

SCM

Another name of SCM :- "Version Control System"

Full Form of SCM :- Source Code Management

1. Challenges :-

- a. Collaboration
- b. Storing Version
- c. Restoring Previous Version
- d. Figure out the reason behind
- e. Backup

2. Benefits of using Version Control System(SCM) :-

- a. Breaking and Merging
- b. Traceability
- c. Version Comparison
- d. Support Developers Break Flow

3. Examples of SCM :-

- a. AWS(Amazon Web Services) code commit
- b. Big Bucket
- c. Git Lab
- d. Team(Microsoft Teams) Foundation Server

4. Site :-

- a. Git (git-scm.org)
- b. kaggle

Terms important for git dash:-

- 1. Encryption:- Encryption is the method by which information is converted into secret code that hides information's true meaning....

2. **Decryption:-** to change electronic information or signals that were stored, written, or sent in the form of a secret code back into a form that you can understand and use normally....

3. **Hashing:-** Hashing is the process of transforming any given key or a string of characters into another value....

4. **Digital Signature :-** A digital signature is an electronic, encrypted, stamp of authentication on digital information such as email messages, macros, or electronic documents....

5. **Public Key:-** a public key is a large numerical value that is used to encrypt data

6. **Private Key:-** The secret part of an asymmetric key pair that is typically used to digitally sign or decrypt data.

5. Commands of Git Bash :-

```
priya@priyanshuslove MINGW64 ~/OneDrive/Desktop/2210992103 (master)
$ git version
git version 2.39.1.windows.1
```

git config --global user.name "Priyank Mahajan"

```
Priyank Mahajan@LAPTOP-N9TRDI4Q MINGW64 ~ (master)
$ git config --global user.name
Priyank Mahjan
```

git config --user.email "priyank788mahajan@gmail.com"

```
Priyank Mahajan@LAPTOP-N9TRDI4Q MINGW64 ~ (master)
$ git config --global user.email
priyank788mahajan@gmail.com
```

git init

```
Priyank Mahajan@LAPTOP-N9TRDI4Q MINGW64 ~ (master)
$ git init
Reinitialized existing Git repository in C:/Users/Priyank Mahajan/.git/
```

git add hello.txt

```
Priyank Mahajan@LAPTOP-N9TRDI4Q MINGW64 ~/Desktop/2210992099 (master)
$ git add hello.txt
```

git status

```
Priyank Mahajan@LAPTOP-N9TRDI4Q MINGW64 ~/Desktop/2210992099 (master)
$ git status
On branch master

No commits yet

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

Public key and private key

```
Priyank Mahajan@LAPTOP-N9TRDI4Q MINGW64 ~/Desktop/2210992099 (master)
$ ssh-keygen -t rsa -b 4096 -C "priyank788mahajan"
Generating public/private rsa key pair.
Enter file in which to save the key (/c/Users/Priyank Mahajan/.ssh/id_rsa): priyank
Enter passphrase (empty for no passphrase):
Enter same passphrase again:
Your identification has been saved in priyank
Your public key has been saved in priyank.pub
The key's fingerprint is:
SHA256:J9Jt1UB6t4i3HMRWCvVwCj/B6tz01DnuQ57WXcjtZFQ priyank788mahajan
The key's randomart image is:
+----[RSA 4096]-----+
|
|..+o+o
|o.B+ .
|..B+oo
|..*.o+.E
|..S=o+o.=O
|..+ooo+=+
|o+=+*
|o**
|o..
+-----[SHA256]-----+
```

ssh-rsa

```
AAAAB3NzaC1yc2EAAAADAQABAAQDJKRYsCQYaMRaPswRMM6+Vrx+qxpEChLBJMTJ4AL6opzgHFAvgKxbAon1V0JkGfCpF1e5H0Rv
4Ky0tSWxToJTnYKjo7ivtbdFShTJuVek0dr6h9exzxv9zEJi4dSJKEsl6cr+ZrGDv2caoY/0pEDNLnXP9fpxjNhfGjRuCorQgQ+qLMYhvTKndw4
Sz8hxgcUw90bClfpOKolvXzKweP2dljo6PQCisS6hd60neqFoFt3BkoogjNh7sg7x3KlJNXD6LNTYskhCFIjn6hdbPEVj9shf3P3HmCgpZ+hNb9
ODkAejG3C2ot7/vZcS8f0my3W+UmlizR1crrK4MO3W6isODC3V2frvR+L/i2mzJn+61o5FEca+mRtwksFsDphJqotOyN3klfGVt4qmDsEfWIO
V2CtTDB2C7DB1xqDdfj8XD0cK0NxxUJaGLDr8Py9Eg1FJm/ppfScZglwsTYJGxvZYqPqtEBdKGI72o3iiiJi7GnDeFcnwXytqVLgmZijmAQvGLP
wYeoxhgcPBIlEwltkxOrdwmVPp+hwNDTtMkLX3585cKggAVpCpuDzdWqNrwkcyo6+df22pBLnzPxCP+rhxlinfNB/iB7YUyAx7kl7CqBLKU16T
ZcFtXJnKsac4BrGkYoW3IGSLkyiqKxaWX4zrZvJbaCPTv4EABkWrKuFFChQ== priyank788mahajan@gmail.com
```

git add helloworld.py

```
Priyank Mahajan@LAPTOP-N9TRDI4Q MINGW64 ~/Desktop/2210992099 (master)
$ git add helloworld.py
```

git status

```
Priyank Mahajan@LAPTOP-N9TRDI4Q MINGW64 ~/Desktop/2210992099 (master)
$ git status
On branch master

No commits yet

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

Untracked files:
  (use "git add <file>..." to include in what will be committed)
    hello
    hello.pub
    world.py.txt
```

git commit -m "first commit"

```
Priyank Mahajan@LAPTOP-N9TRDI4Q MINGW64 ~/Desktop/2210992099 (master)
$ git commit -m "first commit"
[master (root-commit) e6fde80] first commit
2 files changed, 1 insertion(+)
create mode 100644 hello.txt
create mode 100644 helloworld.py
```

git add sum.py

```
Priyank Mahajan@LAPTOP-N9TRDI4Q MINGW64 ~/Desktop/2210992099 (master)
$ git add sum.py
```

git status

```
Priyank Mahajan@LAPTOP-N9TRDI4Q MINGW64 ~/Desktop/2210992099 (master)
$ git status

On branch master
Untracked files:
  (use "git add <file>..." to include in what will be committed)
        hello
        hello.pub
        second.py.txt
        world.py.txt

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

git commit -m "second commit"

```
Priyank Mahajan@LAPTOP-N9TRDI4Q MINGW64 ~/Desktop/2210992099 (master)
$ git commit -m "second commit"
On branch master
Untracked files:
  (use "git add <file>..." to include in what will be committed)
        hello
        hello.pub
        second.py.txt
        world.py.txt

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

git log

```
Priyank Mahajan@LAPTOP-N9TRDI4Q MINGW64 ~/Desktop/2210992099 (master)
$ git log
commit 84a9ab610a19ba861c0a80a7d65a443a367fdd90 (HEAD -> master)
Author: Priyank Mahjan <priyank788mahjan@gmail.com>
Date: Thu Jan 26 23:41:28 2023 +0530

    second commit

commit e6fde8012b741dc08e854006e141a32f9be6bfb5
Author: Priyank Mahjan <priyank788mahjan@gmail.com>
Date: Thu Jan 26 23:35:38 2023 +0530

    first commit
```

dir

```
Priyank Mahajan@LAPTOP-N9TRDI4Q MINGW64 ~/Desktop (master)
$ dir
2210992099          Telegram.lnk
CodeBlocks.lnk     WhatsApp\ (2).lnk
Dev-C++.lnk        Zoom.lnk
Jupyter\ Notebook\ (anaconda3).lnk  desktop.ini
PyCharm\ Community\ Edition\ 2022.3.lnk  python.lnk
```

ls

```
Priyank Mahajan@LAPTOP-N9TRDI4Q MINGW64 ~/Desktop (master)
$ ls
2210992099/          Telegram.lnk*
CodeBlocks.lnk*     'WhatsApp (2).lnk'*
Dev-C++.lnk*        Zoom.lnk*
'Jupyter Notebook (anaconda3).lnk'*  desktop.ini
'PyCharm Community Edition 2022.3.lnk'*  python.lnk*
```

mkdir scm

```
Priyank Mahajan@LAPTOP-N9TRDI4Q MINGW64 ~/Desktop/2210992099 (master)
$ mkdir scm
```

cd scm

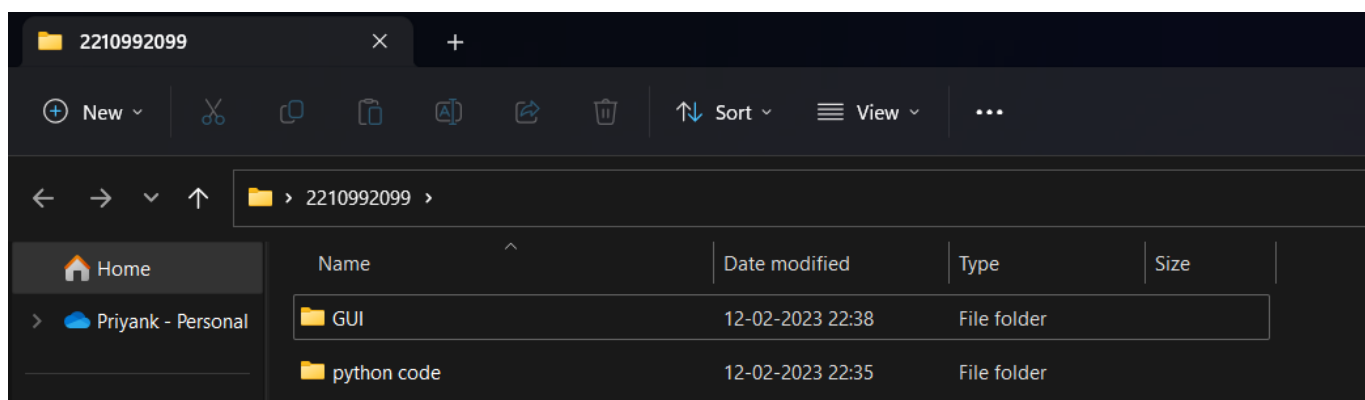
```
Priyank Mahajan@LAPTOP-N9TRDI4Q MINGW64 ~/Desktop/2210992099 (master)
$ cd scm
```

cd ..

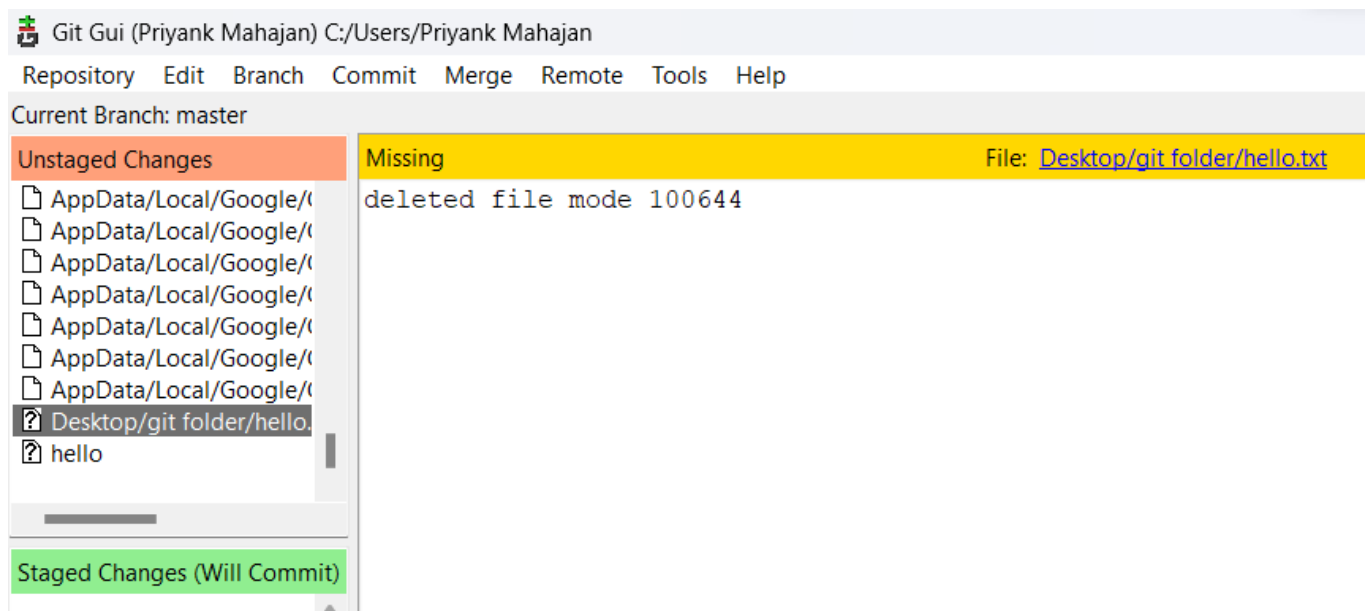
```
Priyank Mahajan@LAPTOP-N9TRDI4Q MINGW64 ~/Desktop/2210992099/scm (master)
$ cd ..
```

6. Git GUI

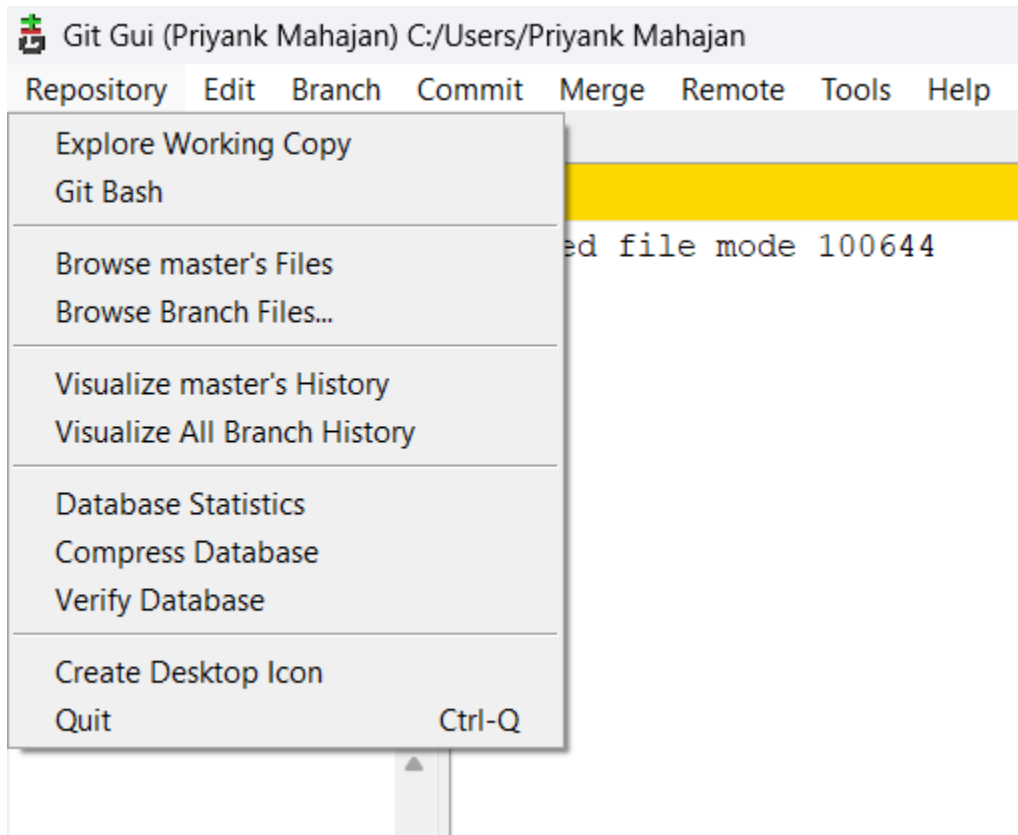
1. Make a new GUI folder in roll no. folder and make a new repository using git GUI..



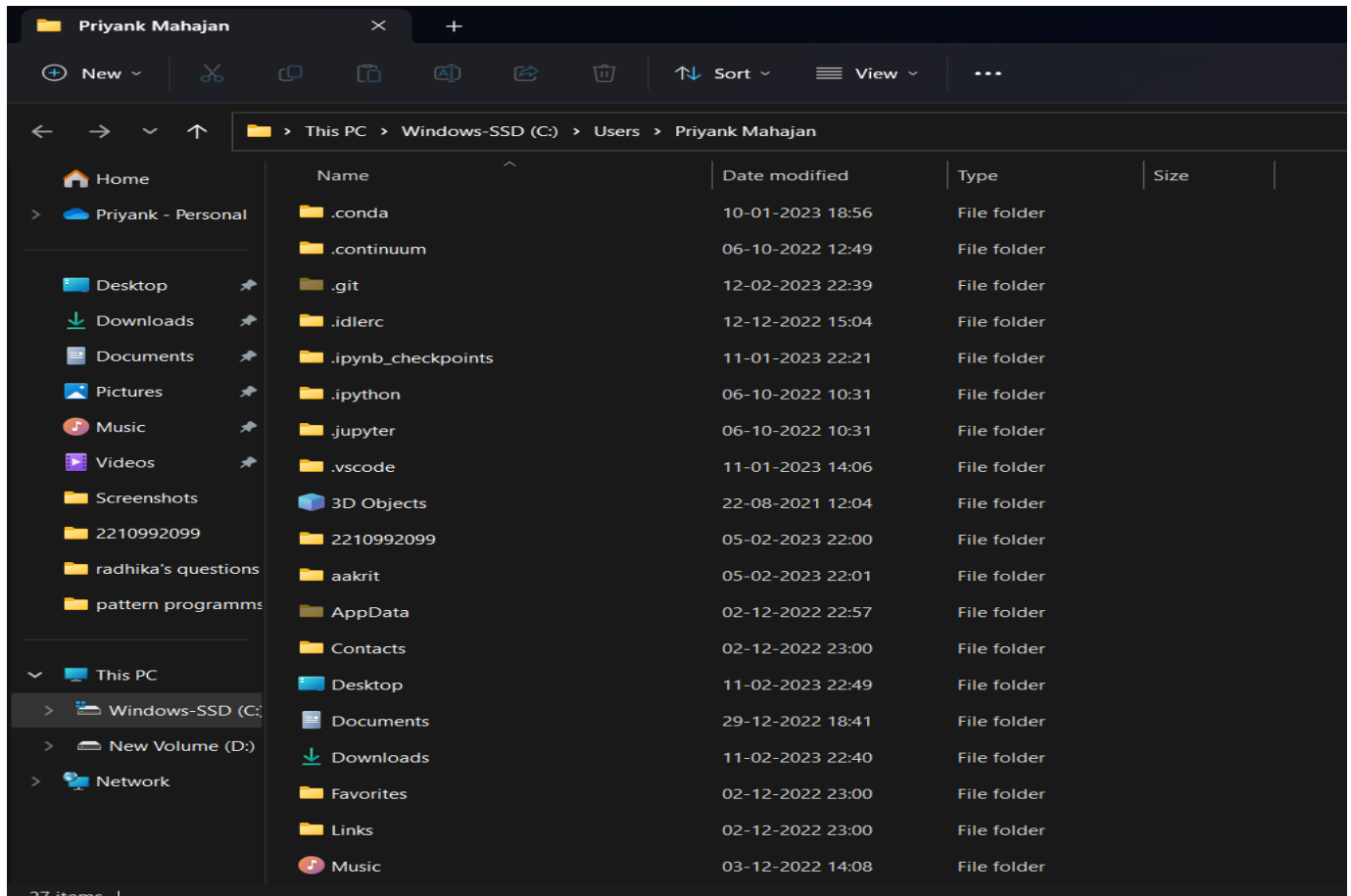
2. Git GUI



3. Click on repository and click on explore working copyk







4. Click on explore working copy



7. GIT BASH

1. Make four new notepads in python code

 user1	07-02-2023 11:08	Text Document	17 KB
 user2	07-02-2023 11:09	Text Document	17 KB
 user3	07-02-2023 11:09	Text Document	17 KB
 user4	07-02-2023 11:09	Text Document	17 KB

2. Add these four files in git bash using git add user1/2/3/4.txt

```
Priyank Mahajan@LAPTOP-N9TRDI4Q MINGW64 ~/Desktop/2210992099/python code (master)
$ git add user1.txt

Priyank Mahajan@LAPTOP-N9TRDI4Q MINGW64 ~/Desktop/2210992099/python code (master)
$ git add user2.txt

Priyank Mahajan@LAPTOP-N9TRDI4Q MINGW64 ~/Desktop/2210992099/python code (master)
$ git add user3.txt

Priyank Mahajan@LAPTOP-N9TRDI4Q MINGW64 ~/Desktop/2210992099/python code (master)
$ git add user4.txt

Priyank Mahajan@LAPTOP-N9TRDI4Q MINGW64 ~/Desktop/2210992099/python code (master)
$ |
```

3. git commit -m "first commit"

```
Priyank Mahajan@LAPTOP-N9TRDI4Q MINGW64 ~/Desktop/2210992099 (master)
$ git commit -m "first commit"
[master 6254b79] first commit
4 files changed, 4 insertions(+)
create mode 100644 user1.txt
create mode 100644 user2.txt
create mode 100644 user3.txt
create mode 100644 user4.txt
```


- Now change the comments of all four notepads and again add them in git bash using git add

```
Priyank Mahajan@LAPTOP-N9TRDI4Q MINGW64 ~/Desktop/2210992099 (master)
$ git add "user1.txt"

Priyank Mahajan@LAPTOP-N9TRDI4Q MINGW64 ~/Desktop/2210992099 (master)
$ git add "user2.txt"

Priyank Mahajan@LAPTOP-N9TRDI4Q MINGW64 ~/Desktop/2210992099 (master)
$ git add "user3.txt"

Priyank Mahajan@LAPTOP-N9TRDI4Q MINGW64 ~/Desktop/2210992099 (master)
$ git add "user4.txt"
```

- git log

```
Priyank Mahajan@LAPTOP-N9TRDI4Q MINGW64 ~/Desktop/2210992099 (master)
$ git log
commit 45ff956af1fe9fd2cbb729c5577f103cfa9788fd (HEAD -> master)
Author: Priyank Mahjan <priyank788mahjan@gmail.com>
Date: Tue Feb 7 11:12:35 2023 +0530

    second commit

commit 6254b791d5eb30963f9c1cb3e7b5b0e6b243f464
Author: Priyank Mahjan <priyank788mahjan@gmail.com>
Date: Tue Feb 7 11:05:00 2023 +0530

    first commit
```

- git show

```
00 --0.0 v1.20 80
What about you buddy?
The human population exploits a large number of other animal species for food, both of domesticated livestock species in animal husbandry
and, mainly at sea, by hunting wild species.[175][176] Marine fish of many species are caught commercially for food. A smaller number of
species are farmed commercially.[175][177][178] Humans and their livestock make up more than 90% of the biomass of all terrestrial
vertebrates, and almost as much as all insects combined.[179]

Invertebrates including cephalopods, crustaceans, and bivalve or gastropod molluscs are hunted or farmed for food.[180] Chickens,
cattle, sheep, pigs, and other animals are raised as livestock for meat across the world.[176][181][182] Animal fibres such as wool
are used to make textiles, while animal skins have been used as leathers and bindings, and leather is widely used to make shoes
and other items. Animals have been hunted and farmed for their fur to make items such as coats and hats.[183] Byproducts, including
eggs (such as eggs),[184][185] shells,[186][187] and horns[188][189] have been made from the bodies of insects, working animals
(including cattle and horses) have been used for work and transport from the first days of agriculture.[190]

Animals such as the Fruit Fly Drosophila melanogaster serve a major role in science as experimental models.[191][192][193][194]
Animals have been used to create vaccines since their discovery in the 18th century.[195] Some medicines such as the cancer drug
Vandetanib are based on toxins or other molecules of animal origin.[196]

A gun dog retrieving a duck during a hunt.
Animals have used hunting dogs to help chase down and retrieve animals,[197] and birds of prey to catch birds and mammals.[198]
Animals called cormorants have been used to catch fish.[199] Poison dart frogs have been used to poison the tips of blowpipes.
Insects [200][201] A wide variety of animals are kept as pets, from invertebrates such as tarantulas and octopuses, insects including
crayfish, mantids,[202] reptiles such as snakes and chameleons,[203] and birds including canaries, parakeets, and parrots[204] all
finding a place. However, the most kept pet species are mammals, namely dogs, cats, and rabbits.[205][206][207] There is a tension
between the role of animals as companions to humans, and their existence as individuals with rights of their own.[208] A wide variety
of terrestrial and aquatic animals are hunted for sport.[209]

A. no newline at end of file
diff --git a/Seventh.txt b/Seventh.txt
new file mode 100644
index 0000000..7f22abd
--- /dev/null
+++ b/Seventh.txt
00 --0.0 v1.20 80
[ ] as fine body.
Invertebrates as long ago as the Ediacaran biota, towards the end of the Precambrian, and possibly somewhat earlier.
It had long been debated whether these life-forms included animals.[95][96][97] but the discovery of the animal flagellum
in the fossil of Dickinsonia establishes their nature.[98] Animals are thought to have originated under low-oxygen
conditions, suggesting that they were capable of living entirely by anaerobic respiration, but as they became specialised
for aerobic metabolism they became fully dependent on oxygen in their environments.[99]

Many animal phyla first appear in the fossil record during the Cambrian explosion, starting about 539 million years ago,[
in fact, some as the Burgess shale.[100] Extant phyla in these rocks include molluscs, brachiopods, onychophorans, tardigrades
[ ] skipping...
commit 45ae6cc5d8f0b7238684727d6a4ef6eeef (HEAD -> master)
Author: Priyank Mahjan <priyank788mahjan@gmail.com>
Date: Tue Feb 7 11:19:11 2023 +0530

    Committing...

diff --git a/Seventh.txt b/Seventh.txt
new file mode 100644
index 0000000..7f22abd
--- /dev/null
+++ b/Seventh.txt
00 --0.0 v1.20 80
What about you buddy?
The human population exploits a large number of other animal species for food, both of domesticated livestock species in animal husbandry
and, mainly at sea, by hunting wild species.[175][176] Marine fish of many species are caught commercially for food. A smaller number of
species are farmed commercially.[175][177][178] Humans and their livestock make up more than 90% of the biomass of all terrestrial
vertebrates, and almost as much as all insects combined.[179]

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cattle, sheep, pigs, and other animals are raised as livestock for meat across the world.[176][181][182] Animal fibres such as wool
are used to make textiles, while animal skins have been used as leathers and bindings, and leather is widely used to make shoes
and other items. Animals have been hunted and farmed for their fur to make items such as coats and hats.[183] Byproducts, including
eggs (such as eggs),[184][185] shells,[186][187] and horns[188][189] have been made from the bodies of insects, working animals
(including cattle and horses) have been used for work and transport from the first days of agriculture.[190]

Animals such as the Fruit Fly Drosophila melanogaster serve a major role in science as experimental models.[191][192][193][194]
Animals have been used to create vaccines since their discovery in the 18th century.[195] Some medicines such as the cancer drug
Vandetanib are based on toxins or other molecules of animal origin.[196]
```

8. Branching

1. git add all

```
Priyank Mahajan@LAPTOP-N9TRDI4Q MINGW64 ~/Desktop/2210992099/python code (master)
$ git add --all
```

2. git log

```
Priyank Mahajan@LAPTOP-N9TRDI4Q MINGW64 ~/Desktop/2210992099/python code (master)
$ git log
commit 45ff956af1fe9fd2cbb729c5577f103cfa9788fd (HEAD -> master)
Author: Priyank Mahjan <priyank788mahjan@gmail.com>
Date: Tue Feb 7 11:12:35 2023 +0530

    second commit

commit 6254b791d5eb30963f9c1cb3e7b5b0e6b243f464
Author: Priyank Mahjan <priyank788mahjan@gmail.com>
Date: Tue Feb 7 11:05:00 2023 +0530

    first commit
```

3. git branch "file name"

```
Priyank Mahajan@LAPTOP-N9TRDI4Q MINGW64 ~/Desktop/2210992099/python code (master)
$ git branch copyPriyank2099
```

4. git branch

```
Priyank Mahajan@LAPTOP-N9TRDI4Q MINGW64 ~/Desktop/2210992099/python code (master)
$ git branch
copy2210992099
copyPriyank2099
* master
```

5. git checkout "file name"

```
Priyank Mahajan@LAPTOP-N9TRDI4Q MINGW64 ~/Desktop/2210992099/python code (master)
$ git checkout copyPriyank2099
Switched to branch 'copyPriyank2099'
A       New Text Document.txt
A       hello
A       hello.pub
A       second.py.txt
M       user1.txt
M       user2.txt
M       user3.txt
M       user4.txt
A       world.py.txt
```

6. Again using git branch

```
Priyank Mahajan@LAPTOP-N9TRDI4Q MINGW64 ~/Desktop/2210992099/python code (copyPriyank2099)
$ git branch
copy2210992099
* copyPriyank2099
master
```

7. Now use command ls

```
Priyank Mahajan@LAPTOP-N9TRDI4Q MINGW64 ~/Desktop/2210992099/python code (copyPriyank2099)
$ ls
'New Text Document.txt'  copy99.txt  hello  hello.pub  hello.txt  helloworld.py  mahajan.txt
```

8. Now use git status

```
Priyank Mahajan@LAPTOP-N9TRDI4Q MINGW64 ~/Desktop/2210992099/python code (copyPriyank2099)
$ git status
On branch copyPriyank2099
Changes to be committed:
  (use "git restore --staged <file>..." to unstage)
    new file:   New Text Document.txt
    new file:   hello
    new file:   hello.pub
    new file:   second.py.txt
    modified:   user1.txt
    modified:   user2.txt
    modified:   user3.txt
    modified:   user4.txt
    new file:   world.py.txt

Untracked files:
  (use "git add <file>..." to include in what will be committed)
    copy99.txt
```

9. Now using command git add --all

```
Priyank Mahajan@LAPTOP-N9TRDI4Q MINGW64 ~/Desktop/2210992099/python code (master)
$ git add --all
```

10. Using git commit --m "commit"

```
Priyank Mahajan@LAPTOP-N9TRDI4Q MINGW64 ~/Desktop/2210992099/python code (copyPriyank2099)
$ git commit -m "commit"
[copyPriyank2099 6bb9c3c] commit
10 files changed, 55 insertions(+), 912 deletions(-)
create mode 100644 New Text Document.txt
create mode 100644 copy99.txt
create mode 100644 hello
create mode 100644 hello.pub
create mode 100644 second.py.txt
create mode 100644 world.py.txt
```

11. Using git checkout master

```
Priyank Mahajan@LAPTOP-N9TRDI4Q MINGW64 ~/Desktop/2210992099/python code (copyPriyank2099)
$ git checkout master
Switched to branch 'master'
```

12. Again using command ls

```
Priyank Mahajan@LAPTOP-N9TRDI4Q MINGW64 ~/Desktop/2210992099/python code (master)
$ ls
hello.txt  helloworld.py  mahajan.txt  priyank.txt  scm/  sum.py  user1.txt  user2.txt
```

9. Merging

1. Make a new branch by using "git branch copy2099"

```
Priyank Mahajan@LAPTOP-N9TRDI4Q MINGW64 ~/Desktop/2210992099/python code (master)
$ git branch copy2099
```

2. Check the branch by using git branch

```
Priyank Mahajan@LAPTOP-N9TRDI4Q MINGW64 ~/Desktop/2210992099/python code (master)
$ git branch
copy2099
copy2210992099
copyPriyank2099
* master
```

3. Now use git "checkout copy2099" to enter from master o copy

```
Priyank Mahajan@LAPTOP-N9TRDI4Q MINGW64 ~/Desktop/2210992099/python code (master)
$ git checkout copy2099
Switched to branch 'copy2099'
```

4. Now add two files in roll no. file add it in git bash by using git add --all

```
Priyank Mahajan@LAPTOP-N9TRDI4Q MINGW64 ~/Desktop/2210992099/python code (copy2099)
$ git add --all
```

5. Check add files by using ls.

```
Priyank Mahajan@LAPTOP-N9TRDI4Q MINGW64 ~/Desktop/2210992099/python code (copy2099)
$ ls
class1.txt class2.txt hello.txt helloworld.py mahajan.txt priyank.txt scm/ sum.py user1.txt
```

6. Now perform the commit command

```
Priyank Mahajan@LAPTOP-N9TRDI4Q MINGW64 ~/Desktop/2210992099/python code (copy2099)
$ git commit -m "third commit"
[copy2099 4b15117] third commit
2 files changed, 0 insertions(+), 0 deletions(-)
create mode 100644 class1.txt
create mode 100644 class2.txt
```

7. Now check the commit by using "git log"

```
Priyank Mahajan@LAPTOP-N9TRDI4Q MINGW64 ~/Desktop/2210992099/python code (copy2099)
$ git log
commit 4b15117c2a6d635ab7c2d11879c167a961495096 (HEAD -> copy2099)
Author: Priyank <priyankmahajan788@gmail.com>
Date: Tue Feb 28 00:28:25 2023 +0530

    third commit

commit 45ff956af1fe9fd2cbb729c5577f103cfa9788fd (master, copy2210992099)
Author: Priyank Mahjan <priyank788mahjan@gmail.com>
Date: Tue Feb 7 11:12:35 2023 +0530

    second commit
```

8. Go back to master by using "git checkout master"

```
Priyank Mahajan@LAPTOP-N9TRDI4Q MINGW64 ~/Desktop/2210992099/python code (copy2099)
$ git checkout master
Switched to branch 'master'
```

9. Check the branch by using "git branch"

```
Priyank Mahajan@LAPTOP-N9TRDI4Q MINGW64 ~/Desktop/2210992099/python code (master)
$ git branch
copy2099
copy2210992099
copyPriyank2099
* master
```

10. Now use "git merge copy2099"

```
Priyank Mahajan@LAPTOP-N9TRDI4Q MINGW64 ~/Desktop/2210992099/python code (master)
$ git merge copy2099
Updating 45ff956..4b15117
Fast-forward
 class1.txt | 0
 class2.txt | 0
2 files changed, 0 insertions(+), 0 deletions(-)
create mode 100644 class1.txt
create mode 100644 class2.txt
```

11. Now use command `ls` . We can see the files has been merged in the master branch.

```
Priyank Mahajan@LAPTOP-N9TRDI4Q MINGW64 ~/Desktop/2210992099/python code (master)
$ ls
class1.txt class2.txt hello.txt helloworld.py mahajan.txt priyank.txt scm/ sum.py
```

12. Now we have to delete the copied branch because the files has been merged into the master branch. Use command "Git branch -d copy2099"

```
Priyank Mahajan@LAPTOP-N9TRDI4Q MINGW64 ~/Desktop/2210992099/python code (master)
$ git branch -d copy2099
Deleted branch copy2099 (was 4b15117).
```

13. Now use the command `git branch`

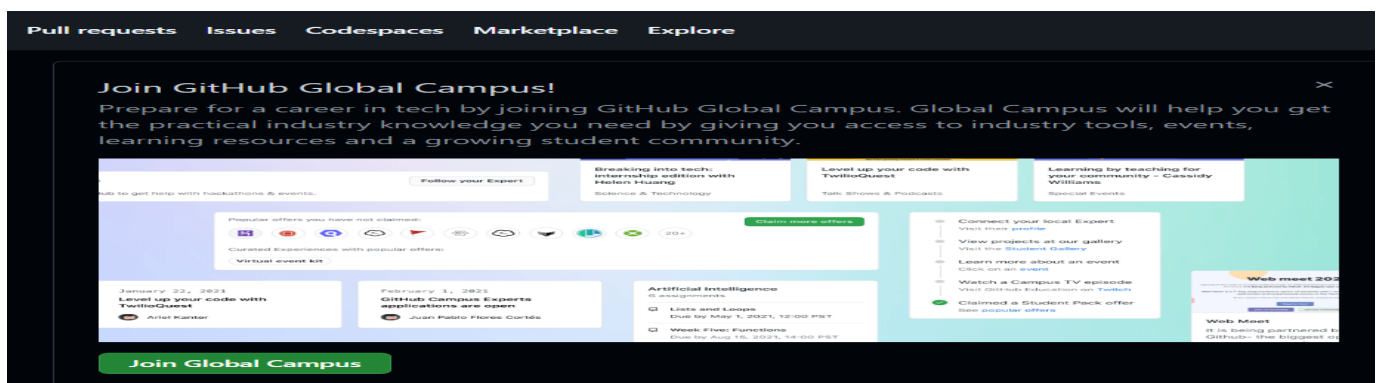
```
Priyank Mahajan@LAPTOP-N9TRDI4Q MINGW64 ~/Desktop/2210992099/python code (master)
$ git branch
copy2210992099
copyPriyank2099
* master
```

14. Now use "git checkout copy2099" to see if the copy branch is deleted or not . If the branch is deleted it will show an error.

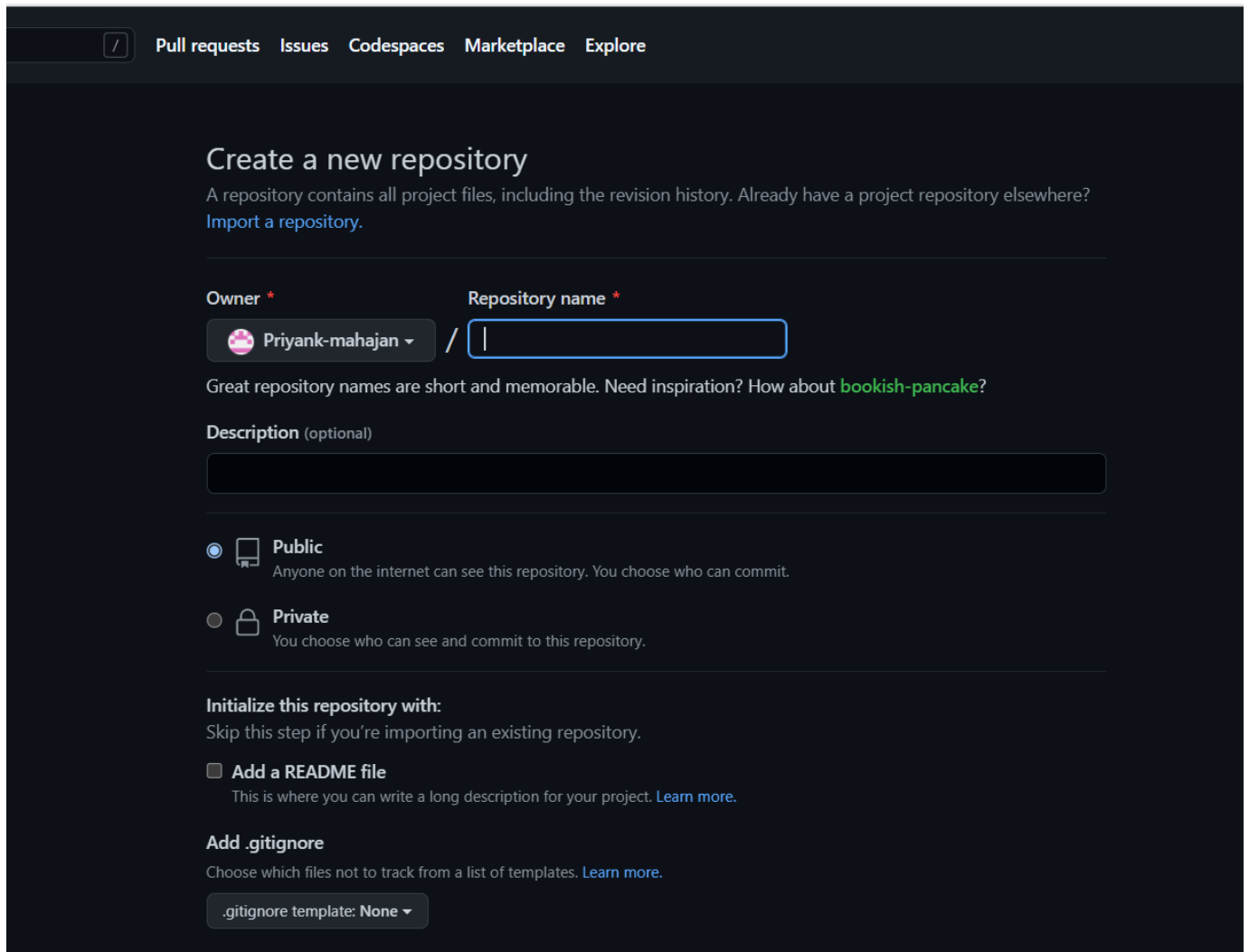
```
Priyank Mahajan@LAPTOP-N9TRDI4Q MINGW64 ~/Desktop/2210992099/python code (master)
$ git branch -d copy2099
Deleted branch copy2099 (was 4b15117).
```

10. Untitled :

1. Login to github account



2. Create a new repository



The screenshot shows the GitHub 'Create a new repository' page. At the top, there are navigation links: Pull requests, Issues, Codespaces, Marketplace, and Explore. The main heading is 'Create a new repository', followed by a subtext: 'A repository contains all project files, including the revision history. Already have a project repository elsewhere? [Import a repository.](#)'. Below this, there are two main input fields: 'Owner' and 'Repository name'. The 'Owner' field is a dropdown menu showing 'Priyank-mahajan'. The 'Repository name' field is a text input box. Below these fields, there is a hint: 'Great repository names are short and memorable. Need inspiration? How about [bookish-pancake?](#)'. There is also a 'Description (optional)' text area. Below the description, there are two radio button options for visibility: 'Public' (selected) and 'Private'. The 'Public' option has a subtext: 'Anyone on the internet can see this repository. You choose who can commit.' The 'Private' option has a subtext: 'You choose who can see and commit to this repository.' Below the visibility options, there is a section 'Initialize this repository with:' with a subtext: 'Skip this step if you're importing an existing repository.' There are two checkboxes: 'Add a README file' (checked) and 'Add .gitignore' (unchecked). The 'Add a README file' checkbox has a subtext: 'This is where you can write a long description for your project. [Learn more.](#)'. The 'Add .gitignore' checkbox has a subtext: 'Choose which files not to track from a list of templates. [Learn more.](#)'. Below the 'Add .gitignore' checkbox, there is a dropdown menu for '.gitignore template:' showing 'None'.

3. Now open git bash in roll no. folder and use command “git init” to initialize

```
Priyank Mahajan@LAPTOP-N9TRDI4Q MINGW64 ~/Desktop/2210992099/python code (main)
$ git init
Reinitialized existing Git repository in C:/Users/Priyank Mahajan/Desktop/2210992099/python code/.git/
```

4. Use “git add --all” to add all files

```
Priyank Mahajan@LAPTOP-N9TRDI4Q MINGW64 ~/Desktop/2210992099/python code (main)
$ git add --all
```

5. Use git commit -m “Third”

```
Priyank Mahajan@LAPTOP-N9TRDI4Q MINGW64 ~/Desktop/2210992099/python code (master)
$ git commit -m"Third"
On branch master
Your branch is up to date with 'origin/main'.

nothing to commit, working tree clean
```

6. Use git log

```
Priyank Mahajan@LAPTOP-N9TRDI4Q MINGW64 ~/Desktop/2210992099/python code (master)
$ git log
commit 4b15117c2a6d635ab7c2d11879c167a961495096 (HEAD -> master, origin/main, checkout)
Author: Priyank Mahajan <priyankmahajan788@gmail.com>
Date: Tue Feb 28 00:28:25 2023 +0530

    third commit

commit 45ff956af1fe9fd2cbb729c5577f103cfa9788fd (copy2210992099)
Author: Priyank Mahajan <priyank788mahajan@gmail.com>
Date: Tue Feb 7 11:12:35 2023 +0530

    second commit
```

7. Now go on master to main using command “git branch -M main”

```
Priyank Mahajan@LAPTOP-N9TRDI4Q MINGW64 ~/Desktop/2210992099/python code (master)
$ git branch -M main

Priyank Mahajan@LAPTOP-N9TRDI4Q MINGW64 ~/Desktop/2210992099/python code (main)
$
```

8. Use command :-

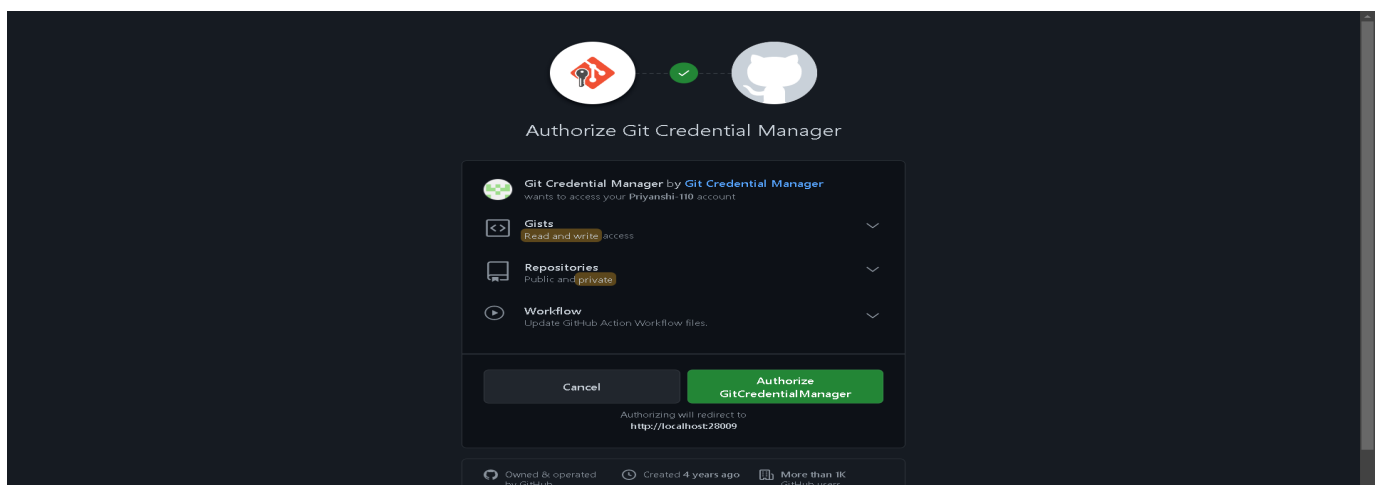
git remote add origin <https://github.com/Priyank-mahajan/SCM.git>

```
Priyank Mahajan@LAPTOP-N9TRDI4Q MINGW64 ~/Desktop/2210992099/python code (main)
$ git remote add origin https://github.com/Priyank-mahajan/SCM.git
```

9. Use “git push -u origin main” and sign in there using browser

```
Priyank Mahajan@LAPTOP-N9TRDI4Q MINGW64 ~/Desktop/2210992099/python code (main)
$ git push -u origin
```

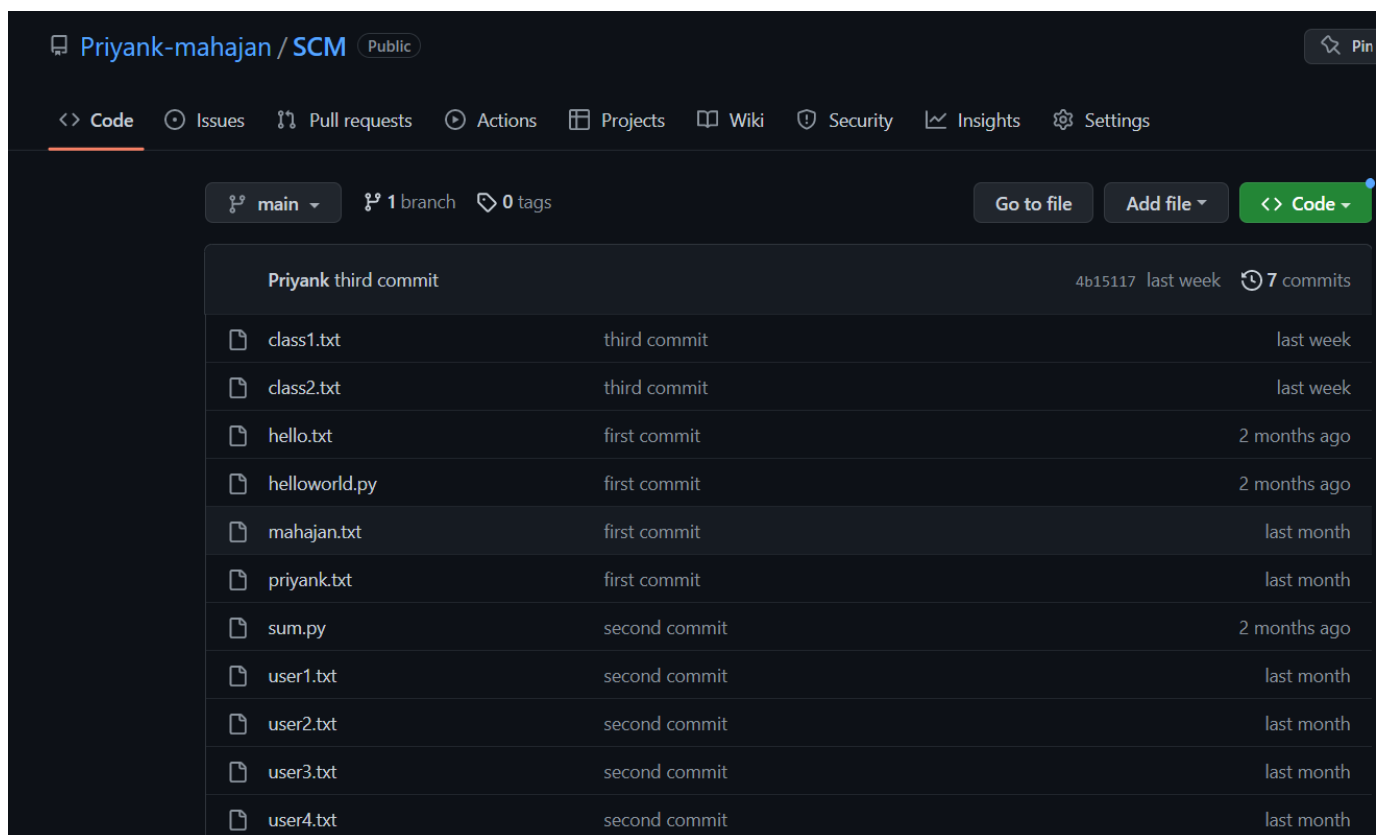
After running this command an authorize application appear on the screen.



After sign in Authorize GitCredentialManager the command “git push -u origin” shows some information

```
Priyank Mahajan@LAPTOP-N9TRDI4Q MINGW64 ~/Desktop/2210992099/python code (main)
$ git push -u origin main
Enumerating objects: 19, done.
Counting objects: 100% (19/19), done.
Delta compression using up to 8 threads
Compressing objects: 100% (15/15), done.
Writing objects: 100% (19/19), 8.44 KiB | 960.00 KiB/s, done.
Total 19 (delta 6), reused 0 (delta 0), pack-reused 0
remote: Resolving deltas: 100% (6/6), done.
To https://github.com/Priyank-mahajan/SCM.git
 * [new branch]      main -> main
branch 'main' set up to track 'origin/main'.
```

After authorizing all files of our roll no. folder uploaded on github




The screenshot shows the GitHub interface for a repository named 'Priyank-mahajan / SCM'. The repository is public and has a 'main' branch with 1 branch and 0 tags. The file list shows the following files and their commit history:

File	Commit	Time
class1.txt	third commit	last week
class2.txt	third commit	last week
hello.txt	first commit	2 months ago
helloworld.py	first commit	2 months ago
mahajan.txt	first commit	last month
priyank.txt	first commit	last month
sum.py	second commit	2 months ago
user1.txt	second commit	last month
user2.txt	second commit	last month
user3.txt	second commit	last month
user4.txt	second commit	last month

10. Collaborators :- For adding collaborators we have to follow some steps :-

- Go to repository
- Go to settings
- Go to collaborators
- Go to add people

 Search or jump to... Pull requests Issues Codespaces Marketplace Explore

Priyank-mahajan / SCM Public Pin Unwatch 1 Fork Star 0

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Tags

Actions

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Environments

Codespaces

Pages

Security

Code security and analysis

Deploy keys

General

Repository name


Rename

☐ Template repository
Template repositories let users generate new repositories with the same directory structure and files. [Learn more.](#)

☐ Require contributors to sign off on web-based commits
Enabling this setting will require contributors to sign off on commits made through GitHub's web interface. Signing off is a way for contributors to affirm that their commit complies with the repository's terms, commonly the Developer Certificate of Origin (DCO). [Learn more about signing off on commits.](#)

Social Preview

Upload an image to customize your repository's social media preview.
Images should be at least 640×320px (1280×640px for best display).
[Download template](#)

 Search or jump to... Pull requests Issues Codespaces Marketplace Explore

Priyank-mahajan / SCM Public Pin Unwatch 1 Fork Star 0

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General

Access

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Moderation options

Code and automation

Branches

Tags

Actions

Webhooks

Environments

Codespaces

Pages

Security

Code security and analysis

Deploy keys

Who has access

PUBLIC REPOSITORY

This repository is public and visible to anyone.
[Manage](#)

DIRECT ACCESS


2 have access to this repository. 1 collaborator, 1 invitation.

Manage access


Select all


Type

Find a collaborator...

 **Priyanshi-110**
Collaborator

Remove

 **Priyanshi-1512**
Awaiting Priyanshi-1512's response

Pending Invite 

Remove