

## 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

```
C:\Users\freny>git config --global user.name "Freny-17"
C:\Users\freny>git config --global user.email "frenysorathiya@email.com"
```

Step 3: C:\Users\freny>git init

```
Reinitialized existing Git repository in C:/Users/freny/.git/
```

```
C:\Users\freny>cd ost
```

```
The system cannot find the path specified.
```

```
C:\Users\freny>cd OST-Freny
```

```
C:\Users\freny\OST-Freny>git init
```

```
Initialized empty Git repository in C:/Users/freny/OST-Freny/.git/
```

```
C:\Users\freny\OST-Freny>git status
```

```
On branch main
```

```
No commits yet
```

```
nothing to commit (create/copy files and use "git add" to track)
```

```
C:\Users\freny\OST-Freny>echo sample.txt
```

```
sample.txt
```

```
C:\Users\freny\OST-Freny>echo demo.py
```

```
demo.py
```

```
C:\Users\freny\OST-Freny>git status
```

```
On branch main
```

```
No commits yet
```

```
nothing to commit (create/copy files and use "git add" to track)
```

```
C:\Users\freny\OST-Freny>dir
```

```
Volume in drive C has no label.
```

```
Volume Serial Number is 04EC-4C5E
```

```
Directory of C:\Users\freny\OST-Freny
```

```
28-01-2026 08:10 <DIR> .
```

```
28-01-2026 08:09 <DIR> ..
```

```
0 File(s) 0 bytes
```

```
2 Dir(s) 31,788,851,200 bytes free
```

```
C:\Users\freny\OST-Freny>echo sample.txt
```

```
sample.txt
```

```
C:\Users\freny\OST-Freny>dir
```

```
Volume in drive C has no label.
```

```
Volume Serial Number is 04EC-4C5E
```

```
Directory of C:\Users\freny\OST-Freny
```

```
28-01-2026 08:10 <DIR> .
```

```
28-01-2026 08:09 <DIR> ..
```

```
0 File(s) 0 bytes
```

```
2 Dir(s) 31,788,863,488 bytes free
```

```
C:\Users\freny\OST-Freny>echo Hello> sample.txt
```

```
C:\Users\freny\OST-Freny>dir
```

```
Volume in drive C has no label.
```

```
Volume Serial Number is 04EC-4C5E
```

Directory of C:\Users\freny\OST-Freny

```
28-01-2026 08:13 <DIR> .
28-01-2026 08:09 <DIR> ..
28-01-2026 08:13 7 sample.txt
               1 File(s)      7 bytes
               2 Dir(s) 31,788,658,688 bytes free
```

```
C:\Users\freny\OST-Freny>type sample.txt
Hello
```

```
C:\Users\freny\OST-Freny>git commit -m "Initial Commit"
On branch main
```

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\freny\OST-Freny>git commit -m "Initial Commit"
On branch main
```

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\freny\OST-Freny>git add sample.txt
```

```
C:\Users\freny\OST-Freny>git commit -m "Initial Commit"
[main (root-commit) 546ce22] Initial Commit
 1 file changed, 1 insertion(+)
 create mode 100644 sample.txt
```

```
C:\Users\freny\OST-Freny>git branch
* main
```

```
C:\Users\freny\OST-Freny>git branch -m master main
fatal: no branch named 'master'
```

```
C:\Users\freny\OST-Freny>git branch -m main main
```

```
C:\Users\freny\OST-Freny>
C:\Users\freny\OST-Freny>git branch
* main
```

```
C:\Users\freny\OST-Freny>git checkout main
Already on 'main'
```

```
C:\Users\freny\OST-Freny>
```

```
C:\Users\freny\OST-Freny>git checkout -b dev
Switched to a new branch 'dev'

C:\Users\freny\OST-Freny>
C:\Users\freny\OST-Freny>echo Hello from dev>> sample.txt

C:\Users\freny\OST-Freny>git add .

C:\Users\freny\OST-Freny>git commit -m "Update in dev"
[dev 620c350] Update in dev
 1 file changed, 1 insertion(+)

C:\Users\freny\OST-Freny>git merge dev
Already up to date.

C:\Users\freny\OST-Freny>dir
 Volume in drive C has no label.
 Volume Serial Number is 04EC-4C5E

 Directory of C:\Users\freny\OST-Freny

28-01-2026  08:13    <DIR>          .
28-01-2026  08:16    <DIR>          ..
28-01-2026  08:17                23 sample.txt
                           1 File(s)       23 bytes
                           2 Dir(s)  31,784,304,640 bytes free

C:\Users\freny\OST-Freny>type sample.txt
Hello
Hello from dev

C:\Users\freny\OST-Freny>git remote -v

C:\Users\freny\OST-Freny>git remote add origin https://github.com/Freny-17/OST-Freny

C:\Users\freny\OST-Freny>git remote -v
origin  https://github.com/Freny-17/OST-Freny (fetch)
origin  https://github.com/Freny-17/OST-Freny (push)

C:\Users\freny\OST-Freny>git push -u origin main
To https://github.com/Freny-17/OST-Freny
 ! [rejected]      main -> main (fetch first)
error: failed to push some refs to 'https://github.com/Freny-17/OST-Freny'
hint: Updates were rejected because the remote contains work that you do not
hint: have locally. This is usually caused by another repository pushing to
hint: the same ref. If you want to integrate the remote changes, use
hint: 'git pull' before pushing again.
hint: See the 'Note about fast-forwards' in 'git push --help' for details.

C:\Users\freny\OST-Freny>git remote add origin https://github.com/Freny-17/OST-Freny.git
error: remote origin already exists.

C:\Users\freny\OST-Freny>git pull --rebase origin main
remote: Enumerating objects: 10, done.
remote: Counting objects: 100% (10/10), done.
```

```
remote: Compressing objects: 100% (8/8), done.  
remote: Total 10 (delta 1), reused 0 (delta 0), pack-reused 0 (from 0)  
Unpacking objects: 100% (10/10), 256.36 KiB | 458.00 KiB/s, done.
```

```
From https://github.com/Freny-17/OST-Freny
```

```
* branch      main      -> FETCH_HEAD  
* [new branch] main      -> origin/main
```

```
Successfully rebased and updated refs/heads/dev.
```

```
C:\Users\freny\OST-Freny>git pull --rebase origin main
```

```
From https://github.com/Freny-17/OST-Freny
```

```
* branch      main      -> FETCH_HEAD
```

```
Successfully rebased and updated refs/heads/main.
```

```
C:\Users\freny\OST-Freny>git push -u origin main
```

```
Enumerating objects: 4, done.
```

```
Counting objects: 100% (4/4), done.
```

```
Delta compression using up to 8 threads
```

```
Compressing objects: 100% (2/2), done.
```

```
Writing objects: 100% (3/3), 287 bytes | 143.00 KiB/s, done.
```

```
Total 3 (delta 1), reused 0 (delta 0), pack-reused 0 (from 0)
```

```
remote: Resolving deltas: 100% (1/1), completed with 1 local object.
```

```
To https://github.com/Freny-17/OST-Freny
```

```
 f2650a2..7c47973 main -> main
```

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