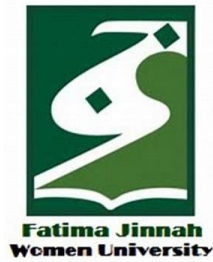

CLOUD COMPUTING
ASSIGNMENT: 01



Submitted To:
Engr. Waqas Salim

Submitted By:
Komal Kashif
BSE V-A
2023-BSE-031

TASK 1: RUN GITEA IN CODESPACE AND CREATE AN INITIAL REPO

1. Set up Gitea:

Run Gitea inside Codespace:

```
@KomalKashif → /workspaces/Assignment (main) $ docker run -d --name gitea -p 3000:3000 gitea/gitea:latest
e7ea2b7110b2: Pull complete
dc71ac9fe925: Pull complete
a4ebd224fde1: Pull complete
3b7dba00267e: Pull complete
Digest: sha256:2edc102cbb636ae1ddac5fa0c715aa5b03079dee13ac6800b2cef6d4e912e718
Status: Downloaded newer image for gitea/gitea:latest
bb4d3d49d57b940f990f8fbbf8e62b580ad43cf914de1ad04169b8aa67e7f726
```

Forward the port to access Gitea:

Port	Forwarded Add...	Running Process	Visibility	Origin
3000	https://special-b...	/usr/bin/docker-...	Private	Auto Forwarded

Set up Gitea in the browser:

Initial Configuration

If you run Gitea inside Docker, please read the [documentation](#) before changing any settings.

Database Settings

Gitea requires MySQL, PostgreSQL, MSSQL, SQLite3 or TiDB (MySQL protocol).

Database Type *

Path *
File path for the SQLite3 database.
Enter an absolute path if you run Gitea as a service.

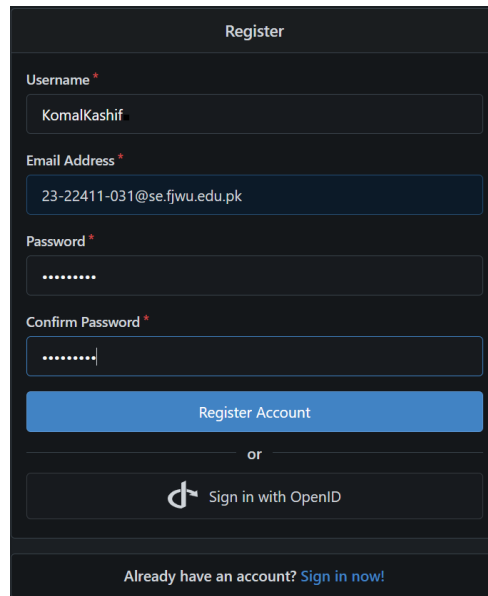
General Settings

Site Title *
You can enter your company name here.

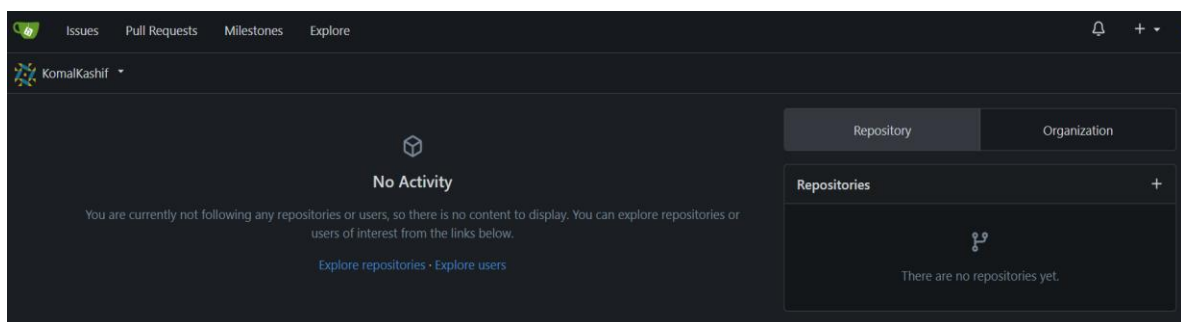
Repository Root Path *
Remote Git repositories will be saved to this directory.

Git LFS Root Path
Files tracked by Git LFS will be stored in this directory. Leave empty to disable.

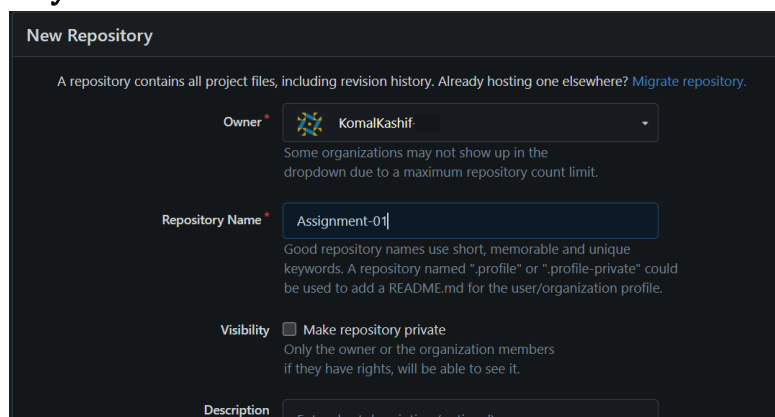
Create an admin account:



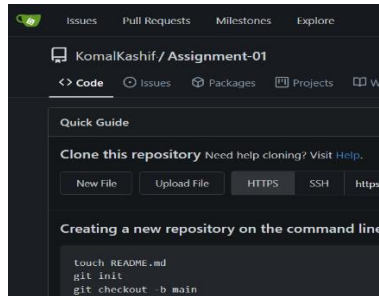
The 'Register' form is a dark-themed interface for creating a new account. It includes fields for Username (filled with 'KomalKashif'), Email Address (filled with '23-22411-031@se.fjwu.edu.pk'), Password (masked with dots), and Confirm Password (also masked). A blue 'Register Account' button is positioned below the password fields. Below this button is a horizontal separator with the word 'or' in the center, followed by a 'Sign in with OpenID' button featuring the OpenID logo. At the bottom, a link reads 'Already have an account? Sign in now!'.



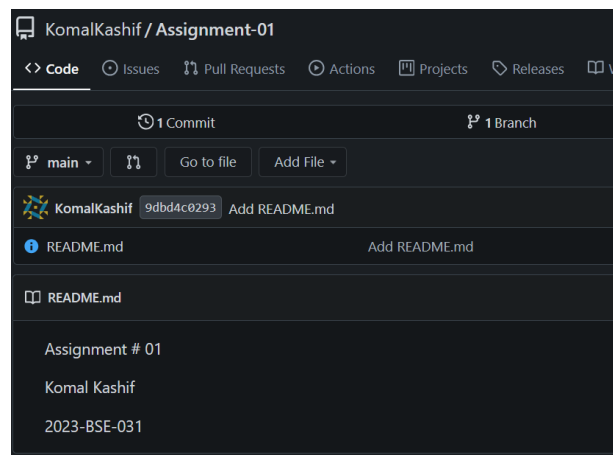
2. Create a Repository:



The 'New Repository' form is a dark-themed interface for creating a new repository. It includes a description at the top: 'A repository contains all project files, including revision history. Already hosting one elsewhere? Migrate repository.' Below this are four fields: 'Owner' (a dropdown menu showing 'KomalKashif'), 'Repository Name' (a text input field containing 'Assignment-01'), 'Visibility' (a checkbox labeled 'Make repository private' which is currently unchecked), and 'Description' (a text input field with the placeholder 'Enter short description (optional)').

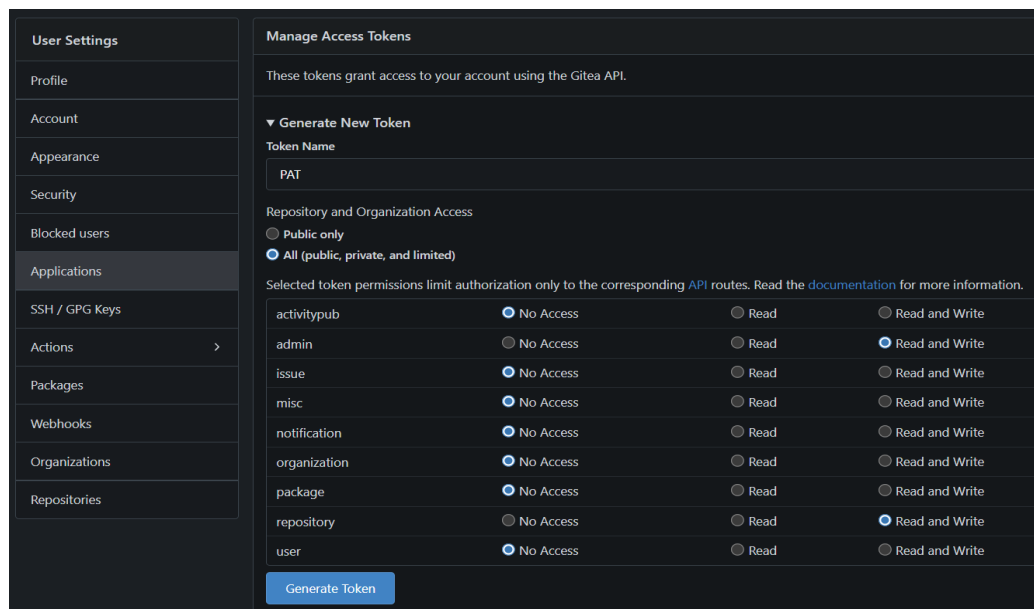


Now, add a **README.md** listing student names & roll numbers.



3. Generate a Personal Access Token (PAT) in Gitea

Open Settings → Applications to create token:




Your new token has been generated. Copy it now as it will not be shown again.

1a6fc8d9b488ffe0426c69cf0524ac39d9c0d8f8

Manage Access Tokens

These tokens grant access to your account using the Gitea API.

 **PAT**
Added on Oct 19, 2025 — ⓘ No recent activity Delete

► Generate New Token

Authorized OAuth2 Applications

You have granted access to your personal Gitea account to these third-party applications. Please revoke access for applications you no longer need.

Now, open Git Bash:

```
Dell@DESKTOP-OPCO1NF MINGW64 ~/Downloads/CC_Komalkashif_031
$ git init
Initialized empty Git repository in C:/Users/Dell/Downloads/CC_Komalkashif_031/.git/

Dell@DESKTOP-OPCO1NF MINGW64 ~/Downloads/CC_Komalkashif_031 (master)
$ git remote add gitea https://komalkashif:1a6fc8d9b488ffe0426c69cf0524ac39d9c0d8f8@gitea.com/Komalkashif/Assignment-01.git

Dell@DESKTOP-OPCO1NF MINGW64 ~/Downloads/CC_Komalkashif_031 (master)
$ git pull
warning: auto-detection of host provider took too long (>2000ms)
warning: see https://aka.ms/gcm/autodetect for more information.
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)
Unpacking objects: 100% (3/3), 250 bytes | 22.00 KiB/s, done.
From https://gitea.com/Komalkashif/Assignment-01
* [new branch]      main      -> gitea/main
There is no tracking information for the current branch.
Please specify which branch you want to merge with.
See git-pull(1) for details.

    git pull <remote> <branch>

If you wish to set tracking information for this branch you can do so with:

    git branch --set-upstream-to=gitea/<branch> master
```

```

De1l@DESKTOP-OPCOINF MINGW64 ~/Downloads/CC_Komalkashif_031 (master)
$ git branch -M main

De1l@DESKTOP-OPCOINF MINGW64 ~/Downloads/CC_Komalkashif_031 (main)
$ git pull gitea main
warning: auto-detection of host provider took too long (>2000ms)
warning: see https://aka.ms/gcm/autodetect for more information.
From https://gitea.com/Komalkashif/Assignment-01
 * branch          main          -> FETCH_HEAD

De1l@DESKTOP-OPCOINF MINGW64 ~/Downloads/CC_Komalkashif_031 (main)
$ ls
README.md

De1l@DESKTOP-OPCOINF MINGW64 ~/Downloads/CC_Komalkashif_031 (main)
$ cat README.md
Assignment # 01

Komal Kashif

2023-BSE-031

De1l@DESKTOP-OPCOINF MINGW64 ~/Downloads/CC_Komalkashif_031 (main)
$ echo "    BSE- VA" >> README.md

De1l@DESKTOP-OPCOINF MINGW64 ~/Downloads/CC_Komalkashif_031 (main)
$ cat README.md
Assignment # 01

Komal Kashif

2023-BSE-031
    BSE- VA

```

```

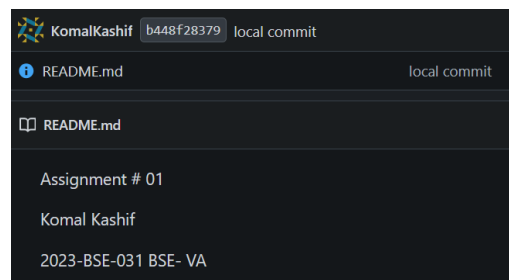
De1l@DESKTOP-OPCOINF MINGW64 ~/Downloads/CC_Komalkashif_031 (main)
$ git add .
warning: in the working copy of 'README.md', LF will be replaced by CRLF the next time Git touches it

De1l@DESKTOP-OPCOINF MINGW64 ~/Downloads/CC_Komalkashif_031 (main)
$ git commit -m "local commit"
[main b448f28] local commit
1 file changed, 1 insertion(+)

De1l@DESKTOP-OPCOINF MINGW64 ~/Downloads/CC_Komalkashif_031 (main)
$ git push -u gitea main
warning: auto-detection of host provider took too long (>2000ms)
warning: see https://aka.ms/gcm/autodetect for more information.
Enumerating objects: 5, done.
Counting objects: 100% (5/5), done.
Delta compression using up to 4 threads
Compressing objects: 100% (2/2), done.
Writing objects: 100% (3/3), 303 bytes | 151.00 KiB/s, done.
Total 3 (delta 0), reused 0 (delta 0), pack-reused 0 (from 0)
remote: . Processing 1 references
remote: Processed 1 references in total
To https://gitea.com/Komalkashif/Assignment-01.git
    9dbd4c0..b448f28  main -> main
branch 'main' set up to track 'gitea/main'.

```

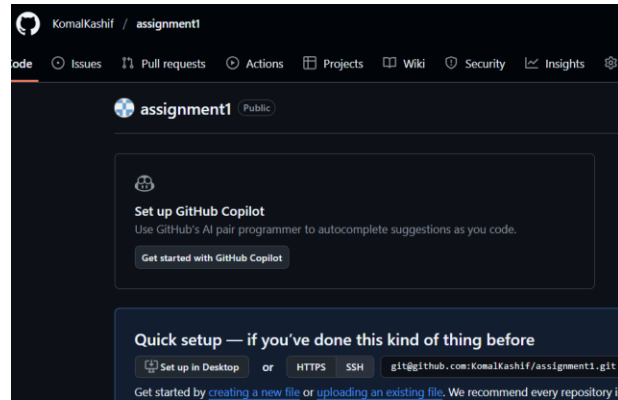
Go back to Gitea:



So the change we made locally also appeared here in the repository.

TASK 2: MIRROR README.MD FROM GITEA TO GITHUB

1. Continue Working with Your Existing Repository
2. Create Github repository named assignment1

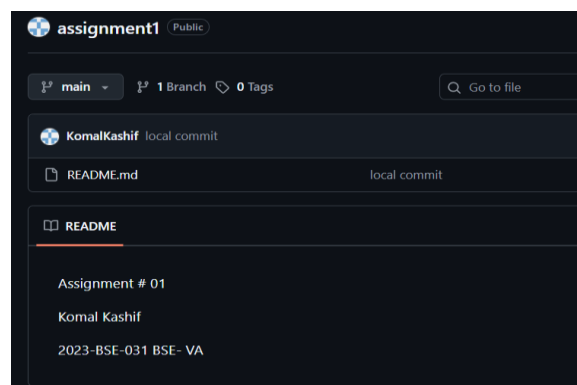


3. Add GitHub as a Second Remote.
4. Push the README.md File to GitHub.
5. Verify Remotes: Run git remote -v and ensure both remotes (gitea and github) are listed.

```
De11@DESKTOP-OPC01NF MINGW64 ~/Downloads/CC_Komalkashif_031 (main)
$ git remote add github https://github.com/Komalkashif/assignment1.git

De11@DESKTOP-OPC01NF MINGW64 ~/Downloads/CC_Komalkashif_031 (main)
$ git push github main
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% (6/6), 541 bytes | 108.00 KiB/s, done.
Total 6 (delta 0), reused 0 (delta 0), pack-reused 0 (from 0)
To https://github.com/Komalkashif/assignment1.git
* [new branch]      main -> main

De11@DESKTOP-OPC01NF MINGW64 ~/Downloads/CC_Komalkashif_031 (main)
$ git remote -v
gitea      https://Komalkashif:1a6fc8d9b488ffe0426c69cf0524ac39d9c0d8f8@gitea.com/Komalkashif/Assignment-01.git (fetch)
gitea      https://Komalkashif:1a6fc8d9b488ffe0426c69cf0524ac39d9c0d8f8@gitea.com/Komalkashif/Assignment-01.git (push)
github     https://github.com/Komalkashif/assignment1.git (fetch)
github     https://github.com/Komalkashif/assignment1.git (push)
```



TASK 3: USE GIT LFS FOR LARGE FILES

1. Install Git LFS:

Set up Git LFS in your local repository.

```
De11@DESKTOP-OPC01NF MINGW64 ~/Downloads/CC_Koma1Kashif_031 (main)
$ git lfs install
Updated Git hooks.
Git LFS initialized.

De11@DESKTOP-OPC01NF MINGW64 ~/Downloads/CC_Koma1Kashif_031 (main)
$ git lfs version
git-lfs/3.7.0 (GitHub; windows amd64; go 1.24.4; git 92dddf56)
```

2. Add Large Files:

Add **three files larger than 100 MB** each to your repository. Track them using Git LFS: `git lfs track "*.ext"`

Replace `.ext` with the appropriate file extension.

```
De11@DESKTOP-OPC01NF MINGW64 ~/Downloads/CC_Koma1Kashif_031 (main)
$ # x (~105 MB)
base_text="CYBERSECURITY INCIDENT REPORT: Summary of attacks, alerts, and response strategies."
yes "$base_text" | head -c 110100480 > x.txt

# y (~110 MB)
base_text="DIGITAL FORENSICS ANALYSIS: Evidence collection, timeline reconstruction, and log correlation."
yes "$base_text" | head -c 115343360 > y.txt

# z (~115 MB)
base_text="NETWORK MONITORING RECORDS: Firewall logs, connection attempts, and anomaly detection results."
yes "$base_text" | head -c 120586240 > z.txt

De11@DESKTOP-OPC01NF MINGW64 ~/Downloads/CC_Koma1Kashif_031 (main)
$ git lfs track "*.txt"
Tracking "*.txt"

De11@DESKTOP-OPC01NF MINGW64 ~/Downloads/CC_Koma1Kashif_031 (main)
$ git add .gitattributes
```

3. Reference in Assignment Repo:

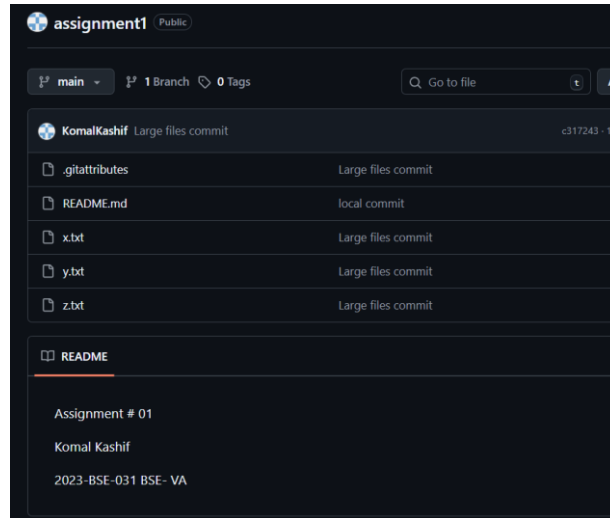
Commit and push these large files to your GitHub assignment 1 repo.

```
De11@DESKTOP-OPC01NF MINGW64 ~/Downloads/CC_Koma1Kashif_031 (main)
$ git add x.txt y.txt z.txt

De11@DESKTOP-OPC01NF MINGW64 ~/Downloads/CC_Koma1Kashif_031 (main)
$ git commit -m "Large files commit"
[main b615239] Large files commit
4 files changed, 10 insertions(+)
create mode 100644 .gitattributes
create mode 100644 x.txt
create mode 100644 y.txt
create mode 100644 z.txt

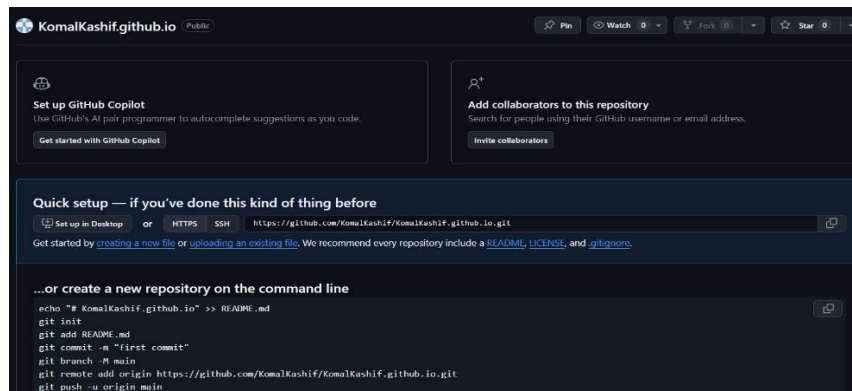
De11@DESKTOP-OPC01NF MINGW64 ~/Downloads/CC_Koma1Kashif_031 (main)
$ git commit -m "Large files commit"
```


Ensure the files are referenced correctly in your repository history.



TASK 4: CREATE A PORTFOLIO/CV WITH GITHUB PAGES

Go to GitHub and create a new repository named <your-username>.github.io. Make sure the repository is public.



Push the Files to GitHub

```
Dell@DESKTOP-OPCOINF MINGW64 ~
$ cd "C:\Users\Dell\Downloads\Lab 3\CV"

Dell@DESKTOP-OPCOINF MINGW64 ~/Downloads/Lab 3/CV
$ git init
Initialized empty Git repository in C:/Users/Dell/Downloads/Lab 3/CV/.git/

Dell@DESKTOP-OPCOINF MINGW64 ~/Downloads/Lab 3/CV (master)
$ git remote add origin git@github.com:KomalKashif/i

Dell@DESKTOP-OPCOINF MINGW64 ~/Downloads/Lab 3/CV (master)
$ git remote add origin git@github.com:KomalKashif/KomalKashif.github.io.git
```

```

Dell@DESKTOP-OPCOINF MINGW64 ~
$ cd "C:\Users\Dell\Downloads\Lab 3\CV"

Dell@DESKTOP-OPCOINF MINGW64 ~/Downloads/Lab 3/CV
$ git init
Initialized empty Git repository in C:/Users/Dell/Downloads/Lab 3/CV/.git/

Dell@DESKTOP-OPCOINF MINGW64 ~/Downloads/Lab 3/CV (master)
$ git remote add origin https://github.com/Komalkashif/Komalkashif.github.io.git

Dell@DESKTOP-OPCOINF MINGW64 ~/Downloads/Lab 3/CV (master)
$ git add .

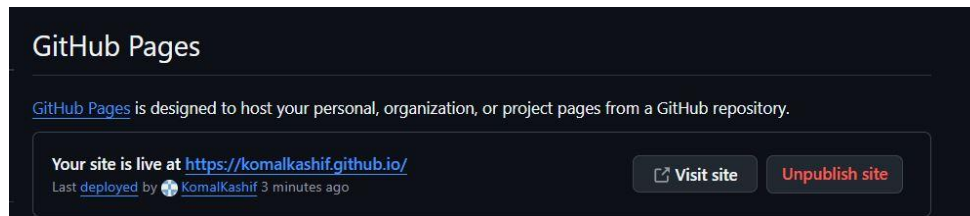
Dell@DESKTOP-OPCOINF MINGW64 ~/Downloads/Lab 3/CV (master)
$ git commit -m "Add portfolio site Github Pages"
On branch master
Your branch is up to date with 'origin/master'.

nothing to commit, working tree clean

Dell@DESKTOP-OPCOINF MINGW64 ~/Downloads/Lab 3/CV (master)
$ git push -u origin master
Enumerating objects: 4, done.
Counting objects: 100% (4/4), done.
Delta compression using up to 4 threads
Compressing objects: 100% (4/4), done.
Writing objects: 100% (4/4), 751.72 KiB | 15.99 MiB/s, done.
Total 4 (delta 0), reused 0 (delta 0), pack-reused 0 (from 0)
To https://github.com/Komalkashif/Komalkashif.github.io.git
 * [new branch]      master -> master
branch 'master' set up to track 'origin/master'.

```

Go to your repository on GitHub. Click Settings > Pages. Confirm that your site is published and see the link to your live site (e.g., <https://your-username.github.io>).



Visit Your Live Site

