

Experiment No. 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 "prashantvala"  
git config --global user.email "prashantvala40@gmail.com"
```

Step 3:

```
C:\Users\prash>git --version  
git version 2.53.0.windows.1
```

```
C:\Users\prash>git init  
Initialized empty Git repository in C:/Users/prash/.git/
```

```
C:\Users\prash>mkdir ost
```

```
C:\Users\prash>mkdir ost  
A subdirectory or file ost already exists.
```

```
C:\Users\prash>git init  
Reinitialized existing Git repository in C:/Users/prash/.git/
```

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

```
C:\Users\prash\ost>git init  
Initialized empty Git repository in C:/Users/prash/ost/.git/
```

```
C:\Users\prash\ost>git status  
On branch master
```

No commits yet

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

```
C:\Users\prash\ost>echo sample.txt  
sample.txt
```

```
C:\Users\prash\ost>echo demo.py  
demo.py
```

```
C:\Users\prash\ost>git status  
On branch master
```

No commits yet

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

```
C:\Users\prash\ost>dir
Volume in drive C is OS
Volume Serial Number is 60CF-E8AF

Directory of C:\Users\prash\ost

17-02-2026 22:07    <DIR>          .
17-02-2026 22:05    <DIR>          ..
              0 File(s)           0 bytes
              2 Dir(s)  406,771,421,184 bytes free
```

```
C:\Users\prash\ost>echo sample.txt
sample.txt
```

```
C:\Users\prash\ost>dir
Volume in drive C is OS
Volume Serial Number is 60CF-E8AF
```

```
Directory of C:\Users\prash\ost

17-02-2026 22:07    <DIR>          .
17-02-2026 22:05    <DIR>          ..
              0 File(s)           0 bytes
              2 Dir(s)  406,771,486,720 bytes free
```

```
C:\Users\prash\ost>echo Hello> sample.txt
```

```
C:\Users\prash\ost>dir
Volume in drive C is OS
Volume Serial Number is 60CF-E8AF
```

```
Directory of C:\Users\prash\ost

17-02-2026 22:11    <DIR>          .
17-02-2026 22:05    <DIR>          ..
17-02-2026 22:11            7 sample.txt
              1 File(s)        7 bytes
              2 Dir(s)  406,771,376,128 bytes free
```

```
C:\Users\prash\ost>type sample.txt
Hello
```

```
C:\Users\prash\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\prash\ost>git config --global init.defaultBranch main
```

```
C:\Users\prash\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\prash\ost>git add sample.txt
```

```
C:\Users\prash\ost>git commit -m "Initial Commit"  
[master (root-commit) 66bbe46] Initial Commit  
1 file changed, 1 insertion(+)  
create mode 100644 sample.txt
```

```
C:\Users\prash\ost>git branch
```

```
* master
```

```
C:\Users\prash\ost>git branch -m main
```

```
C:\Users\prash\ost>git branch  
* main
```

```
C:\Users\prash\ost>git checkout main  
Already on 'main'
```

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

```
C:\Users\prash\ost>echo Hello from dev>> sample.txt
```

```
C:\Users\prash\ost>git add .
```

```
C:\Users\prash\ost>git commit -m "Update in dev"  
[dev f359ad0] Update in dev  
1 file changed, 1 insertion(+)
```

```
C:\Users\prash\ost>git checkout main  
Switched to branch 'main'
```

```
C:\Users\prash\ost>git merge dev  
Updating 66bbe46..f359ad0  
Fast-forward  
 sample.txt | 1 +  
 1 file changed, 1 insertion(+)
```

```
C:\Users\prash\ost>dir
Volume in drive C is OS
Volume Serial Number is 60CF-E8AF
```

```
Directory of C:\Users\prash\ost
```

```
17-02-2026 22:21    <DIR>      .
17-02-2026 22:19    <DIR>      ..
17-02-2026 22:21            23 sample.txt
                           1 File(s)       23 bytes
                           2 Dir(s)  406,768,168,960 bytes free
```

```
C:\Users\prash\ost>type sample.txt
Hello
Hello from dev
```

```
C:\Users\prash\ost>git remote -v
```

```
C:\Users\prash\ost>git remote add origin https://github.com/prashantvala/OST_Prashant_Vala
```

```
C:\Users\prash\ost>git remote -v
origin  https://github.com/prashantvala/OST_Prashant_Vala (fetch)
origin  https://github.com/prashantvala/OST_Prashant_Vala (push)
```

```
C:\Users\prash\ost>git push -u origin main
info: please complete authentication in your browser...
To https://github.com/prashantvala/OST_Prashant_Vala
 ! [rejected]      main -> main (fetch first)
error: failed to push some refs to 'https://github.com/prashantvala/OST_Prashant_Vala'
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\prash\ost>git pull origin main --allow-unrelated-histories
remote: Enumerating objects: 17, done.
remote: Counting objects: 100% (17/17), done.
remote: Compressing objects: 100% (11/11), done.
remote: Total 17 (delta 2), reused 7 (delta 2), pack-reused 0 (from 0)
Unpacking objects: 100% (17/17), 1.35 MiB | 3.72 MiB/s, done.
From https://github.com/prashantvala/OST_Prashant_Vala
 * branch      main      -> FETCH_HEAD
 * [new branch] main      -> origin/main
Merge made by the 'ort' strategy.
Experiment-1.docx | Bin 0 -> 19510 bytes
Experiment-1.pdf   | Bin 0 -> 116067 bytes
OST_Syllabus.pdf  | Bin 0 -> 1311366 bytes
README.md         | 1 +
4 files changed, 1 insertion(+)
create mode 100644 Experiment-1.docx
```

```
create mode 100644 Experiment-1.pdf
create mode 100644 OST_Syllabus.pdf
create mode 100644 README.md
```

```
C:\Users\prash\ost>git push -u origin main
```

Enumerating objects: 9, done.

Counting objects: 100% (9/9), done.

Delta compression using up to 8 threads

Compressing objects: 100% (4/4), done.

Writing objects: 100% (8/8), 749 bytes | 749.00 KiB/s, done.

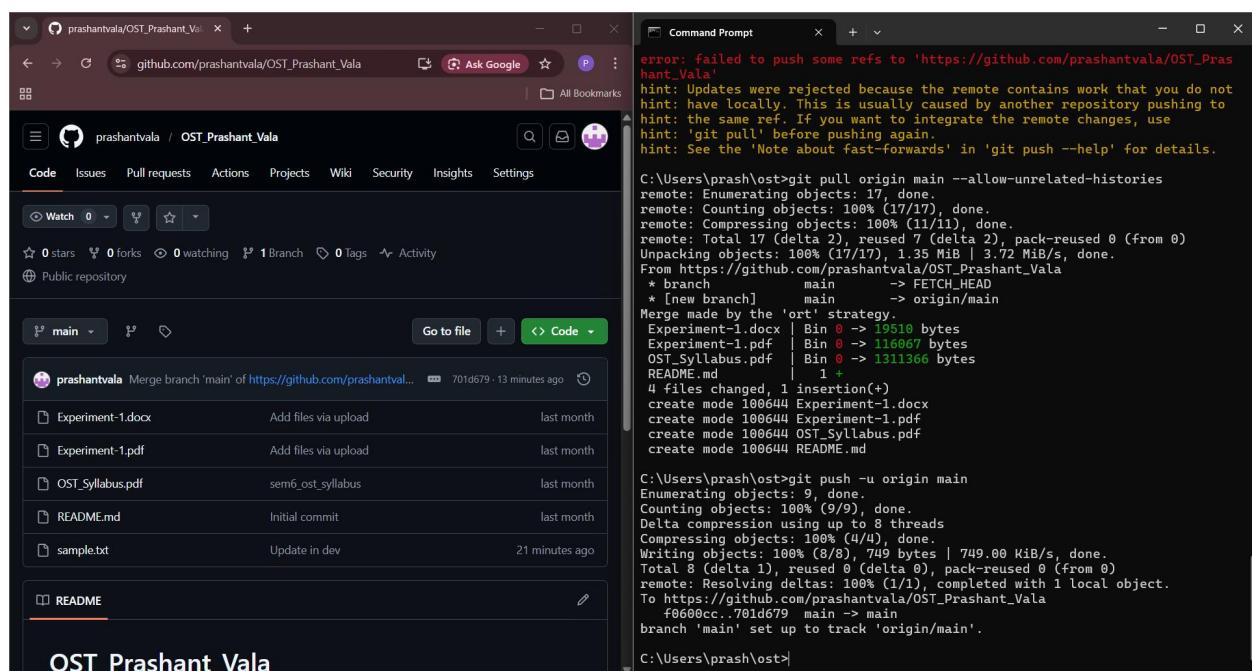
Total 8 (delta 1), reused 0 (delta 0), pack-reused 0 (from 0)

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

To https://github.com/prashantvala/OST_Prashant_Vala

f0600cc..701d679 main -> main

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



The screenshot shows a GitHub repository page for 'prashantvala / OST_Prashant_Vala' on the left and a Command Prompt window on the right.

GitHub Repository Page:

- Repository name: prashantvala / OST_Prashant_Vala
- Description: OST_Prashant_Vala
- Code tab selected.
- Branch: main
- Issues: 0 stars, 0 forks, 0 watching, 1 Branch, 0 Tags, Activity
- Public repository
- File list: Experiment-1.docx, Experiment-1.pdf, OST_Syllabus.pdf, README.md, sample.txt

Command Prompt Window:

```
error: failed to push some refs to 'https://github.com/prashantvala/OST_Prashant_Vala'
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\prash\ost>git pull origin main --allow-unrelated-histories
remote: Enumerating objects: 17, done.
remote: Counting objects: 100% (17/17), done.
remote: Compressing objects: 100% (11/11), done.
remote: Total 17 (delta 2), reused 7 (delta 2), pack-reused 0 (from 0)
Unpacking objects: 100% (17/17), 1.35 MiB | 3.72 MiB/s, done.
From https://github.com/prashantvala/OST_Prashant_Vala
 * branch      main      -> FETCH_HEAD
 * [new branch] main      -> origin/main
Merge made by the 'ort' strategy.
 Experiment-1.docx | Bin 0 -> 19510 bytes
 Experiment-1.pdf  | Bin 0 -> 116067 bytes
 OST_Syllabus.pdf | Bin 0 -> 1311366 bytes
 README.md        | 1 +
 4 files changed, 1 insertion(+)
 create mode 100644 Experiment-1.docx
 create mode 100644 Experiment-1.pdf
 create mode 100644 OST_Syllabus.pdf
 create mode 100644 README.md

C:\Users\prash\ost>git push -u origin main
Enumerating objects: 9, done.
Counting objects: 100% (9/9), done.
Delta compression using up to 8 threads
Compressing objects: 100% (4/4), done.
Writing objects: 100% (8/8), 749 bytes | 749.00 KiB/s, done.
Total 8 (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/prashantvala/OST_Prashant_Vala
 f0600cc..701d679 main -> main
branch 'main' set up to track 'origin/main'.
```