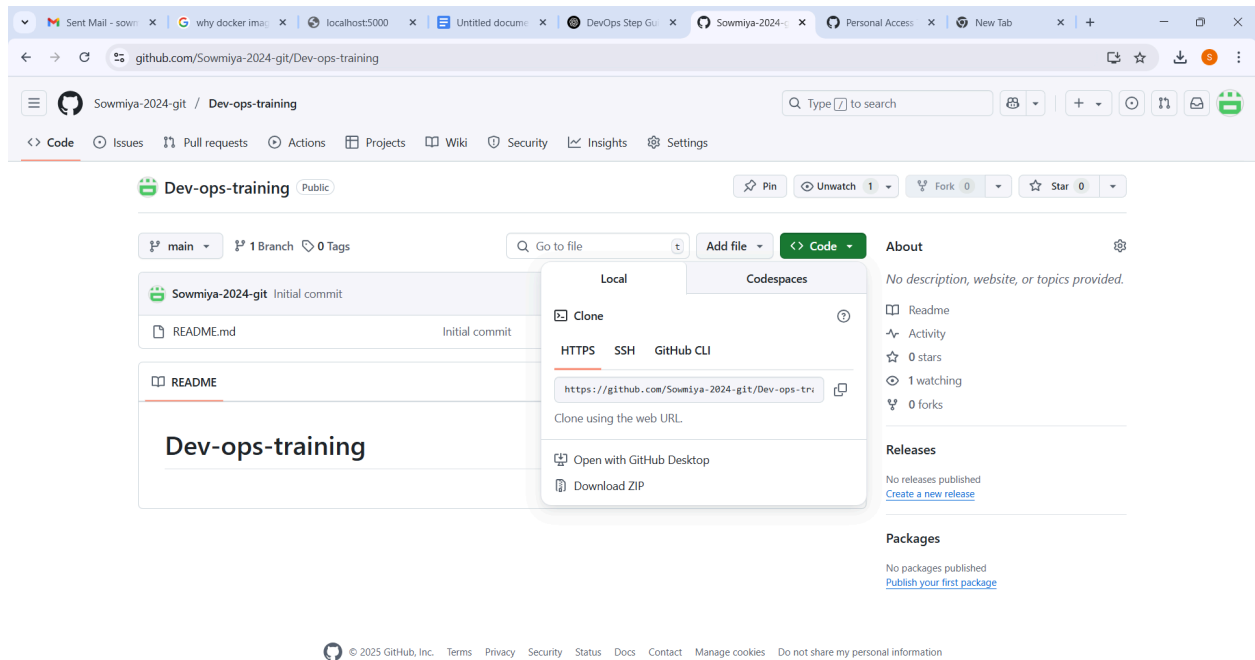


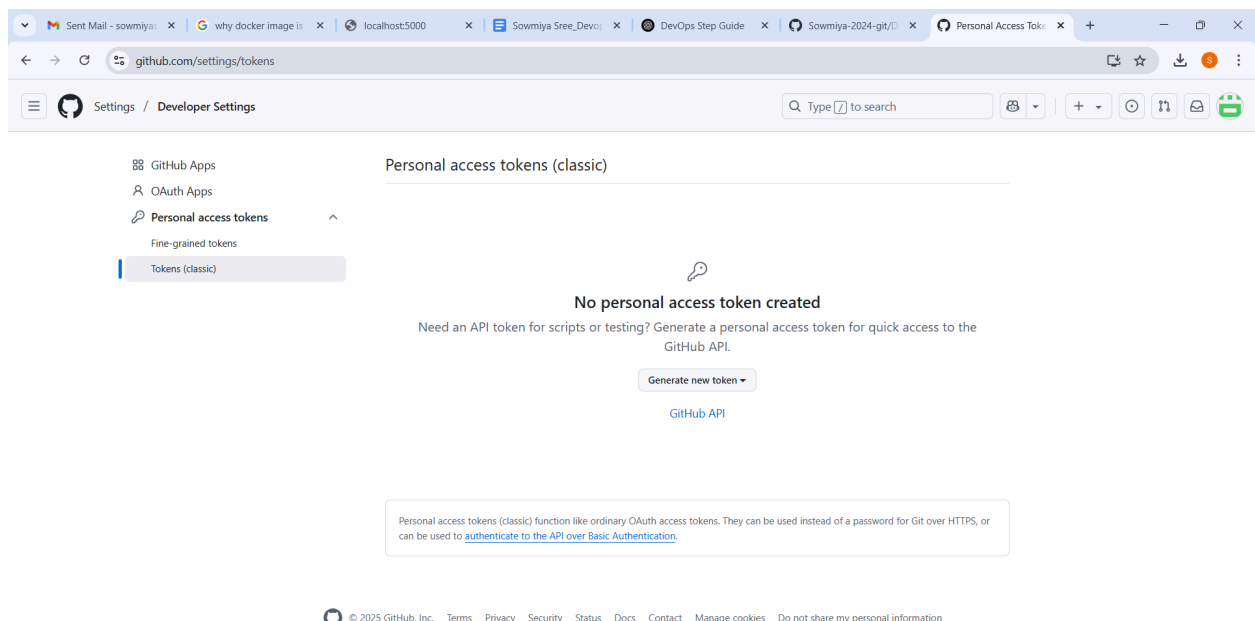
Step 1 :

Create the new repository in github



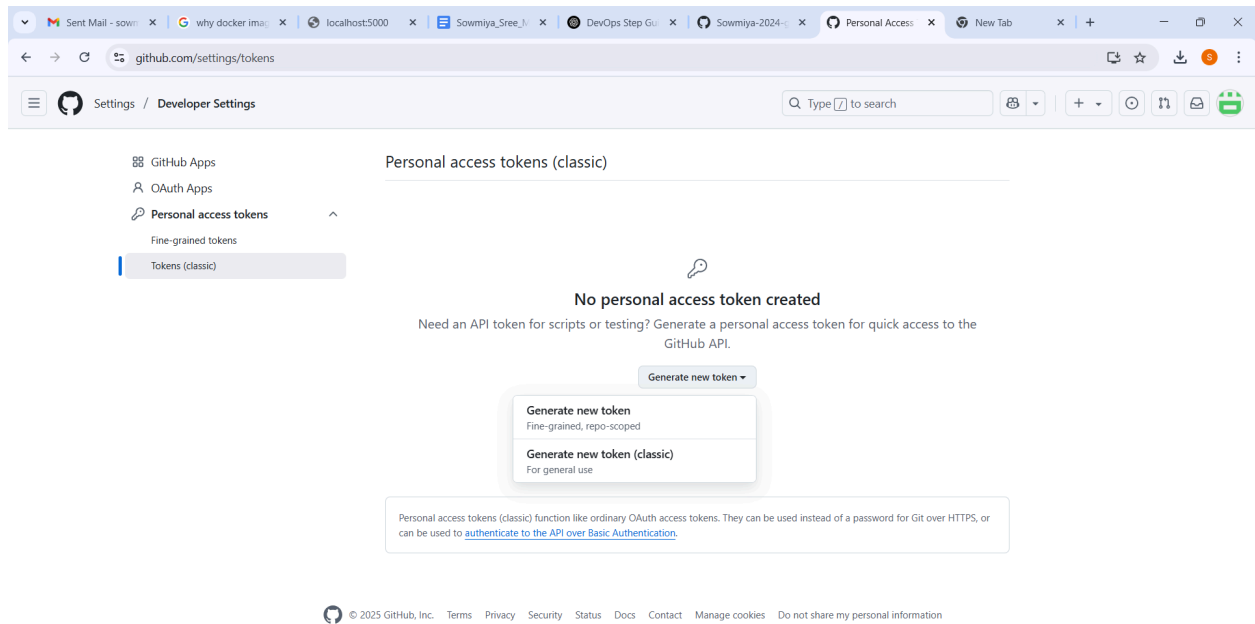
Step 2 :

Give the url <https://github.com/settings/tokens>



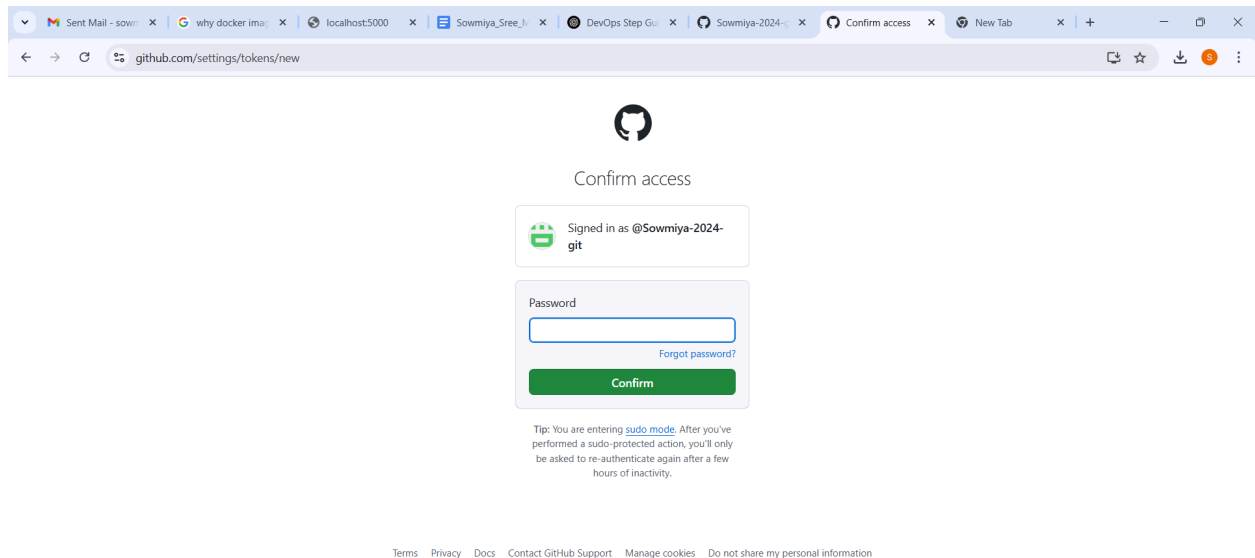
Step 3 :

By clicking the tokens(classic) The page will navigate to this

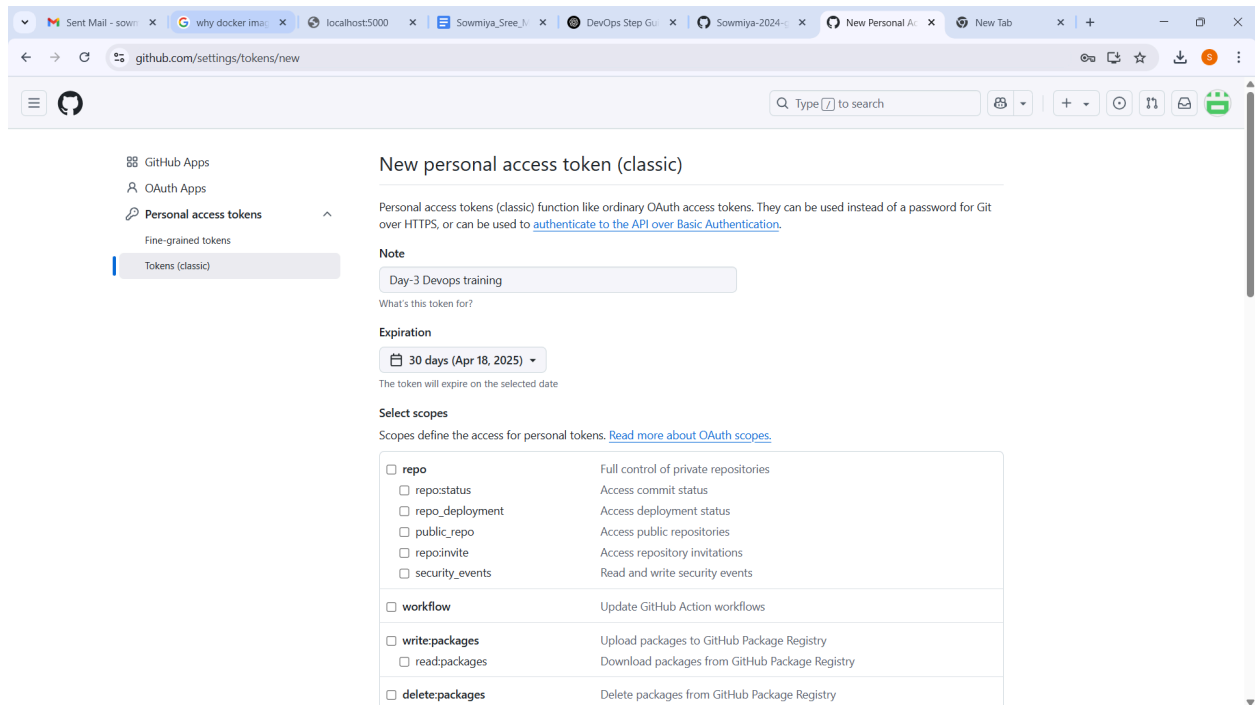


<https://github.com/settings/personal-access-tokens/new>

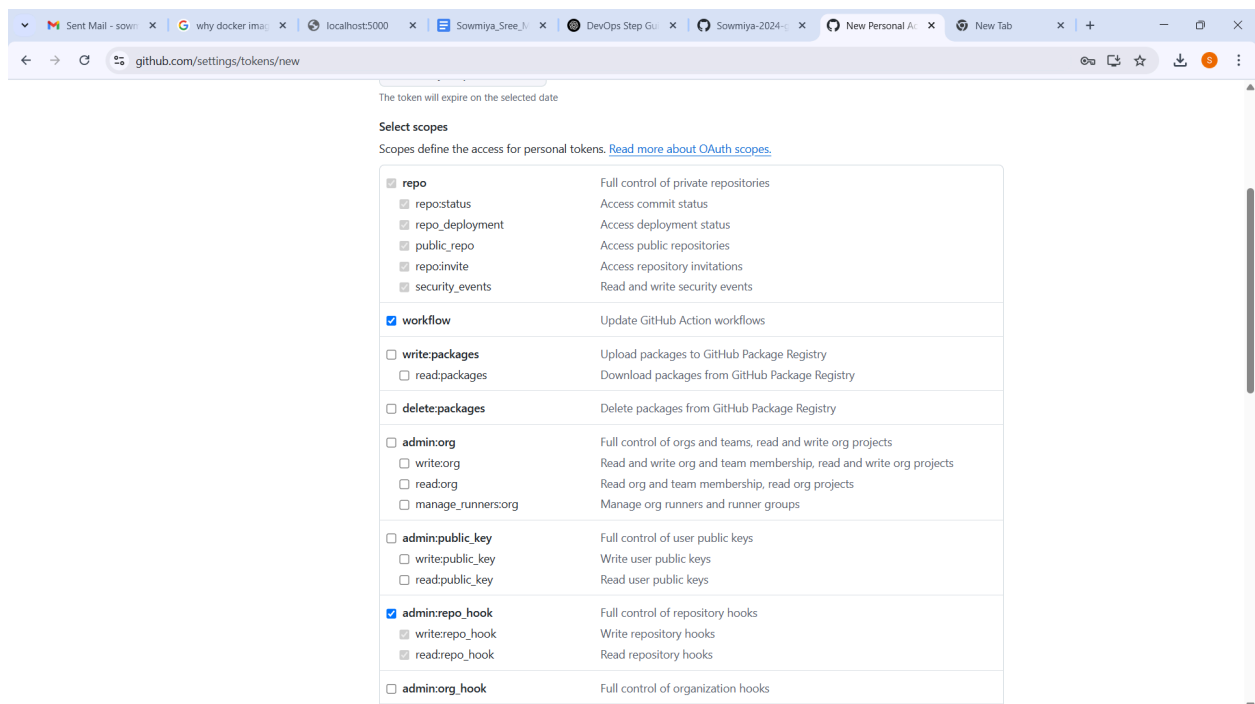
Step 4 :



Step 5 :
After verifying the passcode it will navigate to this page



Step 6 :

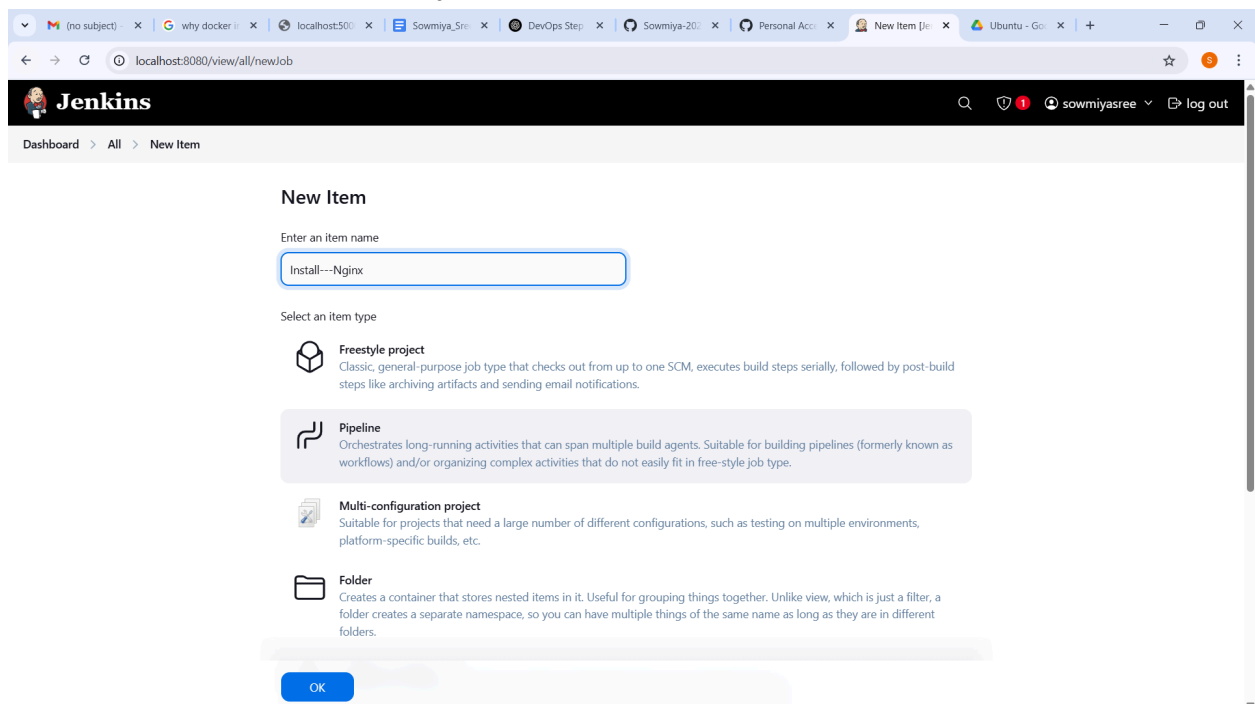


Step 9 :

```
sowmiya@LAPTOP-E2BCEK44:~$ sudo systemctl enable jenkins
[sudo] password for sowmiya:
Synchronizing state of jenkins.service with SysV service script with /usr/lib/systemd/systemd-sysv-install.
Executing: /usr/lib/systemd/systemd-sysv-install enable jenkins
sowmiya@LAPTOP-E2BCEK44:~$ sudo systemctl start jenkins
sowmiya@LAPTOP-E2BCEK44:~$ sudo systemctl status jenkins
● jenkins.service - Jenkins Continuous Integration Server
   Loaded: loaded (/usr/lib/systemd/system/jenkins.service; enabled; preset: enabled)
   Active: active (running) since Wed 2025-03-19 03:39:02 UTC; 45min ago
     Main PID: 169 (java)
       Tasks: 59 (limit: 9360)
      Memory: 479.8M (C)
     CGroup: /system.slice/jenkins.service
             └─169 /usr/bin/java -Djava.awt.headless=true -jar /usr/share/java/jenkins.war --webroot=/var/cache/jenkins
Mar 19 03:39:01 LAPTOP-E2BCEK44 jenkins[169]: 2025-03-19 03:39:01.527+0000 [id=31] INFO jenkins.InitReact>
Mar 19 03:39:01 LAPTOP-E2BCEK44 jenkins[169]: 2025-03-19 03:39:01.529+0000 [id=56] INFO jenkins.InitReact>
Mar 19 03:39:01 LAPTOP-E2BCEK44 jenkins[169]: 2025-03-19 03:39:01.724+0000 [id=31] INFO h.p.b.g.GlobalTime>
Mar 19 03:39:02 LAPTOP-E2BCEK44 jenkins[169]: 2025-03-19 03:39:02.279+0000 [id=49] INFO jenkins.InitReact>
Mar 19 03:39:02 LAPTOP-E2BCEK44 jenkins[169]: 2025-03-19 03:39:02.280+0000 [id=48] INFO jenkins.InitReact>
Mar 19 03:39:02 LAPTOP-E2BCEK44 jenkins[169]: 2025-03-19 03:39:02.480+0000 [id=46] INFO jenkins.InitReact>
Mar 19 03:39:02 LAPTOP-E2BCEK44 jenkins[169]: 2025-03-19 03:39:02.490+0000 [id=46] INFO jenkins.InitReact>
Mar 19 03:39:02 LAPTOP-E2BCEK44 jenkins[169]: 2025-03-19 03:39:02.514+0000 [id=35] INFO jenkins.InitReact>
Mar 19 03:39:02 LAPTOP-E2BCEK44 jenkins[169]: 2025-03-19 03:39:02.544+0000 [id=25] INFO hudson.lifecycle.>
lines 1-19/19 (END)
sowmiya@LAPTOP-E2BCEK44:~$
sowmiya@LAPTOP-E2BCEK44:~$
```

Step 10 :

Create a new pipeline item in the jenkins



Step 11 :

Click the configure inside that click on pipeline and give the url of the repository and add credentials to it and give variable name and passcode

Dashboard > All > Install--Nginx > Configuration

Git

Configure

- General
- Triggers
- Pipeline
- Advanced

Repositories ?

Repository URL ?

Credentials ?

+ Add

Advanced ▾

Add Repository

Branches to build ?

Branch Specifier (blank for 'any') ?

Save Apply

Step 12 :

Then this page will appear

Jenkins

Dashboard > All > Install--Nginx >

Status

Install--Nginx

This is a sample item

Permalinks

- Last build (#1), 51 min ago
- Last stable build (#1), 51 min ago
- Last successful build (#1), 51 min ago
- Last completed build (#1), 51 min ago

Builds

Filter

Today

#1 04:31

REST API Jenkins 2.492.2

Step 13 :

```
sowmiya@LAPTOP-E2BCEK44:~$ git clone https://github.com/Sowmiya-2024-git/Dev-ops-training.git
Cloning into 'Dev-ops-training'...
remote: Enumerating objects: 3, done.
remote: Counting objects: 100% (3/3), done.
remote: Total 3 (delta 0), reused 0 (delta 0), pack-reused 0 (from 0)
Receiving objects: 100% (3/3), done.
sowmiya@LAPTOP-E2BCEK44:~$ ls
Dev-ops-training  docker-python-app
```

Step 14 :

```
sowmiya@LAPTOP-E2BCEK44:~$ cd docker-python-app
sowmiya@LAPTOP-E2BCEK44:~/docker-python-app$ ls
Dockerfile  app.py  docker-compose.yml  requirements.txt
```

Step 15 :

```
sowmiya@LAPTOP-E2BCEK44:~/docker-python-app$ cd ..
sowmiya@LAPTOP-E2BCEK44:~$ cd Dev-ops-training
sowmiya@LAPTOP-E2BCEK44:~/Dev-ops-training$ git add .
sowmiya@LAPTOP-E2BCEK44:~/Dev-ops-training$ git commit -m 'initial commit'
Author identity unknown

*** Please tell me who you are.

Run

  git config --global user.email "you@example.com"
  git config --global user.name "Your Name"

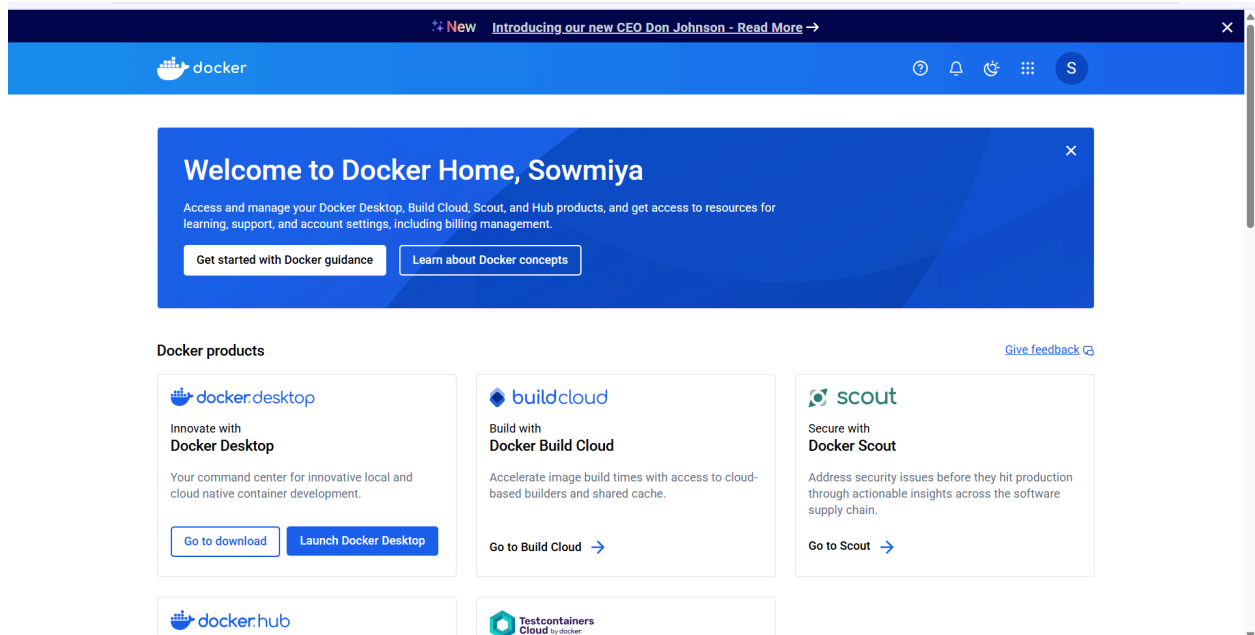
to set your account's default identity.
Omit --global to set the identity only in this repository.

fatal: empty ident name (for <sowmiya@LAPTOP-E2BCEK44.>) not allowed
sowmiya@LAPTOP-E2BCEK44:~/Dev-ops-training$ git config --global user.email "sowmiasreem.24mca@kongu.edu"
sowmiya@LAPTOP-E2BCEK44:~/Dev-ops-training$ git config --global user.name "Sowmiya-2024-git"
sowmiya@LAPTOP-E2BCEK44:~/Dev-ops-training$ git commit -m 'initial commit'
[main 8ea58c0] initial commit
4 files changed, 37 insertions(+)
 create mode 100644 Dockerfile
 create mode 100644 app.py
 create mode 100644 docker-compose.yml
 create mode 100644 requirements.txt
```

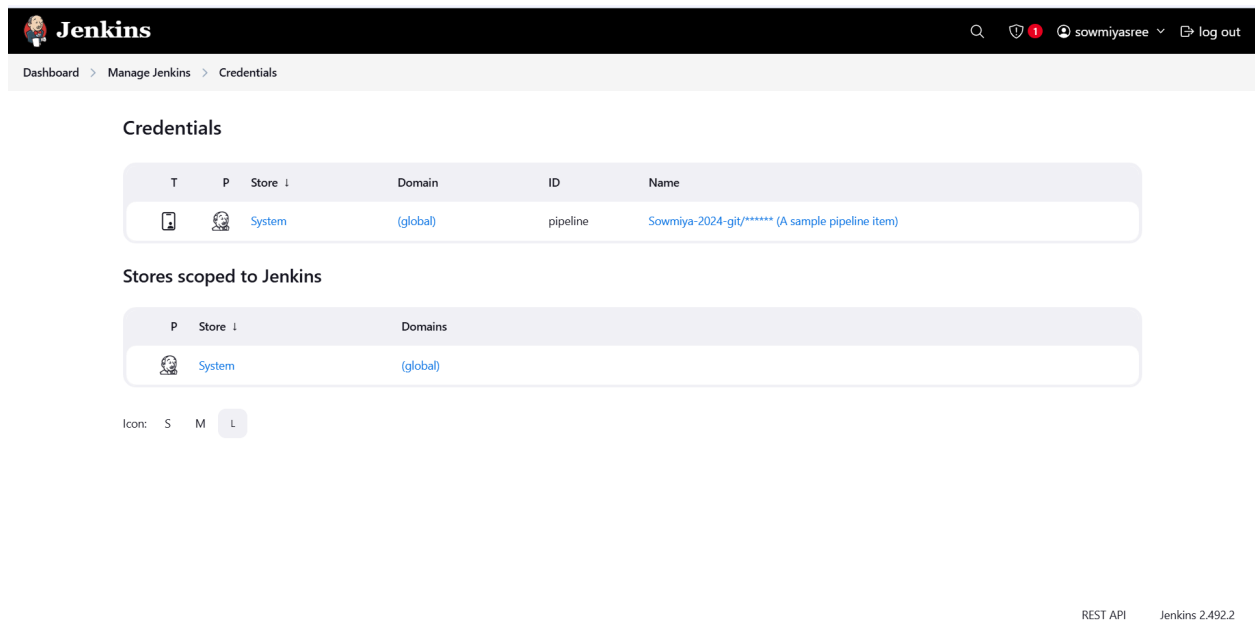
Step 16 :

```
sowmiya@LAPTOP-E2BCEK44:~/Dev-ops-training$ git push https://Sowmiya-2024-git:ghp_Wa6JUffI08X2sWkaF2c01ztV0yLESV01xi0x@github.com/Sowmiya-2024-git/Dev-ops-training.git
Enumerating objects: 7, done.
Counting objects: 100% (7/7), done.
Delta compression using up to 12 threads
Compressing objects: 100% (5/5), done.
Writing objects: 100% (6/6), 937 bytes | 937.00 KiB/s, done.
Total 6 (delta 0), reused 0 (delta 0), pack-reused 0
To https://github.com/Sowmiya-2024-git/Dev-ops-training.git
 55b3aec..8ea58c0  main -> main
sowmiya@LAPTOP-E2BCEK44:~/Dev-ops-training$
```

Step 17 :
Give app.docker.com and signup into it

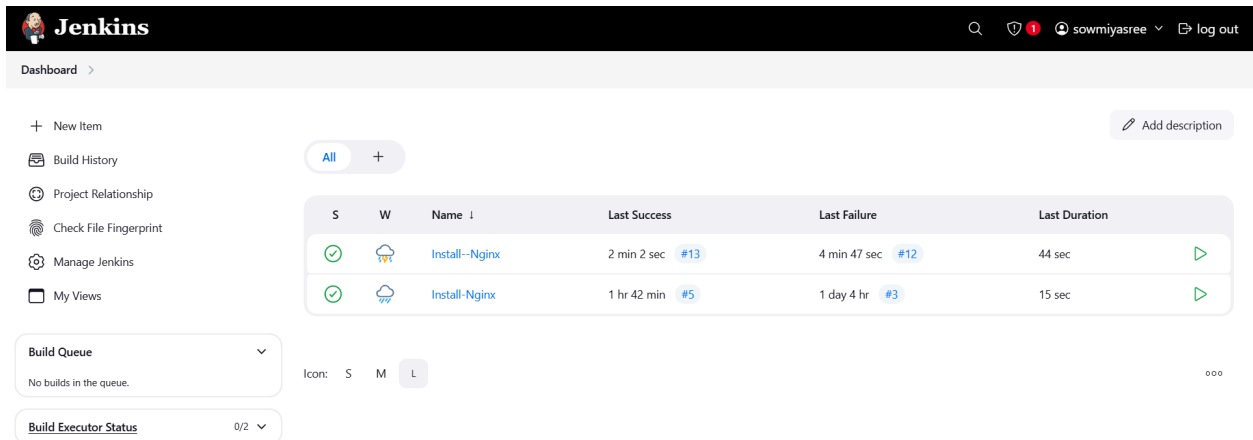


Step 18 :
Navigate to jenkins then move to manage jenkins and view credentials



Step 19 :

Create a new item for the docker



The screenshot shows the Jenkins Dashboard. At the top, there's a search bar and a user profile 'sowmiyasree' with a 'log out' button. Below the dashboard header, there's a '+ New Item' button and a list of links: 'Build History', 'Project Relationship', 'Check File Fingerprint', 'Manage Jenkins', and 'My Views'. A table displays recent builds for 'Install--Nginx'. The table has columns for status (S), warnings (W), name, last success, last failure, and last duration. Two builds are listed: one successful (44 sec) and one failed (1 day 4 hr). Below the table, there's a 'Build Queue' section showing 'No builds in the queue.' and a 'Build Executor Status' section showing '0/2'.

S	W	Name	Last Success	Last Failure	Last Duration
✓	⚠	Install--Nginx	2 min 2 sec #13	4 min 47 sec #12	44 sec
✓	⚠	Install--Nginx	1 hr 42 min #5	1 day 4 hr #3	15 sec

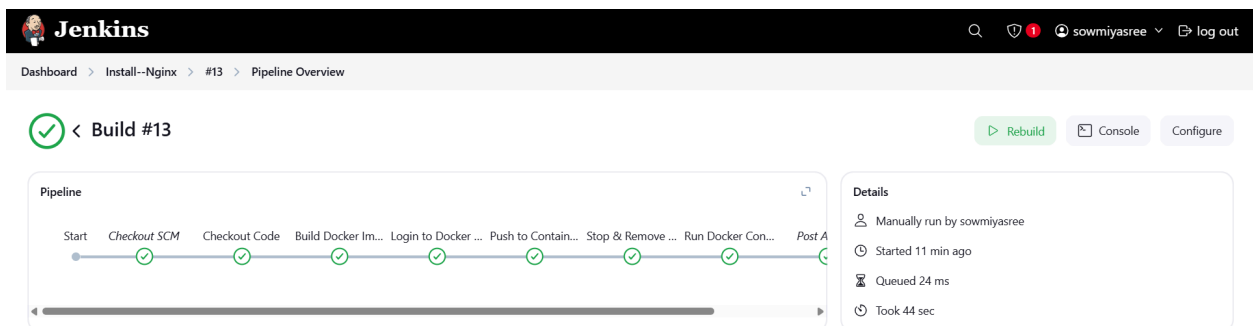
Step 20 :

Create a Jenkinsfile and add the codes for git and jenkins

```
sowmiya@LAPTOP-E2BCEM44:~/Dev-ops-training$ nano Jenkinsfile
sowmiya@LAPTOP-E2BCEM44:~/Dev-ops-training$ git config --global user.email "sowmiyasree@kongu.edu"
sowmiya@LAPTOP-E2BCEM44:~/Dev-ops-training$ git config --global user.name "Sowmiya-2024-git"
sowmiya@LAPTOP-E2BCEM44:~/Dev-ops-training$ git add .
sowmiya@LAPTOP-E2BCEM44:~/Dev-ops-training$ git commit -m 'initial commit'
[main 8ecd7fd] initial commit
1 file changed, 2 insertions(+), 2 deletions(-)
sowmiya@LAPTOP-E2BCEM44:~/Dev-ops-training$ git push https://Sowmiya-2024-git:ghp_Wa6JUFFI08X2sWkaF2c01ZtV0yLESV01xi0x@github.com/Sowmiya-2024-git/Dev-ops-training.git
Enumerating objects: 5, done.
Counting objects: 100% (5/5), done.
Delta compression using up to 12 threads
Compressing objects: 100% (3/3), done.
Writing objects: 100% (3/3), 306 bytes | 306.00 KiB/s, done.
Total 3 (delta 2), reused 0 (delta 0), pack-reused 0
remote: Resolving deltas: 100% (2/2), completed with 2 local objects.
To https://github.com/Sowmiya-2024-git/Dev-ops-training.git
f24c01b..8ecd7fd main -> main
sowmiya@LAPTOP-E2BCEM44:~/Dev-ops-training$ systemctl status docker
● docker.service - Docker Application Container Engine
   Loaded: loaded (/usr/lib/systemd/system/docker.service; enabled; preset
   Active: active (running) since Wed 2025-03-19 03:38:58 UTC; 6h ago
   TriggeredBy: ● docker.socket
```

Step 21 :

Then build the file and it will run successfully



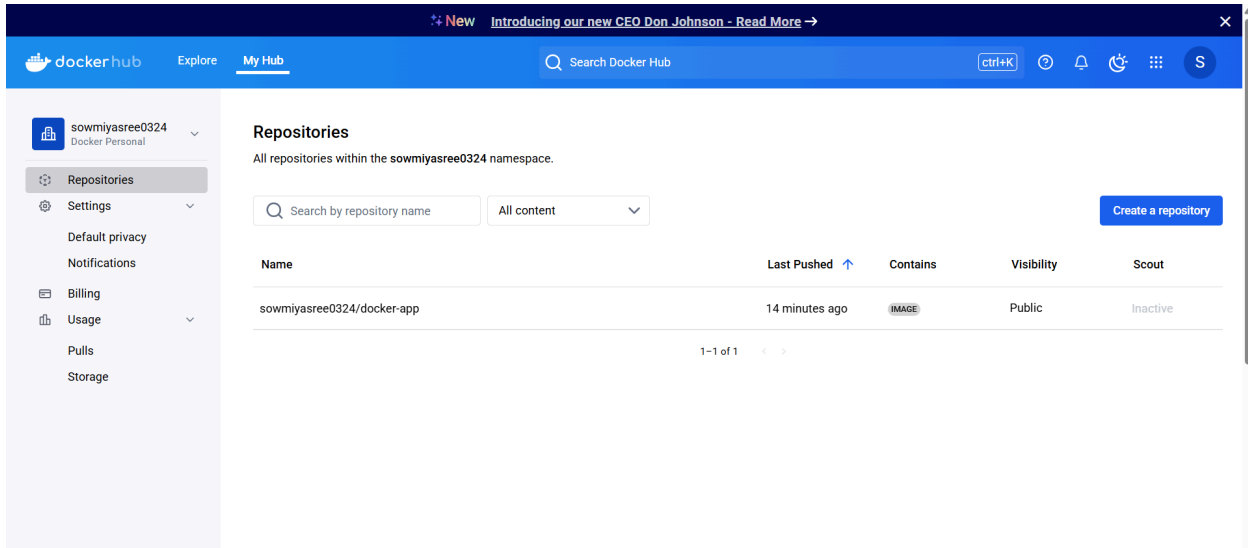
The screenshot shows the Jenkins Pipeline Overview for 'Build #13'. The pipeline is successful, indicated by a green checkmark. The pipeline steps are: Start, Checkout SCM, Checkout Code, Build Docker Im..., Login to Docker ..., Push to Contain..., Stop & Remove ..., Run Docker Con..., and Post A. The details section shows that the pipeline was manually run by 'sowmiyasree', started 11 min ago, queued 24 ms, and took 44 sec.

Pipeline Overview: Start → Checkout SCM → Checkout Code → Build Docker Im... → Login to Docker ... → Push to Contain... → Stop & Remove ... → Run Docker Con... → Post A

Details:

- Manually run by sowmiyasree
- Started 11 min ago
- Queued 24 ms
- Took 44 sec

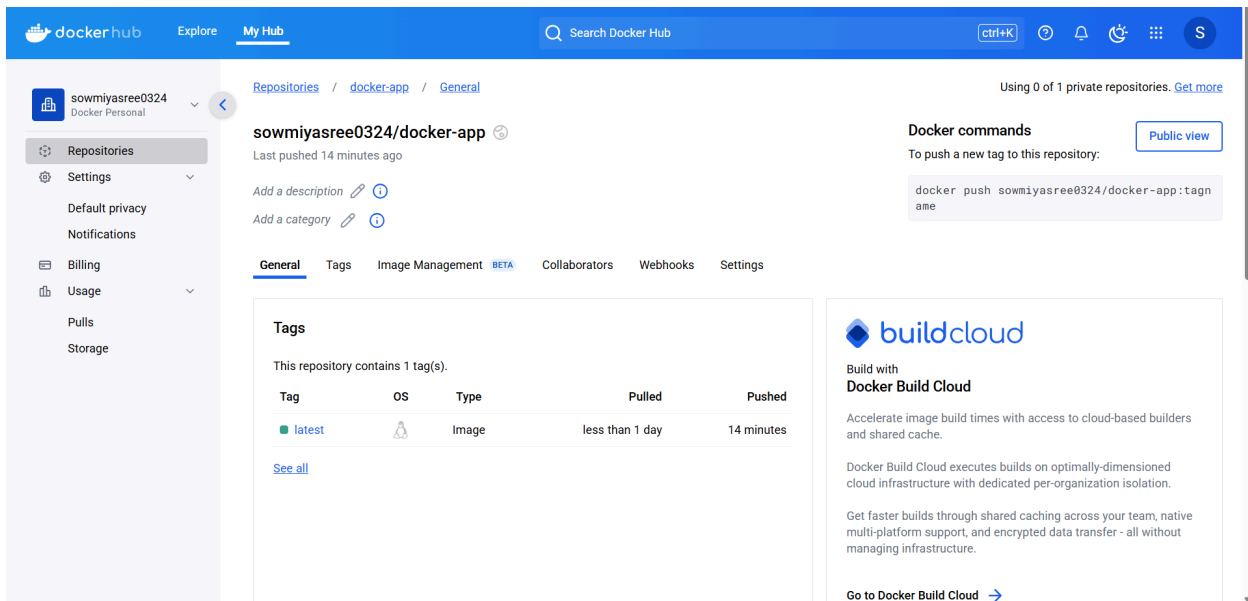
Step 22 :
Move to app.docker.com



The screenshot shows the Docker Hub 'My Hub' page for user 'sowmiyasree0324'. The left sidebar contains navigation links: Repositories, Settings, Default privacy, Notifications, Billing, Usage, Pulls, and Storage. The main content area is titled 'Repositories' and shows a table of repositories within the 'sowmiyasree0324' namespace. The table has columns for Name, Last Pushed, Contains, Visibility, and Scout. One repository is listed: 'sowmiyasree0324/docker-app', pushed 14 minutes ago, containing an image, with public visibility and an inactive scout.

Name	Last Pushed	Contains	Visibility	Scout
sowmiyasree0324/docker-app	14 minutes ago	IMAGE	Public	Inactive

Step 23 :
In docker our file will display like this



The screenshot shows the Docker Hub repository page for 'sowmiyasree0324/docker-app'. The left sidebar is the same as in Step 22. The main content area shows the repository details, including the name 'sowmiyasree0324/docker-app', last pushed 14 minutes ago, and options to add a description or category. The 'Tags' section shows one tag: 'latest', pushed 14 minutes ago. The right sidebar contains 'Docker commands' and a 'Public view' button. A 'buildcloud' advertisement is also visible.

Tag	OS	Type	Pulled	Pushed
latest		Image	less than 1 day	14 minutes