

Git Practical

```
ditiss@ubuntu:~$ ip a
1: lo: <LOOPBACK,UP,LOWER_UP> mtu 65536 qdisc noqueue state UNKNOWN group default qlen 1000
    link/loopback 00:00:00:00:00:00 brd 00:00:00:00:00:00
    inet 127.0.0.1/8 scope host lo
        valid_lft forever preferred_lft forever
    inet6 ::1/128 scope host
        valid_lft forever preferred_lft forever
2: ens33: <BROADCAST,MULTICAST,UP,LOWER_UP> mtu 1500 qdisc fq_codel state UP group default qlen 1000
    link/ether 00:0c:29:64:e1:b1 brd ff:ff:ff:ff:ff:ff
    altname enp2s1
    inet 192.168.10.138/24 brd 192.168.10.255 scope global dynamic noprefixroute ens33
        valid_lft 1637sec preferred_lft 1637sec
    inet6 fe80::99ad:64a9:3a94:df35/64 scope link noprefixroute
        valid_lft forever preferred_lft forever
ditiss@ubuntu:~$
```

first check git is install or not

#which git

then update the machine

#sudo apt-get update

```
root@ubuntu:~# which git
root@ubuntu:~# apt-get update
Hit:1 http://us.archive.ubuntu.com/ubuntu focal InRelease
Hit:2 http://security.ubuntu.com/ubuntu focal-security InRelease
Get:3 http://us.archive.ubuntu.com/ubuntu focal-updates InRelease [114 kB]
Hit:4 http://us.archive.ubuntu.com/ubuntu focal-backports InRelease
Fetched 114 kB in 2s (60.8 kB/s)
Reading package lists... Done
root@ubuntu:~#
```

Install git by using this command

#sudo apt-get install git

```
root@ubuntu:~# apt-get install git
Reading package lists... Done
Building dependency tree
Reading state information... Done
The following package was automatically installed and is no longer required:
  libfwupdplugin1
Use 'apt autoremove' to remove it.
The following additional packages will be installed:
  git-man liberror-perl
Suggested packages:
  git-daemon-run | git-daemon-sysvinit git-doc git-el git-email git-gui gitk gitweb git-cvs
  git-mediawiki git-svn
The following NEW packages will be installed:
  git git-man liberror-perl
0 upgraded, 3 newly installed, 0 to remove and 424 not upgraded.
Need to get 5,518 kB of archives.
After this operation, 38.7 MB of additional disk space will be used.
Do you want to continue? [Y/n] y
```

After installing git check is it install or not

```
root@ubuntu:~# which git
/usr/bin/git
root@ubuntu:~# ls
snap
root@ubuntu:~#
```

Create 1 folder → go to that folder

#git init initialize an existing directory as a Git repository

```
root@ubuntu:~/dac
root@ubuntu:~# which git
/usr/bin/git
root@ubuntu:~# ls
snap
root@ubuntu:~# mkdir dac/
root@ubuntu:~# ls
dac  snap
root@ubuntu:~# cd dac/
root@ubuntu:~/dac# ls
root@ubuntu:~/dac# git init
Initialized empty Git repository in /root/dac/.git/
root@ubuntu:~/dac# ls
root@ubuntu:~/dac#
```

Create on file → and write some content in that file → save the file

```
GNU nano 4.8          abc.txt          Modified
hello
This is my first commit
```

| | | | | | |
|-------------|--------------|-------------|---------------|-------------|---------------|
| ^G Get Help | ^O Write Out | ^W Where Is | ^K Cut Text | ^J Justify | ^C Cur Pos |
| ^X Exit | ^R Read File | ^_ Replace | ^U Paste Text | ^T To Spell | ^_ Go To Line |

Check the git status→write now the status of that file is untracked

git status→ show modified files in working directory, staged for your next commit

```
root@ubuntu: ~/dac
root@ubuntu:~/dac# nano abc.txt
root@ubuntu:~/dac# ls
abc.txt
root@ubuntu:~/dac# cat abc.txt
hello
This is my first commit
root@ubuntu:~/dac# git status
On branch master

No commits yet

Untracked files:
  (use "git add <file>..." to include in what will be committed)
        abc.txt

nothing added to commit but untracked files present (use "git add" to track)
root@ubuntu:~/dac#
```

To track file, use command

#git add <file name>

then check file status

#git status

now the status is tracked and file is in git radar

```
root@ubuntu:~/dac
root@ubuntu:~/dac# git add abc.txt
root@ubuntu:~/dac# git status
On branch master

No commits yet

Changes to be committed:
  (use "git rm --cached <file>..." to unstage)
        new file:   abc.txt

root@ubuntu:~/dac#
```

#git commit -m "[descriptive message]"

commit your staged content as a new commit snapshot

#git config --global user.name "Your Name" → Set the name that will be attached to your commits and tags.

#git config --global user.email "you@example.com" → Set the e-mail address that will be attached to your commits and tags.

```
root@ubuntu: ~/dac
root@ubuntu:~/dac# git add abc.txt
root@ubuntu:~/dac# git status
On branch master

No commits yet

Changes to be committed:
  (use "git rm --cached <file>..." to unstage)
        new file:   abc.txt

root@ubuntu:~/dac# git commit -m "first" abc.txt

*** 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: unable to auto-detect email address (got 'root@ubuntu.(none)')
root@ubuntu:~/dac#
```

```
root@ubuntu:~/dac
root@ubuntu:~/dac# git status
On branch master

No commits yet

Changes to be committed:
  (use "git rm --cached <file>..." to unstage)
        new file:   abc.txt

root@ubuntu:~/dac# git commit -m "first" abc.txt

*** Please tell me who you are.

Run

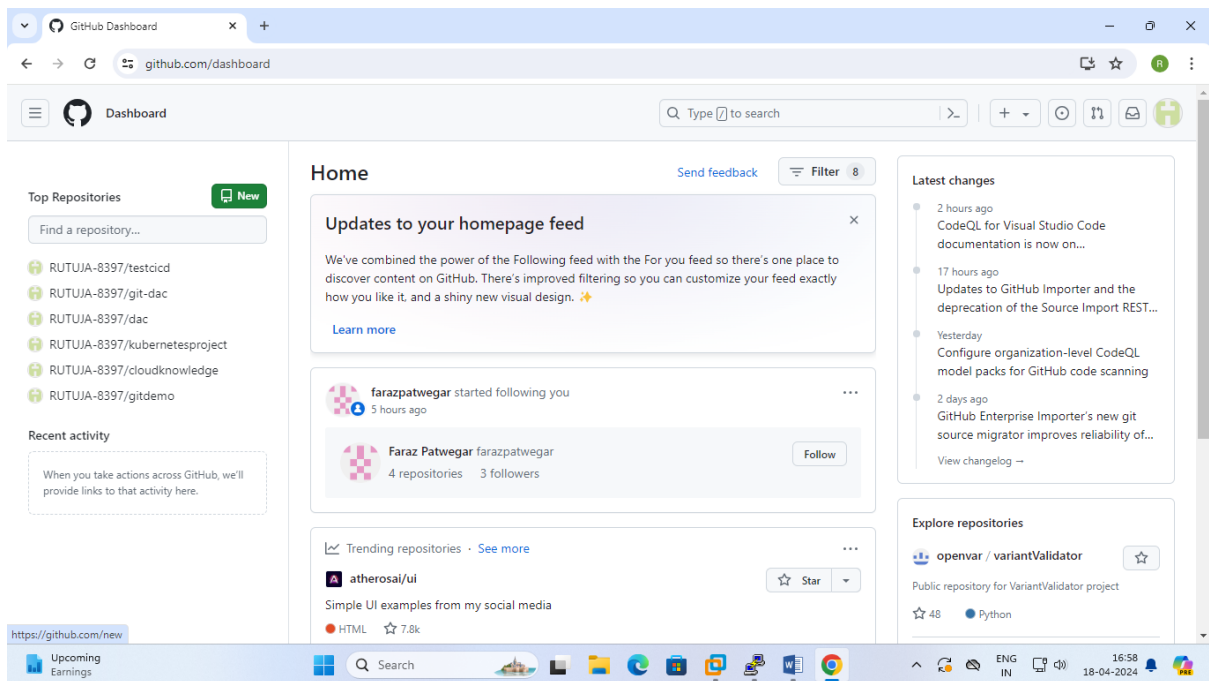
  git config --global user.email "you@example.com"
  git config --global user.name "Your Name"

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

fatal: unable to auto-detect email address (got 'root@ubuntu.(none)')
root@ubuntu:~/dac# git config --global user.email "user@gmail.com"
root@ubuntu:~/dac# git config --global user.name "user1"
root@ubuntu:~/dac#
```

```
root@ubuntu: ~/dac
root@ubuntu:~/dac# git commit -m "first" abc.txt
[master (root-commit) fa8ccf1] first
1 file changed, 2 insertions(+)
create mode 100644 abc.txt
root@ubuntu:~/dac#
```

Go to github→click on new→create new repository



New repository

github.com/new

New repository

Type to search

Create a new repository

A repository contains all project files, including the revision history. Already have a project repository elsewhere? [Import a repository](#).

Required fields are marked with an asterisk (*).

Owner *

Repository name *

RUTUJA-8397

gitrepo

gitrepo is available.

Great repository names are short and memorable. Need inspiration? How about [cuddly-guide](#)?

Description (optional)

☒ Public

Anyone on the internet can see this repository. You choose who can commit.

☐ Private

You choose who can see and commit to this repository.

Initialize this repository with:

☐ Add a README file

This is where you can write a long description for your project. [Learn more about READMEs](#).

Upcoming Earnings

Search

16:58 18-04-2024

RUTUJA-8397 / gitrepo

Type to search

<> Code

Issues

Pull requests

Actions

Projects

Wiki

Security

Insights

Settings

gitrepo

Public

Pin

Unwatch 1

Fork 0

Star 0

Set up GitHub Copilot

Use GitHub's AI pair programmer to autocomplete suggestions as you code.

Get started with GitHub Copilot

Add collaborators to this repository

Search for people using their GitHub username or email address.

Invite collaborators

Quick setup — if you've done this kind of thing before

Set up in Desktop

 or

HTTPS

SSH

https://github.com/RUTUJA-8397/gitrepo.git

Get started by [creating a new file](#) or [uploading an existing file](#). We recommend every repository include a [README](#), [LICENSE](#), and [.gitignore](#).

...or create a new repository on the command line

```
echo "# gitrepo" >> README.md
git init
git add README.md
```

Upcoming Earnings

Search

16:59 18-04-2024

RUTUJA-8397/gitrepo

github.com/RUTUJA-8397/gitrepo

Get started with GitHub Copilot

Invite collaborators

Quick setup — if you've done this kind of thing before

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https://github.com/RUTUJA-8397/gitrepo.git

Get started by [creating a new file](#) or [uploading an existing file](#). We recommend every repository include a [README](#), [LICENSE](#), and [.gitignore](#).

...or create a new repository on the command line

```
echo "# gitrepo" >> README.md
git init
git add README.md
git commit -m "first commit"
git branch -M main
git remote add origin https://github.com/RUTUJA-8397/gitrepo.git
git push -u origin main
```

...or push an existing repository from the command line

```
git remote add origin https://github.com/RUTUJA-8397/gitrepo.git
git branch -M main
git push -u origin main
```

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Search

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16:59 18-04-2024

RUTUJA-8397/gitrepo

github.com/RUTUJA-8397/gitrepo

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https://github.com/RUTUJA-8397/gitrepo.git

Get started by [creating a new file](#) or [uploading an existing file](#). We recommend every repository include a [README](#), [LICENSE](#), and [.gitignore](#).

...or create a new repository on the command line

```
echo "# gitrepo" >> README.md
git init
git add README.md
git commit -m "first commit"
git branch -M main
git remote add origin https://github.com/RUTUJA-8397/gitrepo.git
git push -u origin main
```

...or push an existing repository from the command line

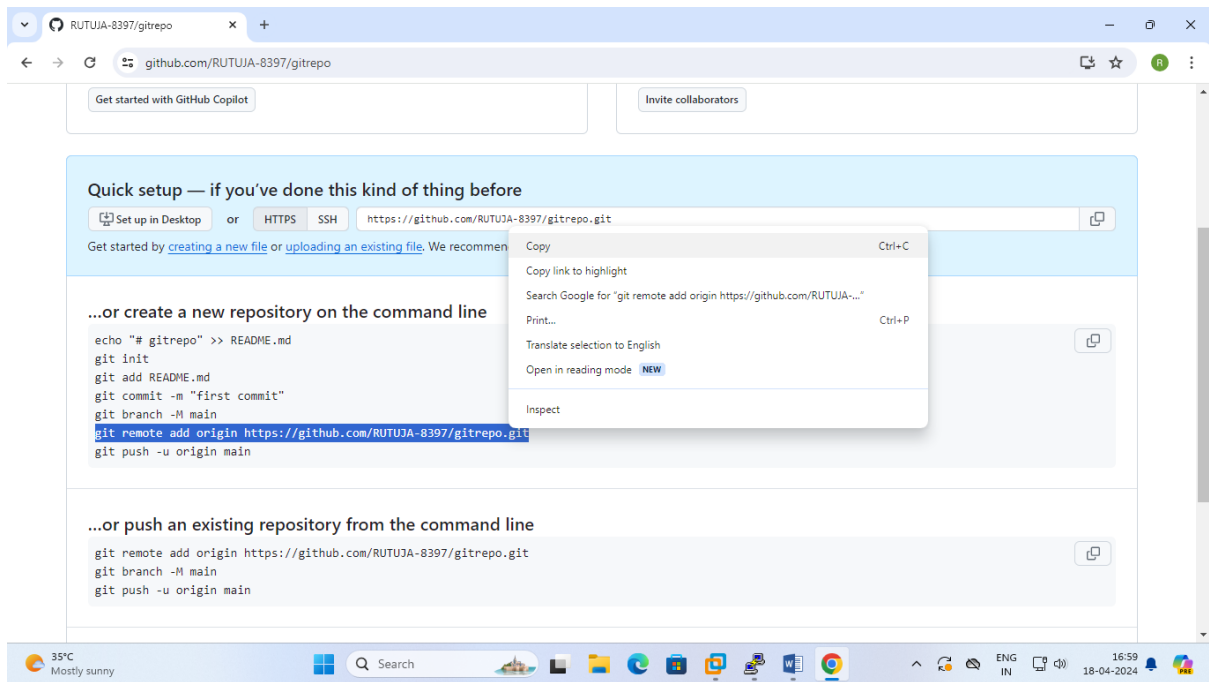
```
git remote add origin https://github.com/RUTUJA-8397/gitrepo.git
git branch -M main
git push -u origin main
```

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#git remote add origin <path of that repository/URL>

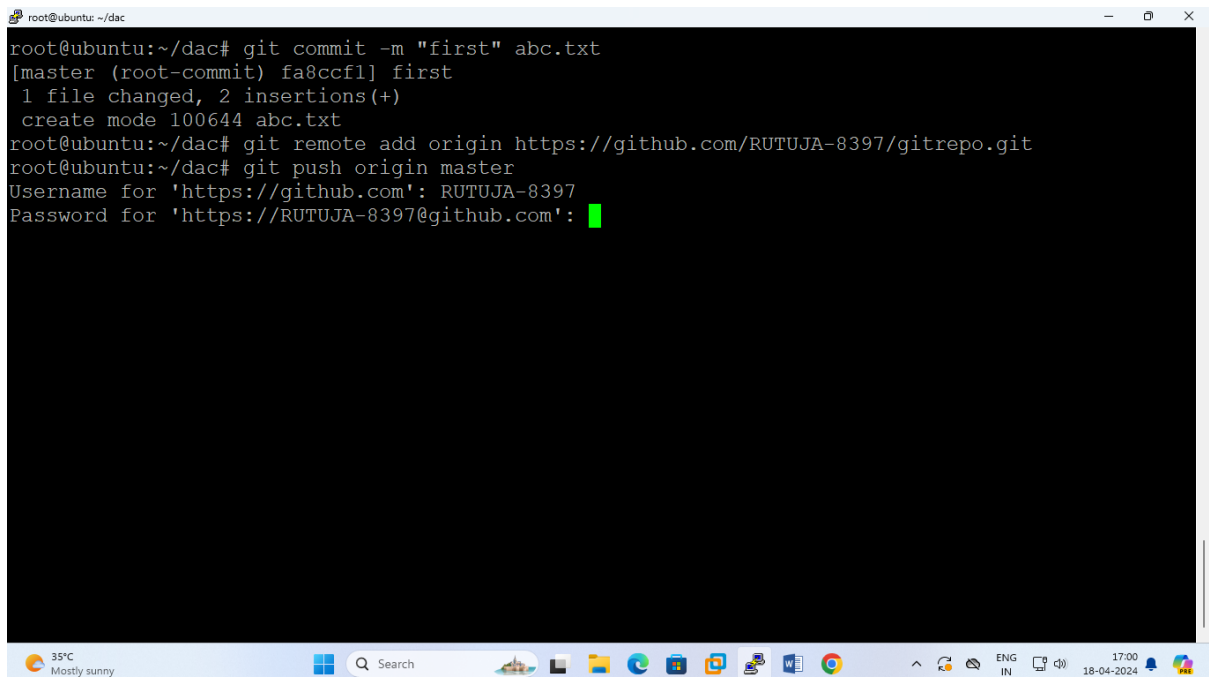
#git remote add [alias] [url]

add a git URL as an alias

#git pushPush local changes to the remote

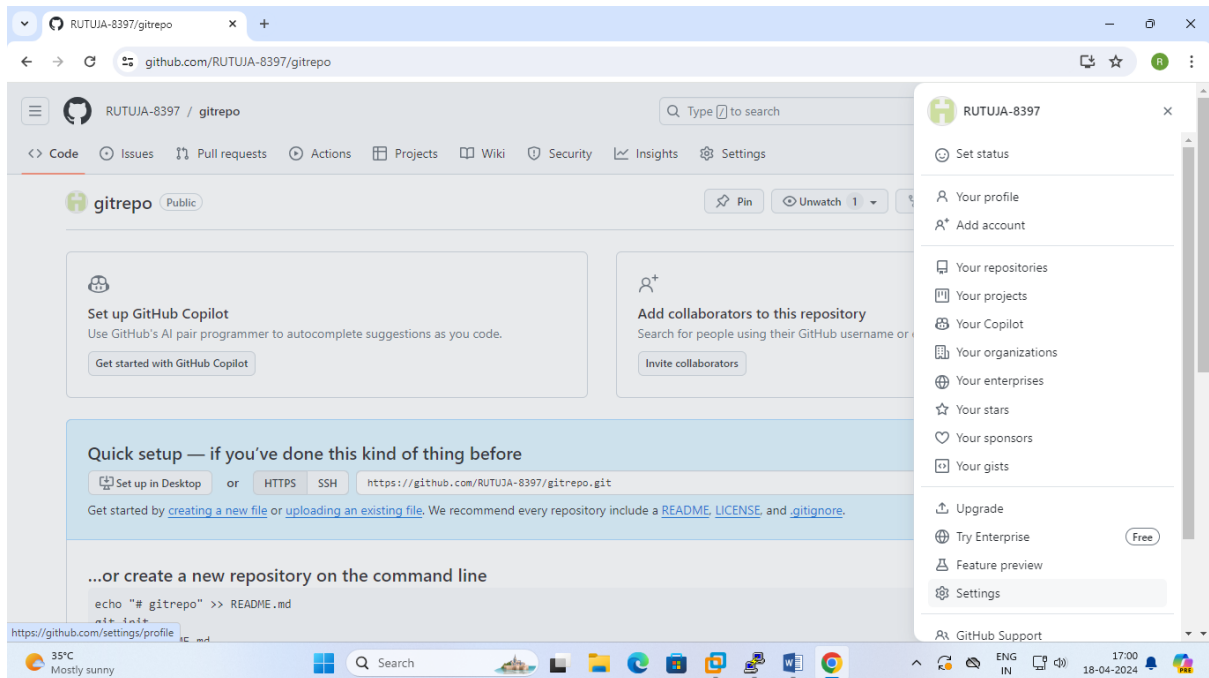
Username →github username

Password→create one token on github and paste it here.

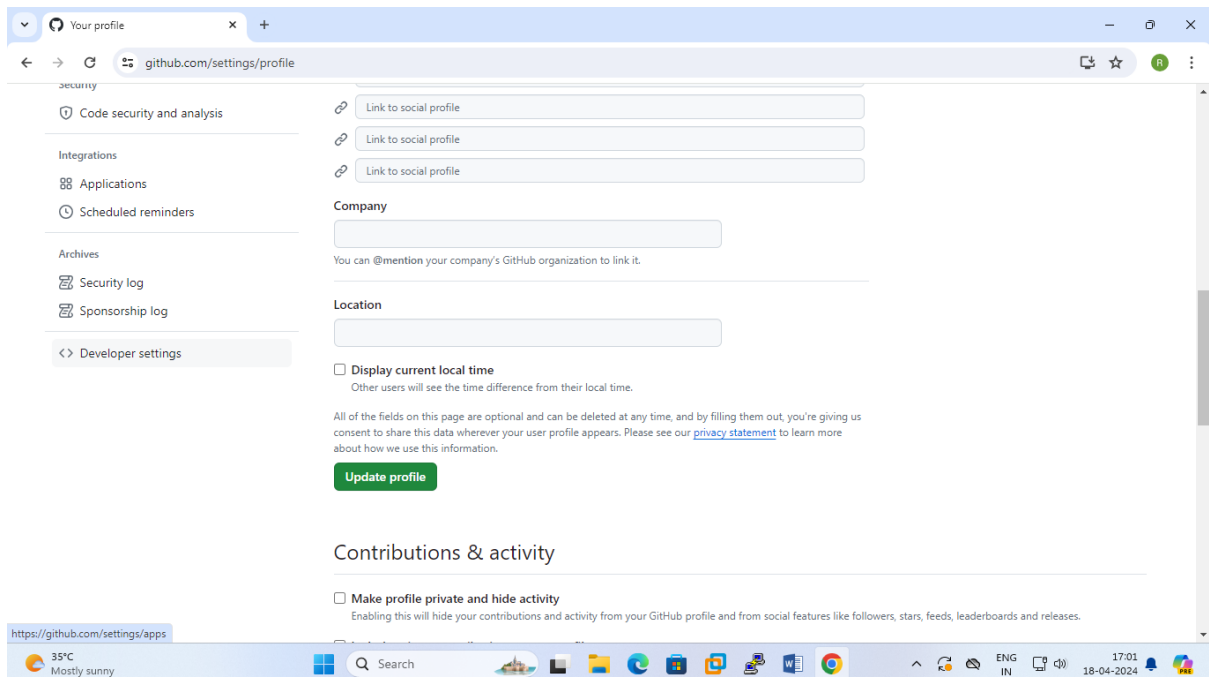


How to create token:

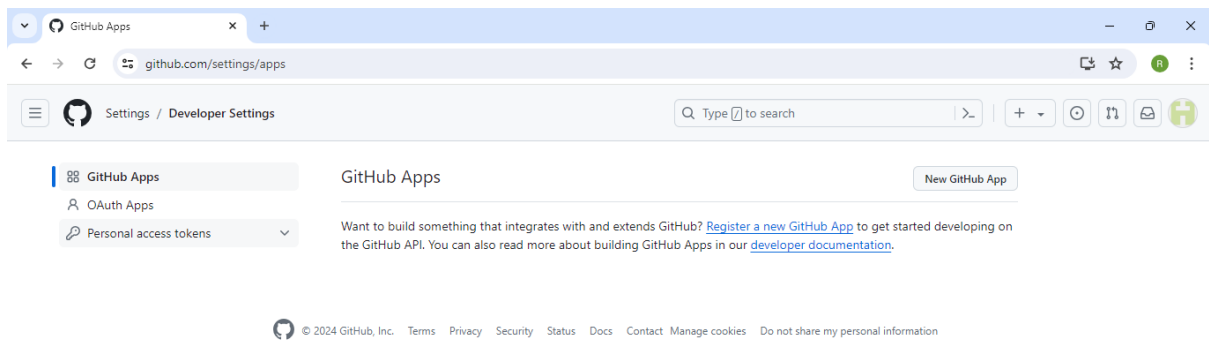
Go to github setting → click on settings



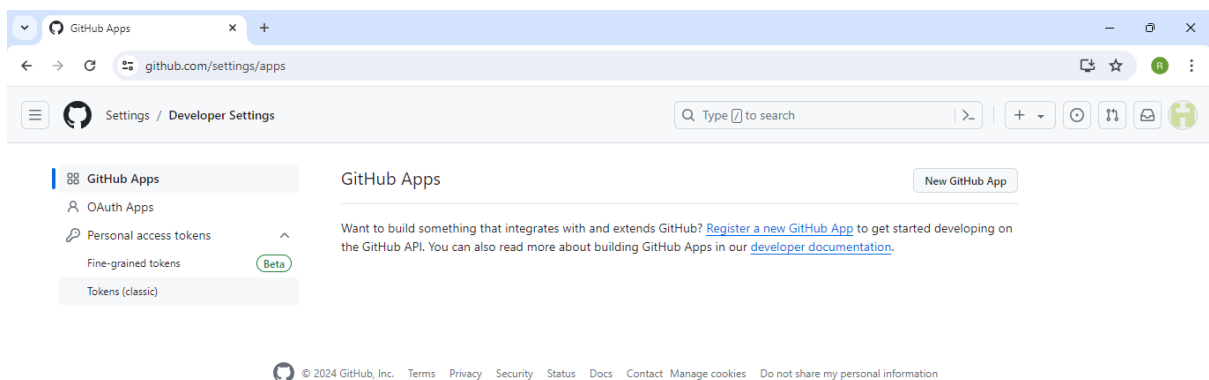
Click on Developers settings



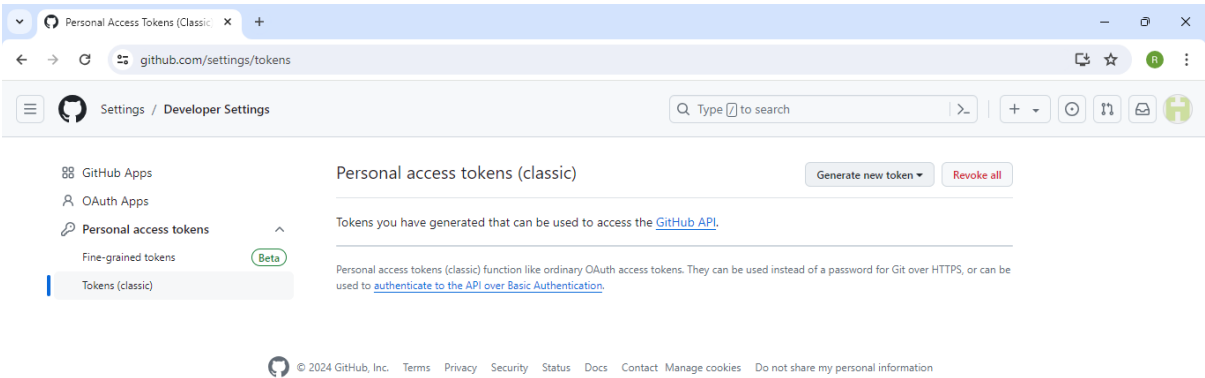
Click on personal access tokens



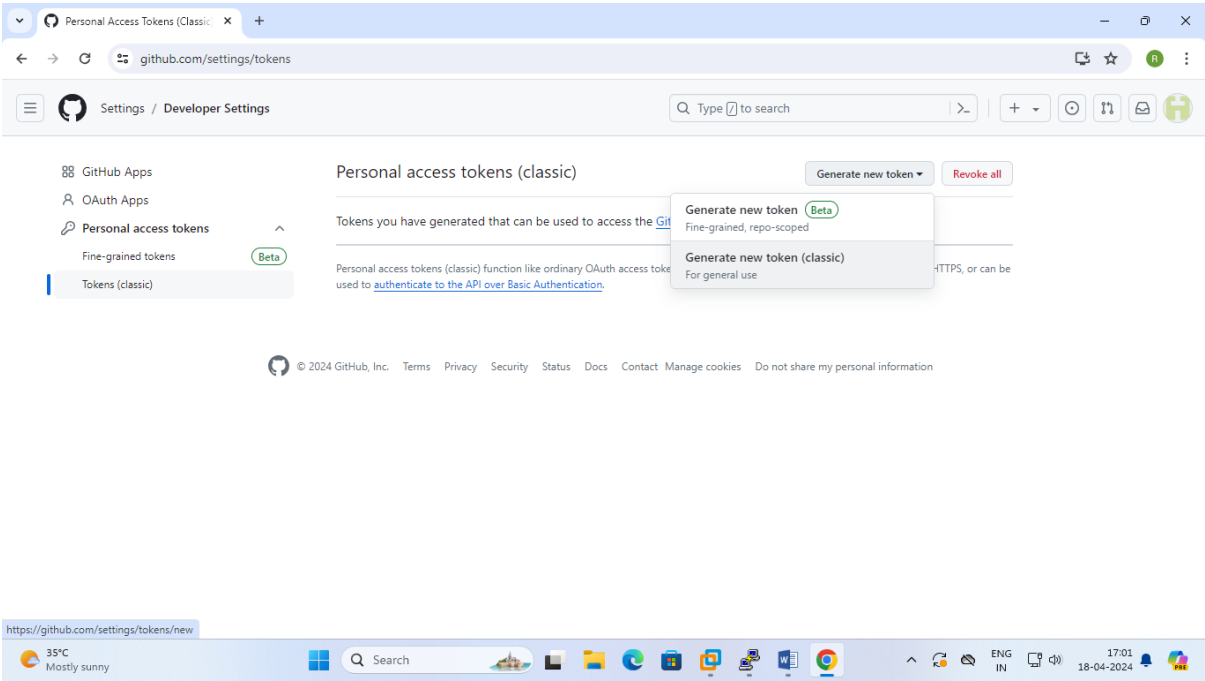
Select token (classic)



Click on generate new token



Click on generate new token (classic)



New Personal Access Token (Classic) x +

github.com/settings/tokens/new

GitHub Apps

OAuth Apps

Personal access tokens

Fine-grained tokens

Tokens (classic)

New personal access token (classic)

Personal access tokens (classic) function like ordinary OAuth access tokens. They can be used instead of a password for Git over HTTPS, or can be used to [authenticate to the API over Basic Authentication](#).

Note

GIT TOKEN

What's this token for?

Expiration

30 days

The token will expire on Sat, May 18 2024

Select scopes

Scopes define the access for personal tokens. [Read more about OAuth scopes](#).

☒ repo

Full control of private repositories

☒ repo:status

Access commit status

☒ repo_deployment

Access deployment status

☒ public_repo

Access public repositories

☒ repo:invite

Access repository invitations

☒ security_events

Read and write security events

☐ workflow

Update GitHub Action workflows

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17:02 18-04-2024

New Personal Access Token (Classic) x +

github.com/settings/tokens/new

| | |
|--|---|
| <input type="checkbox"/> write:public_key | Write user public keys |
| <input type="checkbox"/> read:public_key | Read user public keys |
| <input type="checkbox"/> admin:repo_hook | Full control of repository hooks |
| <input type="checkbox"/> write:repo_hook | Write repository hooks |
| <input type="checkbox"/> read:repo_hook | Read repository hooks |
| <input type="checkbox"/> admin:org_hook | Full control of organization hooks |
| <input type="checkbox"/> gist | Create gists |
| <input type="checkbox"/> notifications | Access notifications |
| <input checked="" type="checkbox"/> user | Update ALL user data |
| <input checked="" type="checkbox"/> read:user | Read ALL user profile data |
| <input checked="" type="checkbox"/> user:email | Access user email addresses (read-only) |
| <input checked="" type="checkbox"/> user:follow | Follow and unfollow users |
| <input type="checkbox"/> delete_repo | Delete repositories |
| <input type="checkbox"/> write:discussion | Read and write team discussions |
| <input type="checkbox"/> read:discussion | Read team discussions |
| <input type="checkbox"/> admin:enterprise | Full control of enterprises |
| <input type="checkbox"/> manage_runners:enterprise | Manage enterprise runners and runner groups |
| <input type="checkbox"/> manage_billing:enterprise | Read and write enterprise billing data |
| <input type="checkbox"/> read:enterprise | Read enterprise profile data |

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Search

ENG IN

17:02 18-04-2024

Personal Access Tokens (Classic) x +

github.com/settings/tokens

Settings / Developer Settings

Some of the scopes you've selected are included in other scopes. Only the minimum set of necessary scopes has been saved.

GitHub Apps
OAuth Apps
Personal access tokens
Fine-grained tokens (Beta)
Tokens (classic)

Personal access tokens (classic)

Generate new token Revoke all

Tokens you have generated that can be used to access the [GitHub API](#).

Make sure to copy your personal access token now. You won't be able to see it again!

ghp_sTkdgM61eUgh7BfQrQKFFH5UZTrDh23287QL

Delete

Personal access tokens (classic) function like ordinary OAuth access tokens. They can be used instead of a password for Git over HTTPS, or can be used to [authenticate to the API over Basic Authentication](#).

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Search

root@ubuntu: ~/dac

```
root@ubuntu:~/dac# git push origin master
Username for 'https://github.com': RUTUJA-8397
Password for 'https://RUTUJA-8397@github.com':
Enumerating objects: 3, done.
Counting objects: 100% (3/3), done.
Writing objects: 100% (3/3), 227 bytes | 113.00 KiB/s, done.
Total 3 (delta 0), reused 0 (delta 0)
To https://github.com/RUTUJA-8397/gitrepo.git
 * [new branch]      master -> master
root@ubuntu:~/dac#
```

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Search

17:05 18-04-2024

Web browser window showing the GitHub repository page for `RUTUJA-8397 / gitrepo`. The page displays the repository name, a search bar, and navigation links (Code, Issues, Pull requests, Actions, Projects, Wiki, Security, Insights, Settings). The repository is public and has 1 branch (master) and 0 tags. The commit history shows a single commit by `server5056` titled "first" with the file `abc.txt` added 13 minutes ago. The README section is empty, with a prompt to "Add a README". The right sidebar shows repository statistics: 0 stars, 1 watching, 0 forks, and no releases or packages published.

Web browser window showing the file view for `gitrepo/abc.txt` in the repository `RUTUJA-8397 / gitrepo`. The file is located at `gitrepo/blob/master/abc.txt`. The file content is displayed as follows:

```
1 hello
2 This is my first commit
```

The file is 30 bytes and was committed by `server5056` 13 minutes ago. The commit message is "first". The file is currently selected in the "Files" view on the left sidebar.