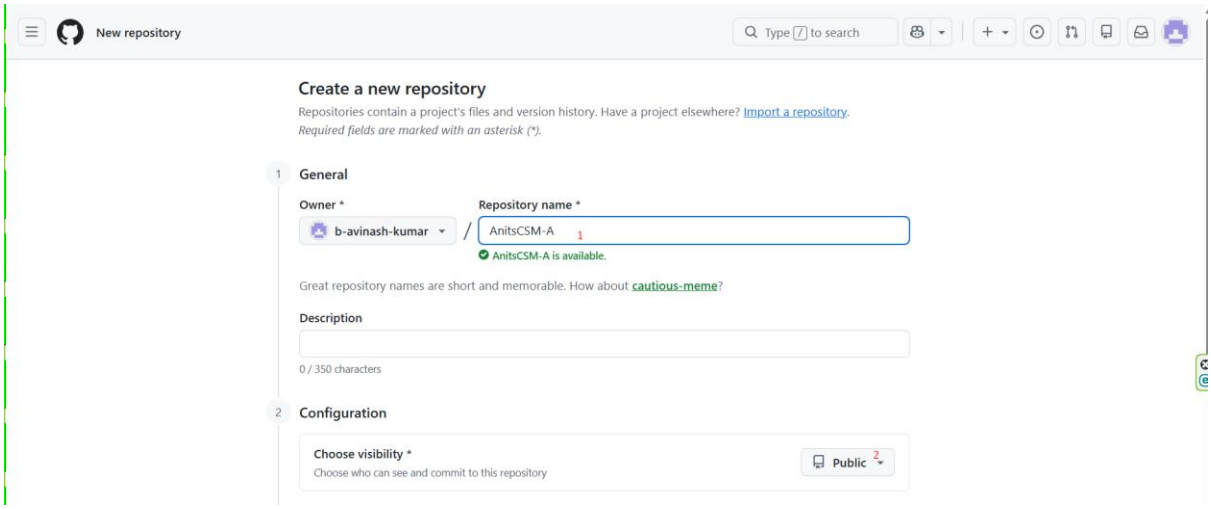


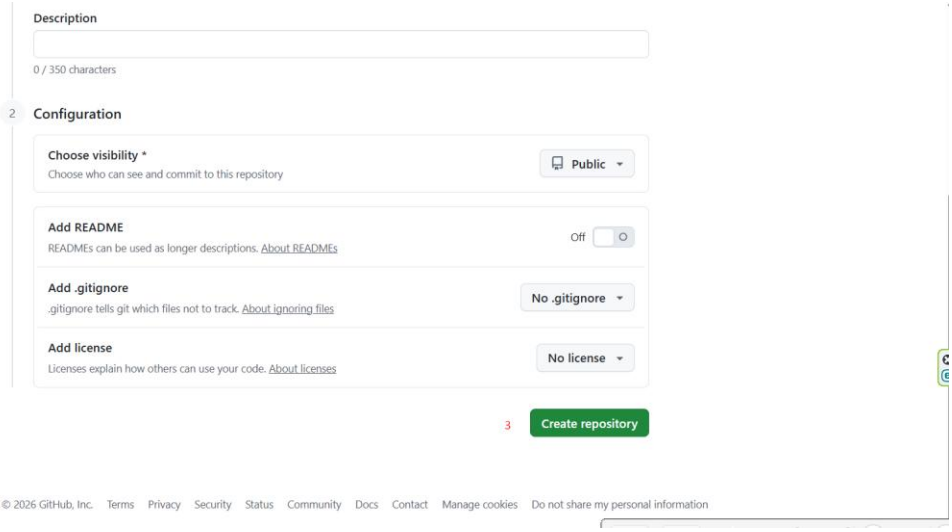
Signup

After signing up you can verify through your email sent by github
After email verification
Log in

Create a repository

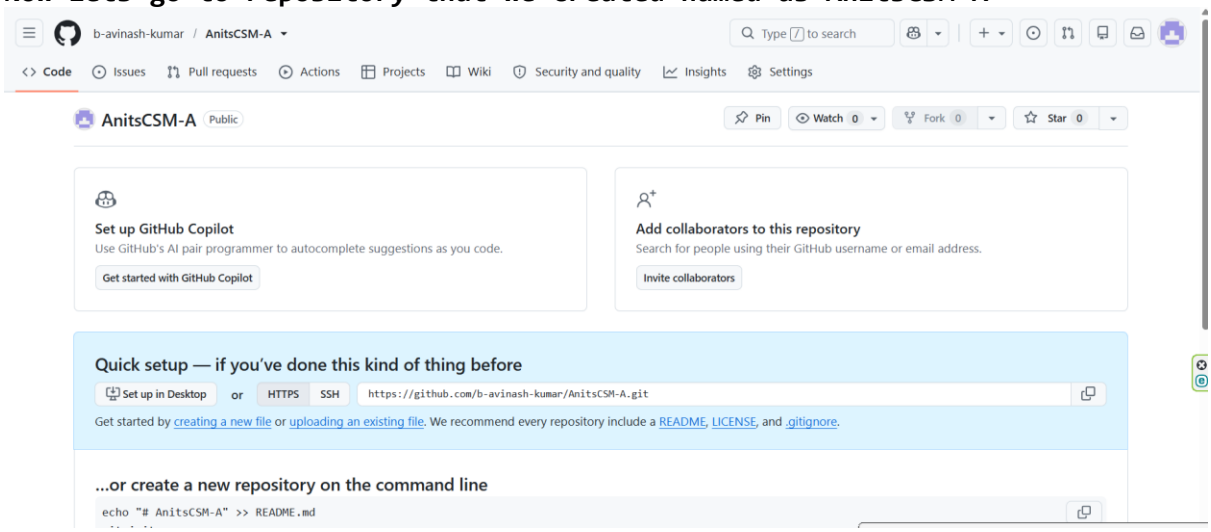




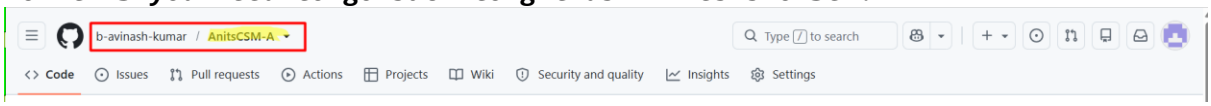


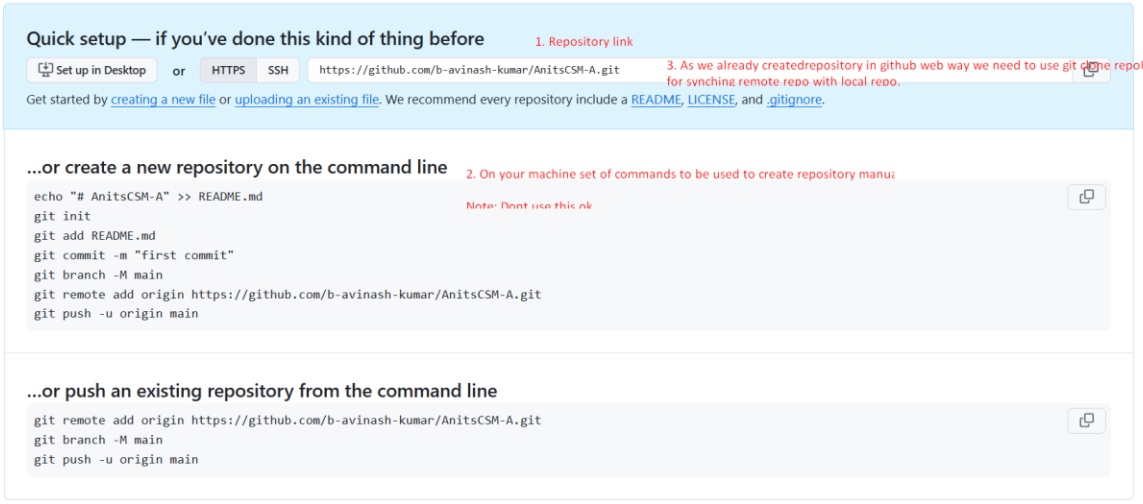
By following above steps you will be able to create Github account and create repository upon login.

Now lets go to repository that we created named as AnitsCSM-A



Repository got created
Now you have a doubt how to validate weather repository created or not?
For this you need to go back to github in web browser.





Now you may have a doubt what is remote repository?
A remote repository is the location where we created our repository named "AnitsCSM-A" at github servers using github.com.

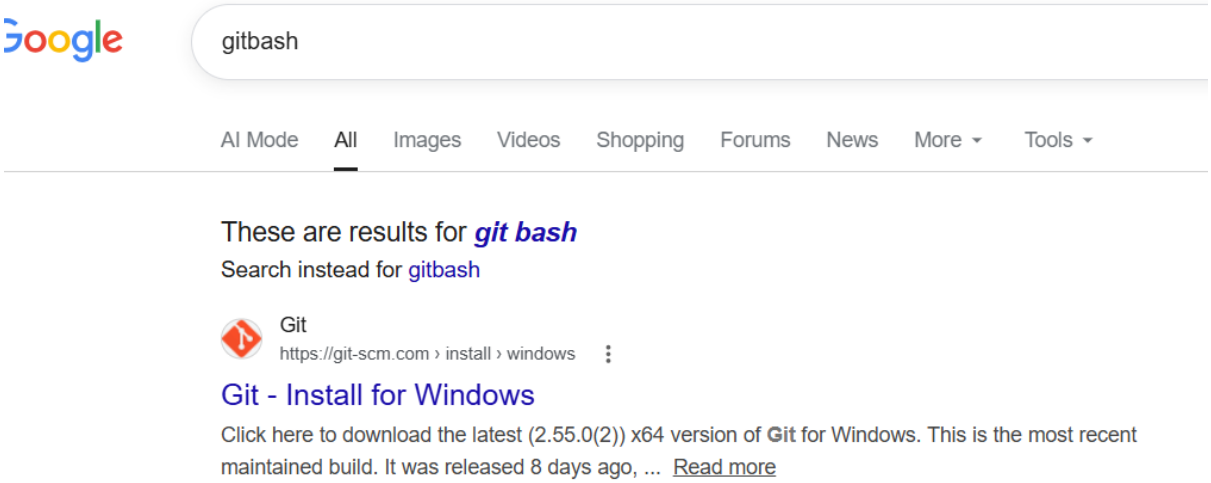
Clear

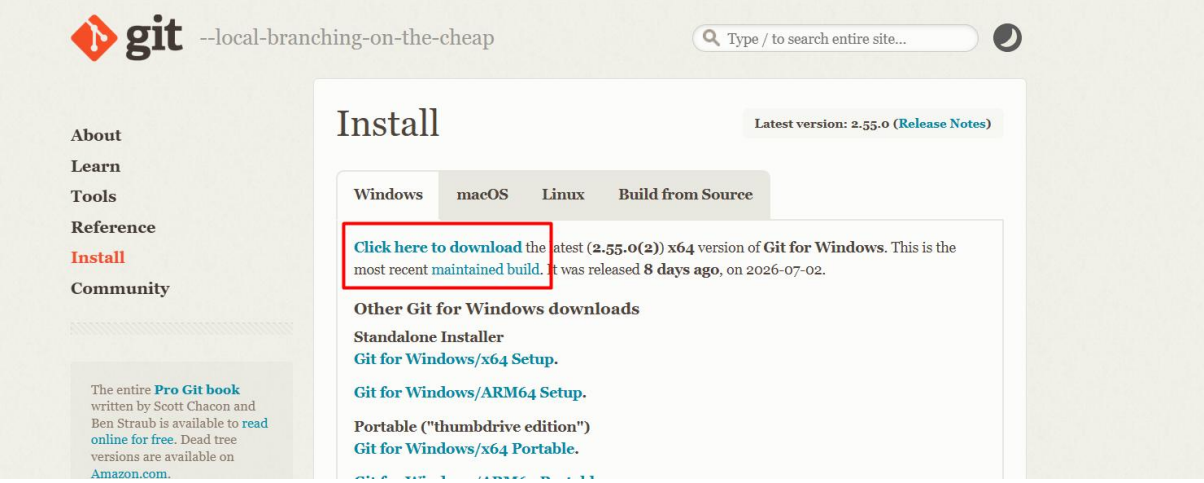
C:\>git clone repositoryURL
e.g. git clone https://github.com/b-avinash-kumar/AnitsCSM-A.git
hit enter you will be able to see .git hidden folder.

After creating git recognizable directory on your local machine, now you need to create your codes i.e write codes and update the files/folders, code which are created to github remote repository (remote location).

Now at your local machine you need to install a gitbash software then only you can work with your repository.

Download the gitbash

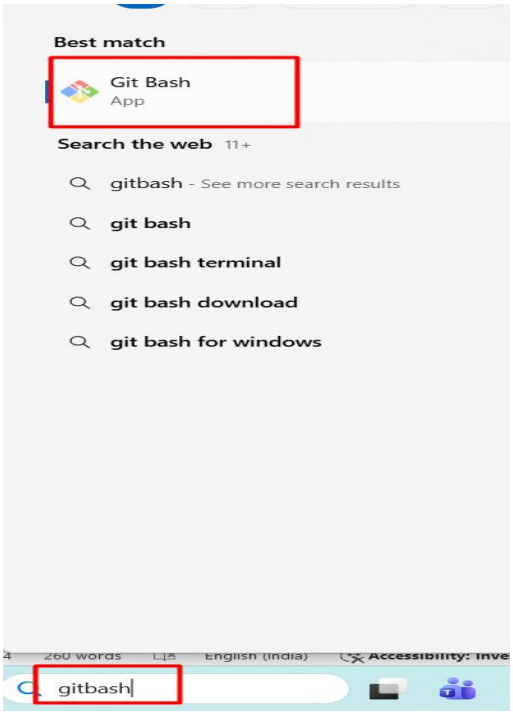




After downloading the gitbash install the software.

Once the software got installed you need to open git bash or command promt or vs code terminal window to work with git remote repository.

Clear.

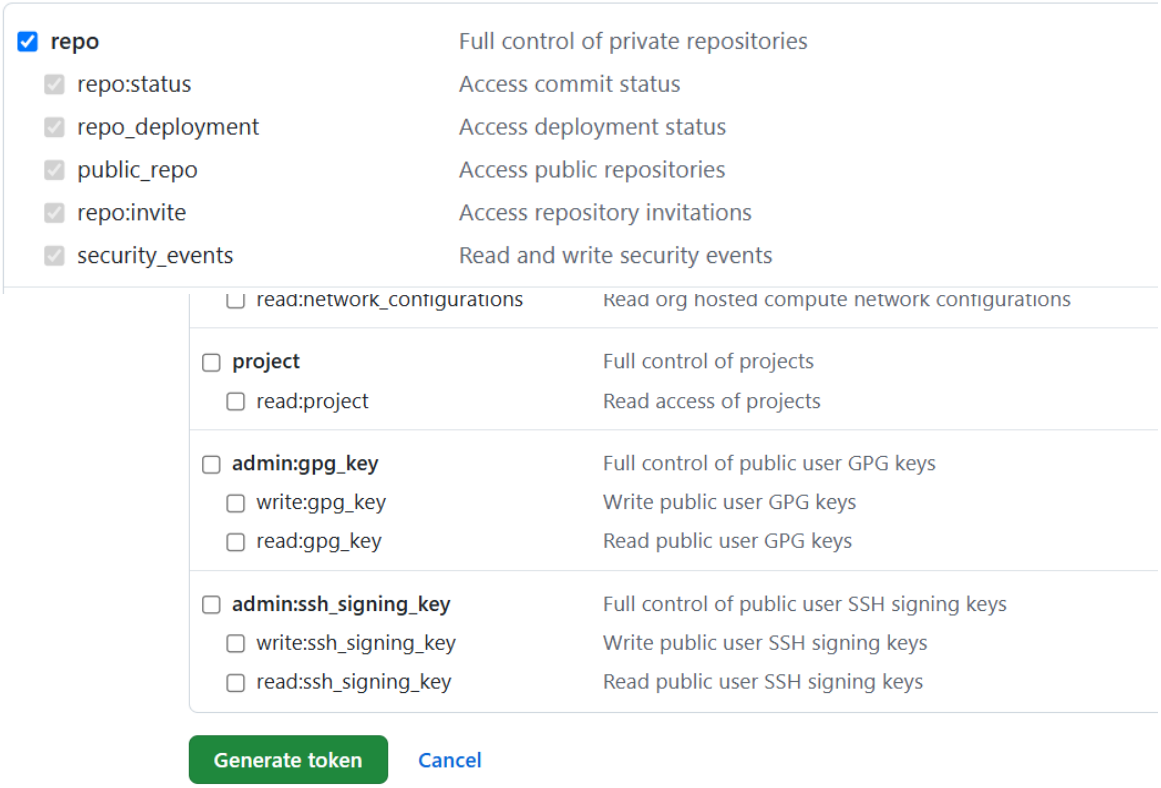


Now lets work in vs code

```
<!--
add the file index.html to remote repository
git add .
index.html will be moving from working directory to staged area
git commit -m 'added index page'
it moves index.html file from stagged area to local repsitory on your machine.
and from here we can send to remote repository
git push
```

as a beginner for the first time you need to establish trust
ok
then how?
Go to github
-->

Account -> Settings -> Developer Settings -> Tokens(Classic) -> Generate classic token -> verify with code sent to email -> Name the token -> select the repo checkbox



Then hit generate

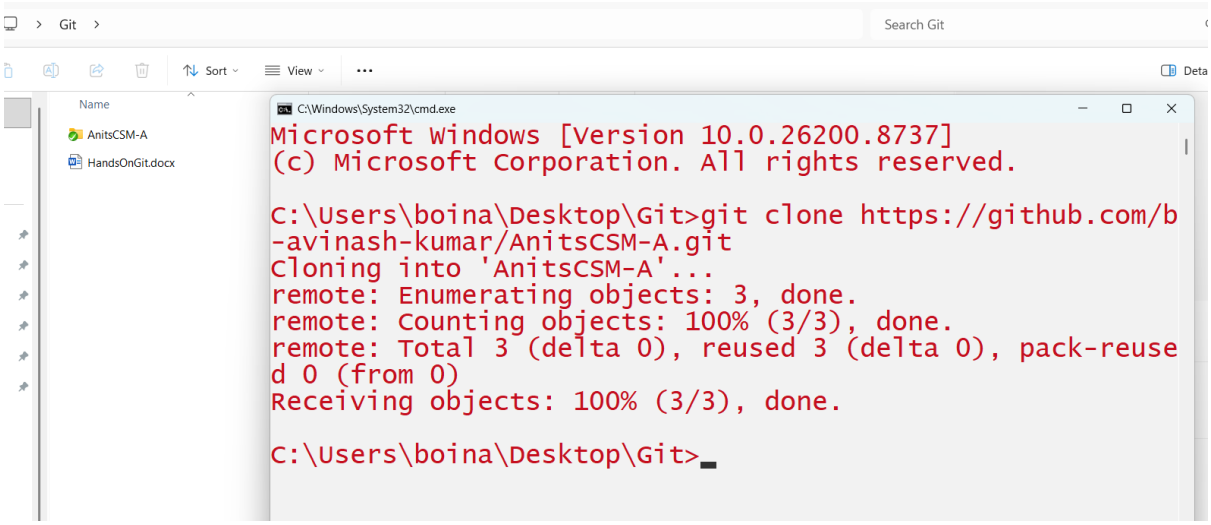
Now token created is displayed you need to copy and save it and token will be expired after 30days.

Note: If you forget to save the token and try to revisit the created token the token will not be available so save after creation of token.

Clear

Add = add the files from your working directory to staged area.
Commit = add the files from staged area to local repository
Push = add the files from local repository to remote repository

Note:
Until commit operation trust between local repository and remote repository is not required.
For the first time as a new user when you want to push the files from local repository to remote repository then for the first time we need to establish trust using git token that we generated.



After clone change directory to git repository folder

Suppose you created an index.html and other files these files first we need to add in staged area using "git add . "

git add .

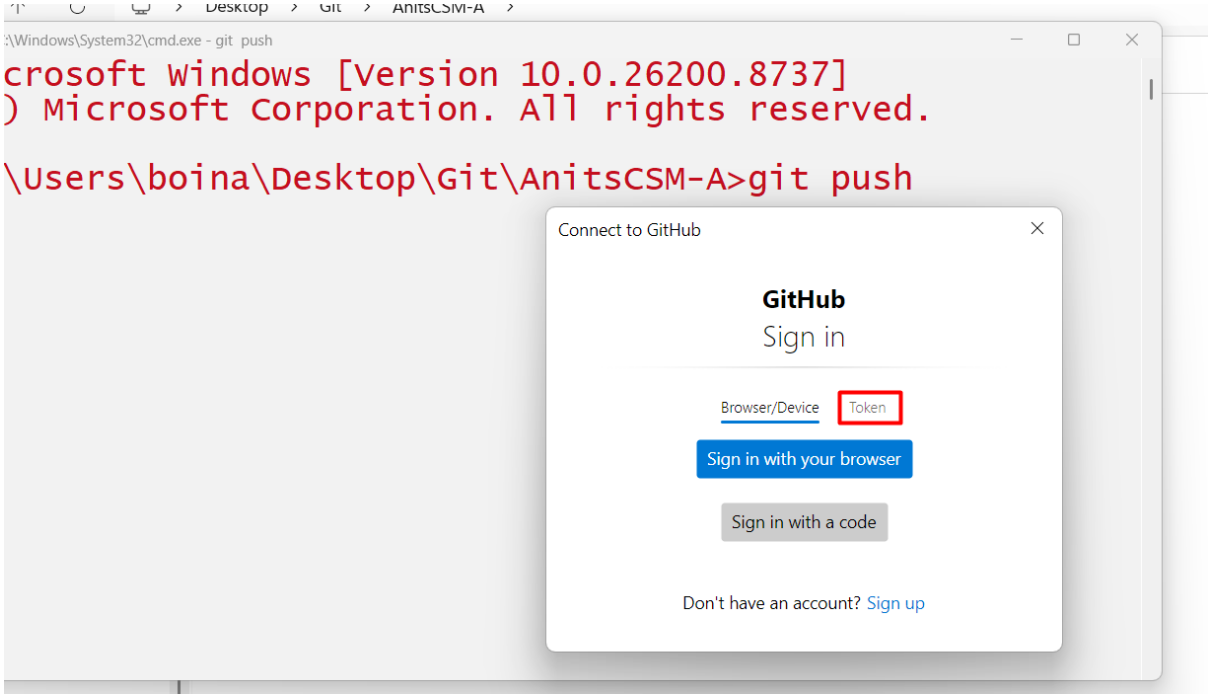
optional step : check the status using "git status" if you want.

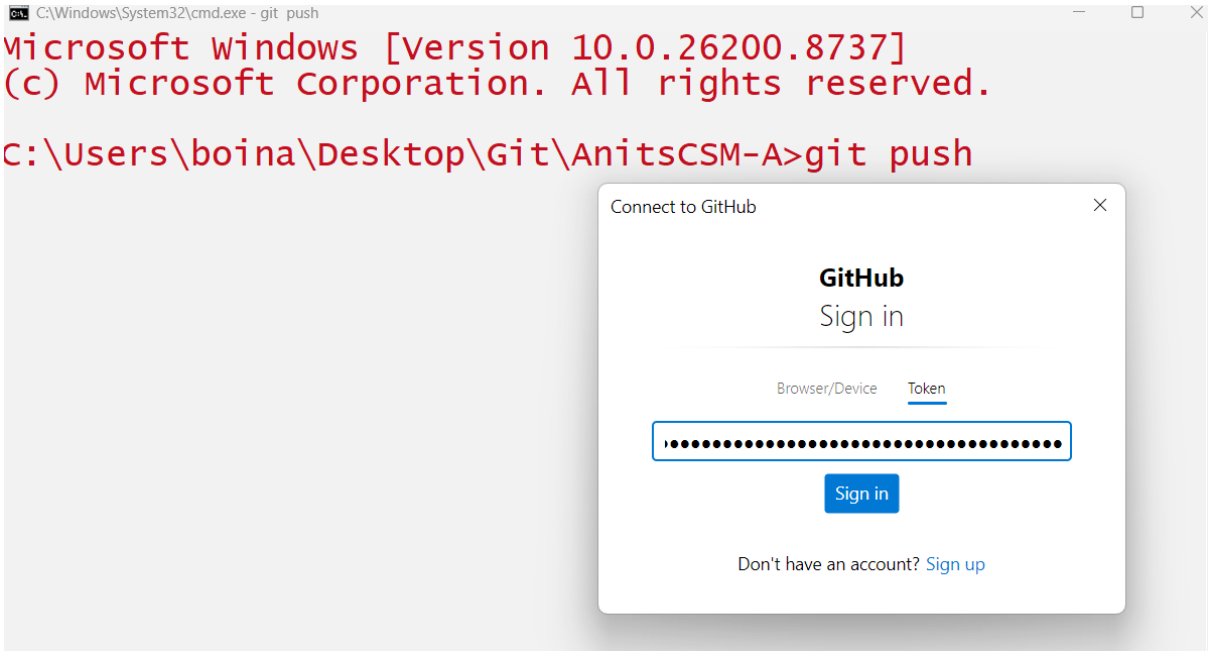
Now commit the files in staged area to local repository
git commit -m 'message'

```
C:\Users\boina\Desktop\Git\AnitsCSM-A>git commit -m "firs
tcommit"
On branch main
Your branch is up to date with 'origin/main'.

Untracked files:
  (use "git add <file>..." to include in what will be com
mitted)
        style.css

nothing added to commit but untracked files present (use
"git add" to track)

C:\Users\boina\Desktop\Git\AnitsCSM-A>
```

git push
In the 3rd stage for connecting to remote repo from local git directory you need to provide token that you generated and saved.

Screenshots for establishing trust between local repository to remote repository.

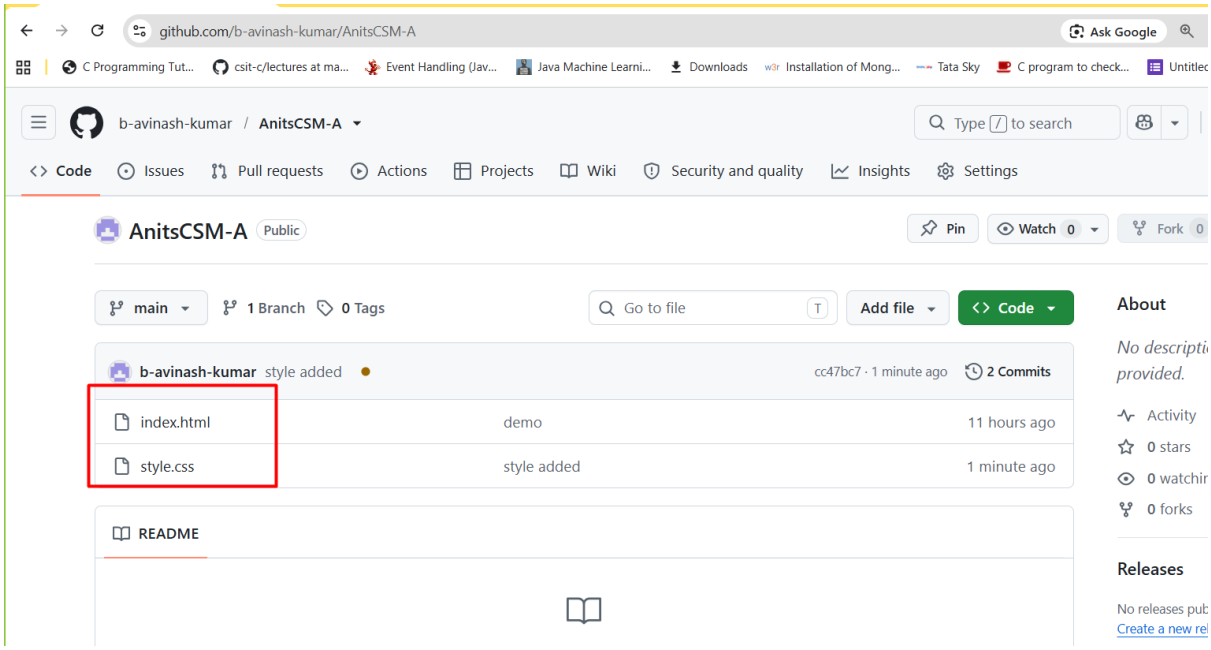




Now 1st trust will be established then data will be updated in remote repo.

Do once again
C:/>git add .
C:/>git commit -m “added”
C:/>git push

```
C:\Users\boina\Desktop\Git\AnitsCSM-A>git push
Enumerating objects: 3, done.
Counting objects: 100% (3/3), done.
Delta compression using up to 4 threads
Compressing objects: 100% (2/2), done.
Writing objects: 100% (2/2), 254 bytes | 254.00 KiB/s, done.
Total 2 (delta 0), reused 0 (delta 0), pack-reused 0 (from 0)
To https://github.com/b-avinash-kumar/AnitsCSM-A.git
   7d33292..cc47bc7  main -> main
```

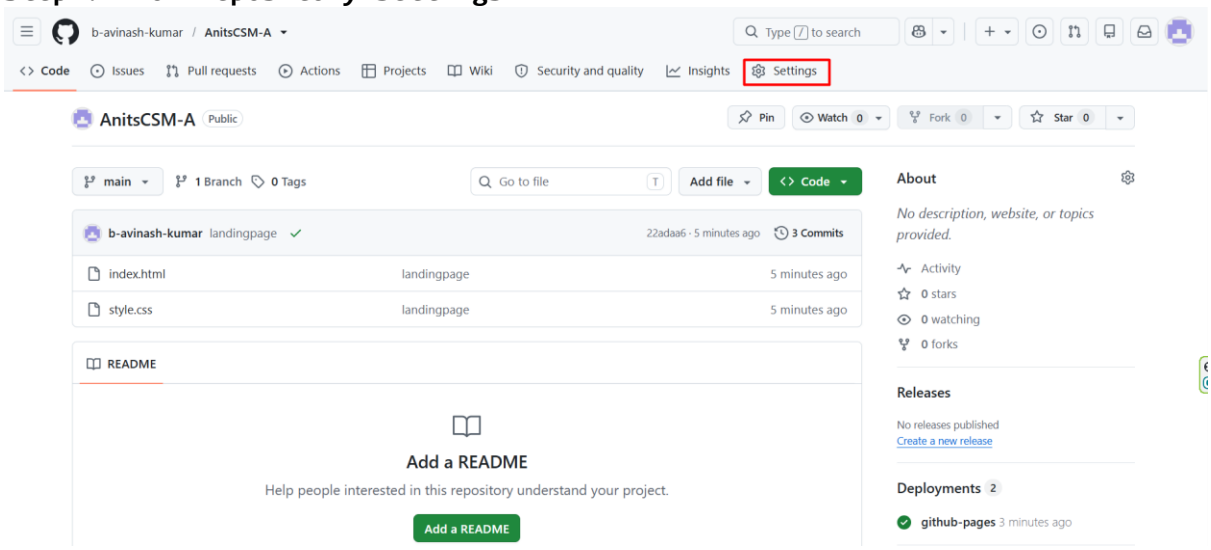


Now lets understand hosting your lab tasks and assignments in github pages.

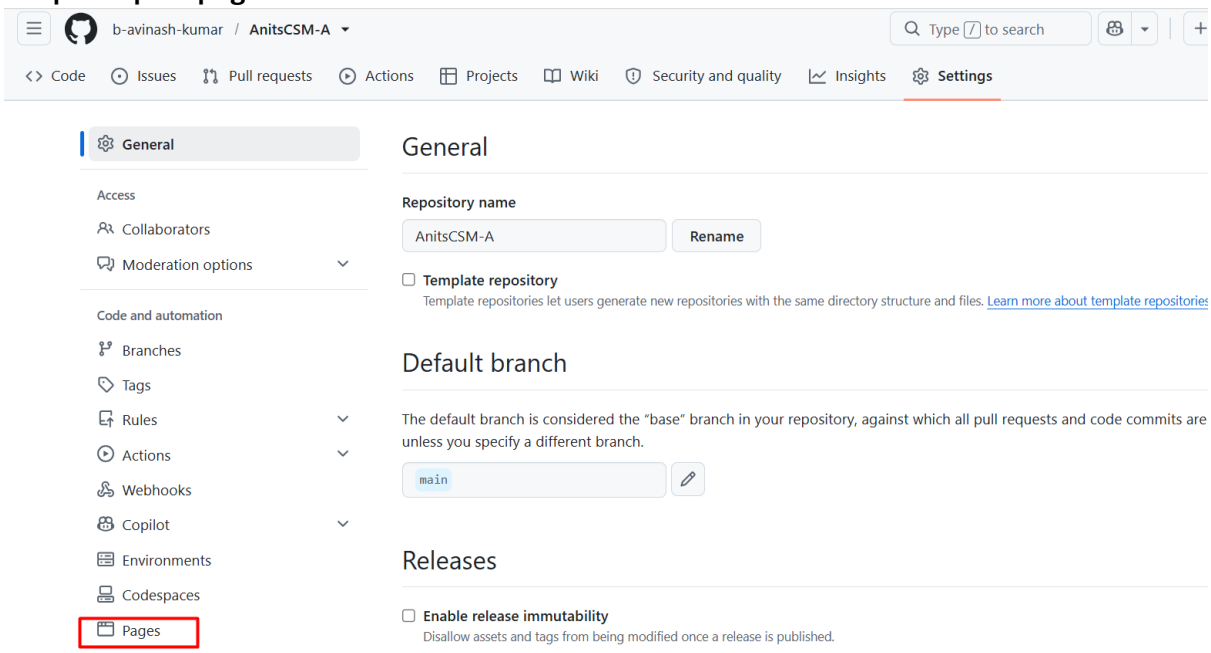
Note: Github pages can help us to host only static web sites.

Configuring our repository(containing web application files) as web site using github pages.

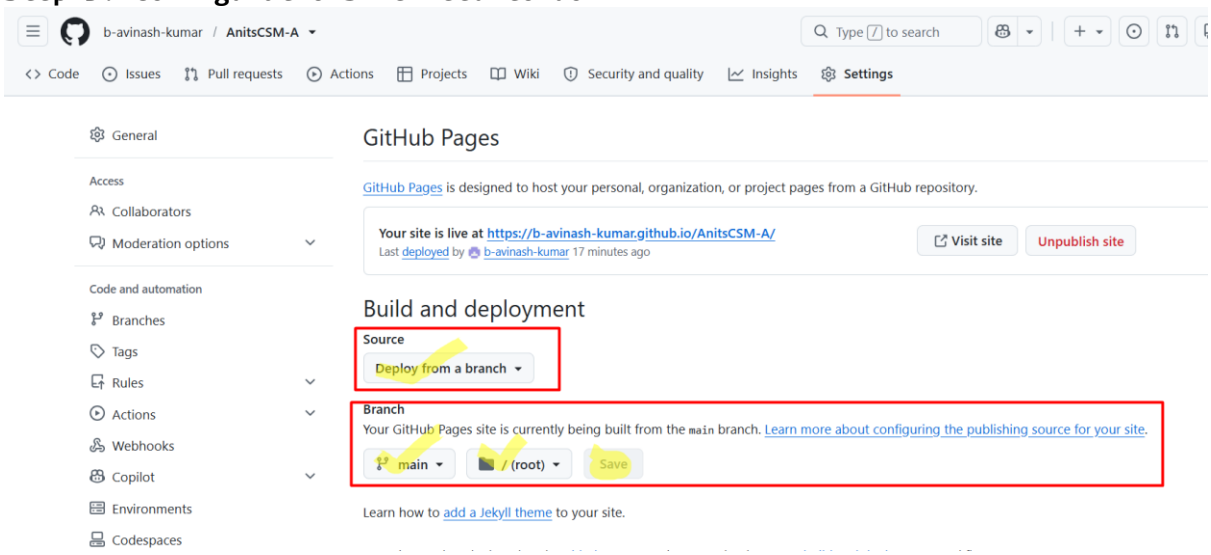
Step1: From repository settings



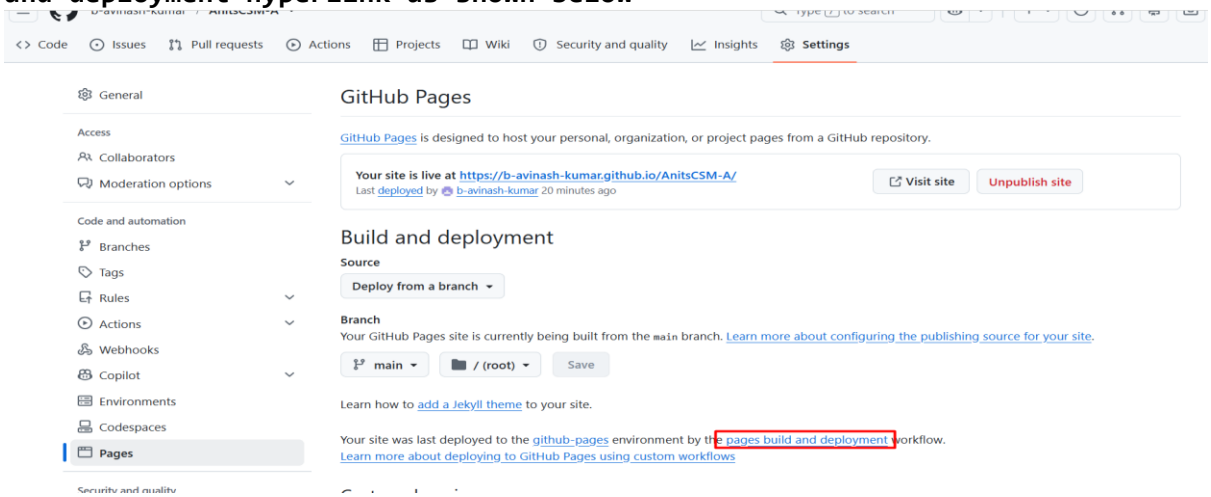
Step2: open pages



Step 3: Configurations we need to do

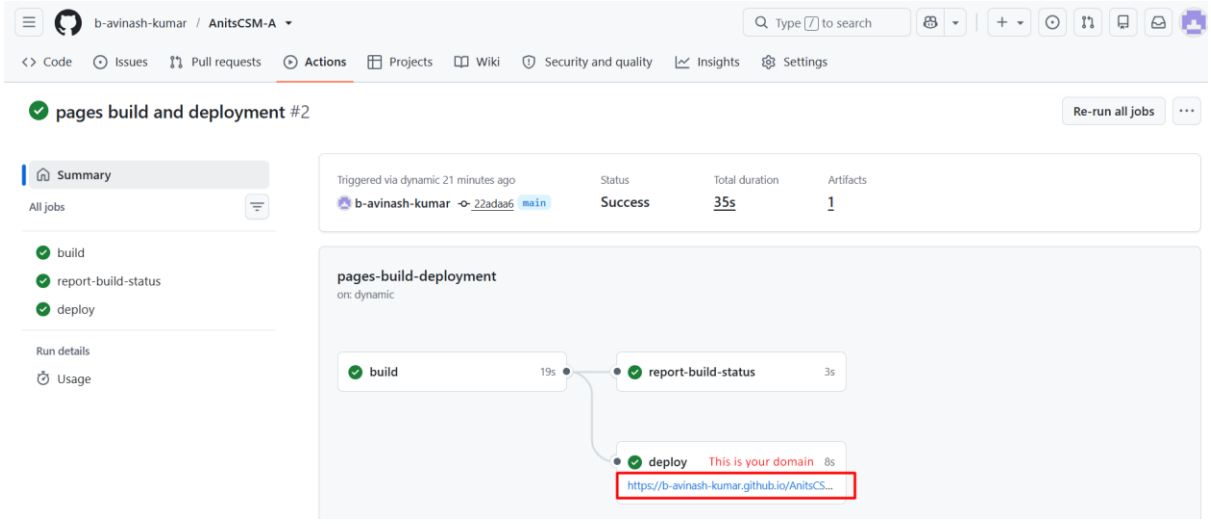


Step 4: Now after saving, you need to copy your domain from pages build and deployment hyperlink as shown below

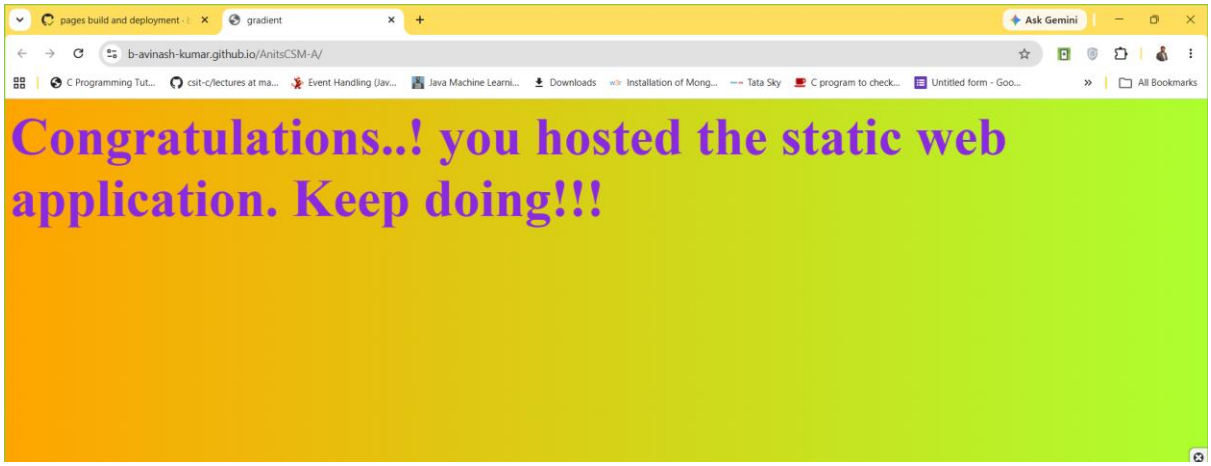


Step 5: Domain name is the url used to load the page in the web browser

https://b-avinash-kumar.github.io/AnitsCSM-A/



Finally Hosted… Congratulations



Happy learning