

Experiment 2

AIM: Setup Git and explore commands related to Version Control System (VCS)

Step 1: Download from <https://git-scm.com>

Step 2: Configuration

```
git config --global user.name "hetpatel200608"
```

```
git config --global user.email
```

hetkumar.bhatasana126413@marwadiuniversity.ac.in

Step 3:

```
C:\USERS\HET>git --version
```

```
git version 2.43.0.windows.1
```

```
C:\USERS\HET>git init
```

```
Reinitialized existing Git repository in C:/USERS/HET/.git/
```

```
C:\USERS\HET>mkdir ost
```

```
C:\USERS\HET>mkdir ost
```

```
A subdirectory or file ost already exists.
```

```
C:\USERS\HET>git init
```

```
Reinitialized existing Git repository in C:/USERS/HET/.git/
```

```
C:\USERS\HET>cd ost
```

```
C:\USERS\HET\ost>git init
```

```
Initialized empty Git repository in C:/USERS/HET/ost/.git/
```

```
C:\USERS\HET\ost>git  
status On branch master  
No commits yet  
nothing to commit (create/copy files and use "git add" to track)
```

```
C:\USERS\HET\ost>echo  
sample.txt sample.txt  
C:\USERS\HET\ost>echo  
demo.py demo.py
```

```
C:\USERS\HET\ost>git  
status On branch master  
No commits yet  
nothing to commit (create/copy files and use "git add" to track)
```

```
C:\USERS\HET\ost>dir  
Volume in drive C is OS  
Volume Serial Number is E2F6-8AB0  
Directory of C:\USERS\HET\ost  
26-Jan-26 08:29 PM <DIR> .  
26-Jan-26 08:22 PM <DIR> ..  
0 File(s) 0 bytes  
2 Dir(s) 17,472,352,256 bytes free
```

```
C:\USERS\HET\ost>echo  
sample.txt sample.txt
```

```
C:\USERS\HET\ost>dir
```

Volume in drive C is OS

Volume Serial Number is E2F6-8AB0

Directory of C:\USERS\HET\ost

```
26-Jan-26 08:29 PM <DIR> .
```

```
26-Jan-26 08:22 PM <DIR> ..
```

0 File(s) 0 bytes

```
2 Dir(s) 17,472,425,984 bytes free
```

```
C:\USERS\HET\ost>echo Hello> sample.txt
```

```
C:\USERS\HET\ost>dir
```

Volume in drive C is OS

Volume Serial Number is E2F6-8AB0

Directory of C:\USERS\HET\ost

```
26-Jan-26 08:35 PM <DIR> .
```

```
26-Jan-26 08:22 PM <DIR> ..
```

```
26-Jan-26 08:35 PM 7 sample.txt
```

1 File(s) 7 bytes

```
2 Dir(s) 17,471,066,112 bytes free
```

```
C:\USERS\HET\ost>type
```

```
sample.txt Hello
```

```
C:\USERS\HET\ost>git commit -m "Initial Commit"
```

On branch master

Initial commit

Untracked

files:

(use "git add <file>..." to include in what will be committed)

sample.txt

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

```
C:\USERS\HET\ost>git config --global init.defaultBranch main
```

```
C:\USERS\HET\ost>git commit -m "Initial Commit"
```

On branch master

Initial commit

Untracked

files:

(use "git add <file>..." to include in what will be committed)

sample.txt

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

```
C:\USERS\HET\ost>git add sample.txt
```

```
C:\USERS\HET\ost>git commit -m "Initial Commit"
```

[master (root-commit) df439d9] Initial Commit

1 file changed, 1 insertion(+)

create mode 100644 sample.txt

```
C:\USERS\HET\ost>git branch  
* master  
* C:\USERS\HET\ost>git branch -m master main
```

```
C:\USERS\HET\ost>git branch  
* main
```

```
C:\USERS\HET\ost>git checkout main  
Already on 'main'
```

```
C:\USERS\HET\ost>git checkout -b dev  
Switched to a new branch 'dev'
```

```
C:\USERS\HET\ost>echo Hello from dev>> sample.txt  
C:\USERS\ HET\ost>git add .
```

```
C:\USERS\HET\ost>git commit -m "Initial commit"  
[dev de8fe00] Update in dev  
1 file changed, 1 insertion(+)
```

```
C:\USERS\HET\ost>git checkout main  
Switched to branch 'main'
```

```
C:\USERS\HET\ost>git merge dev  
Updating df439d9..de8fe00  
Fast-forward  
 sample.txt | 1 +
```

1 file changed, 1 insertion(+)

C:\USERS\HET\ost>dir Volume in drive C is OS

Volume Serial Number is E2F6-8AB0

Directory of

C:\USERS\HET\ost 26-Jan-26

08:48 PM <DIR> .

26-Jan-26 08:44 PM <DIR> ..

26-Jan-26 08:48 PM 23 sample.txt

1 File(s) 23 bytes

2 Dir(s) 17,468,366,848 bytes free

C:\USERS\HET\ost>type

sample.txt Hello

Hello from dev

C:\USERS\HET\ost>git remote -v

C:\USERS\HET\ost>git remote add origin

https://github.com/Userspatel200608/OST_Bhatasana_Users.git

C:\USERS\HET\ost>git remote -v

origin https://github.com/Userspatel200608/OST_Bhatasana_Users.git

(fetch) origin <https://github.com/>

Userspatel200608/OST_Bhatasana_Users.git (push)

C:\USERS\HET\ost>git push -u origin main

remote: Invalid username or token. Password authentication is not supported for Git operations.

fatal: Authentication failed for 'https://github.com/

Userspatel200608/OST_Bhatasana_Users.git/'

```
C:\USERS\HET\ost>
```

```
C:\USERS\HET\ost>
```

```
C:\USERS\HET\ost>git push -u origin main
```

```
info: please complete authentication in your browser...
```

```
Enumerating objects: 6, done.
```

```
Counting objects: 100% (6/6), done.
```

```
Delta compression using up to 16
```

```
threads Compressing objects: 100%
```

```
(2/2), done.
```

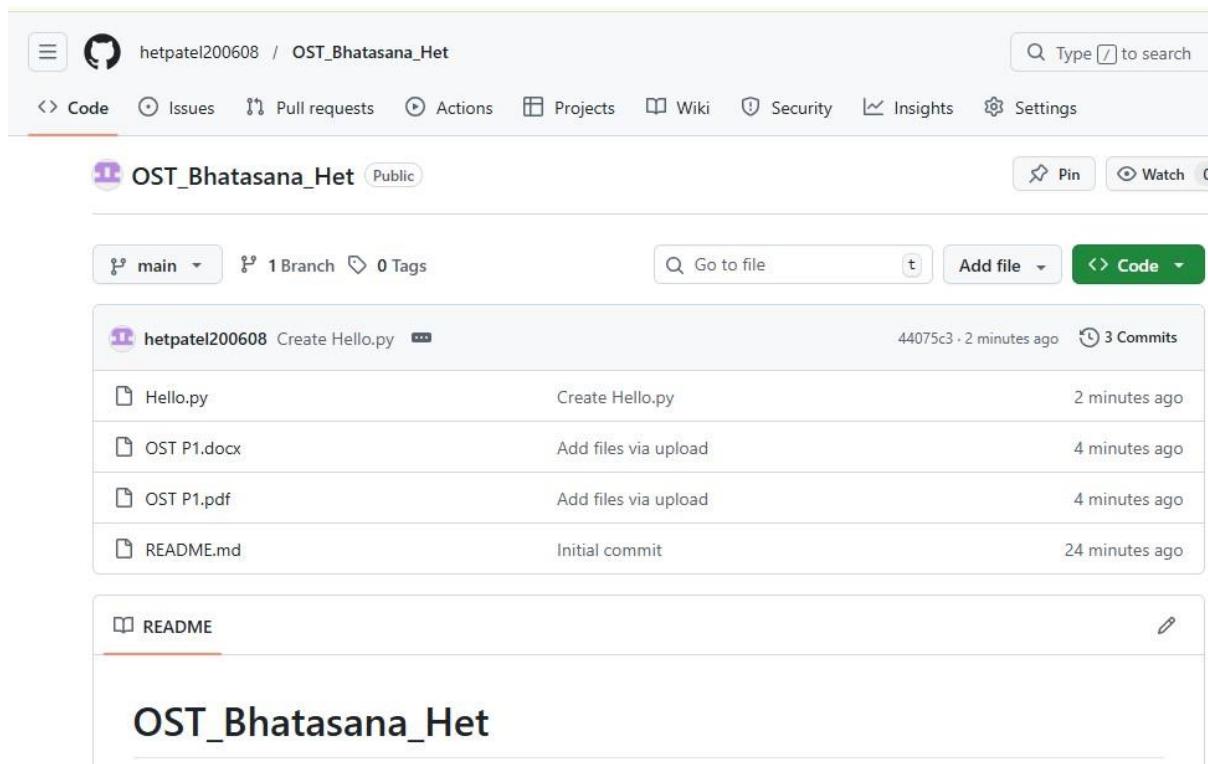
```
Writing objects: 100% (6/6), 452 bytes | 226.00 KiB/s, done.
```

```
Total 6 (delta 0), reused 0 (delta 0), pack-reused 0
```

```
To https://github.com/Userspatel200608/OST_Bhatasana_Users.git
```

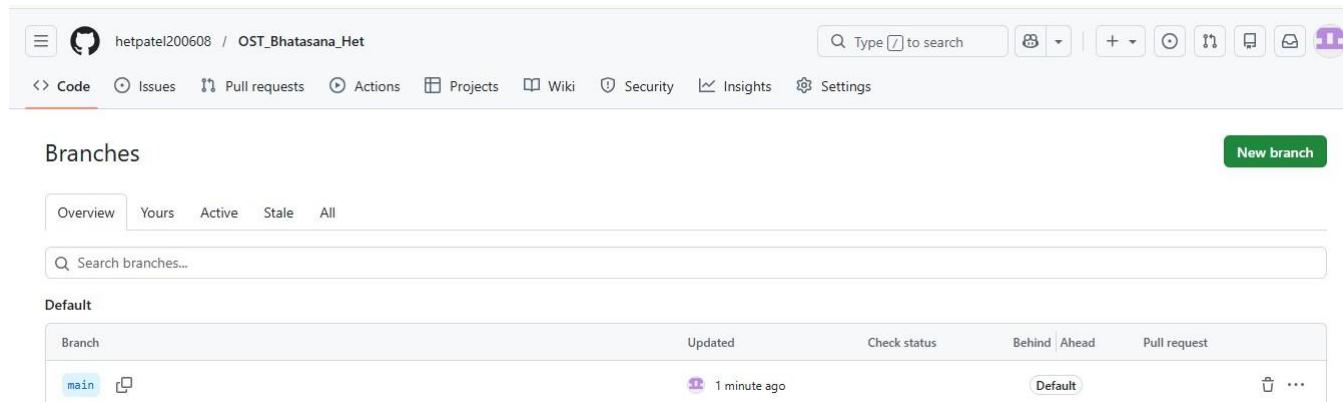
```
* [new branch] main -> main
```

```
branch 'main' set up to track 'origin/main'.
```



The screenshot shows a GitHub repository page for 'OST_Bhatasana_Het'. The repository is public and was created by 'hetpatel200608'. It contains one branch ('main') and no tags. The repository has 3 commits. The latest commit was made 2 minutes ago and created a file named 'Hello.py'. Previous commits added files via upload, including 'OST P1.docx', 'OST P1.pdf', and 'README.md'. The 'README' file is currently empty.

Commit	File	Date
hetpatel200608 Create Hello.py	Hello.py	2 minutes ago
	OST P1.docx	4 minutes ago
	OST P1.pdf	4 minutes ago
	README.md	24 minutes ago



The screenshot shows the GitHub interface for the repository `hetpatel200608 / OST_Bhatasana_Het`. The top navigation bar includes links for Code, Issues, Pull requests, Actions, Projects, Wiki, Security, Insights, and Settings. A search bar is at the top right. Below the navigation is a section titled "Branches" with a "New branch" button. A "Default" section lists the "main" branch, which was updated 1 minute ago. The branch status is "Default".

Branch	Updated	Check status	Behind	Ahead	Pull request
main	1 minute ago	Default			...