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 "RAJNISH KUMAR"
git config --global user.email rajnishkumar@gmail.com

Step 3:
student@DESKTOP-14AGCKR MINGW64 /cgit --version
git version 2.43.0.windows.1

student@DESKTOP-14AGCKR MINGW64 /c
$ git init
Initialized empty Git repository in C:/.git/

student@DESKTOP-14AGCKR MINGW64 /c
$ mkdir ost

student@DESKTOP-14AGCKR MINGW64 /c
$ mkdir ost
mkdir: cannot create directory 'ost': File exists

student@DESKTOP-14AGCKR MINGW64 /c
$ git init
Reinitialized existing Git repository in C:/.git/

student@DESKTOP-14AGCKR MINGW64 /c
$ cd ost

student@DESKTOP-14AGCKR MINGW64 /c/ost
$ git init
Initialized empty Git repository in C:/ost/.git/

student@DESKTOP-14AGCKR MINGW64 /c/ost (master)
$ git status
On branch master

No commits yet

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

student@DESKTOP-14AGCKR MINGW64 /c/ost (master)
$ echo sample.txt
sample.txt

student@DESKTOP-14AGCKR MINGW64 /c/ost (master)
$ echo demo.py
demo.py

student@DESKTOP-14AGCKR MINGW64 /c/ost (master)
$ git status
On branch master

No commits yet

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

```
student@DESKTOP-14AGCKR MINGW64 /c/ost (master)
$ dir

student@DESKTOP-14AGCKR MINGW64 /c/ost (master)
$ echo sample.txt
sample.txt

student@DESKTOP-14AGCKR MINGW64 /c/ost (master)
$ dir

student@DESKTOP-14AGCKR MINGW64 /c/ost (master)
$ echo Hello> sample.txt

student@DESKTOP-14AGCKR MINGW64 /c/ost (master)
$ dir
sample.txt

student@DESKTOP-14AGCKR MINGW64 /c/ost (master)
$ type sample.txt
bash: type: sample.txt: not found

student@DESKTOP-14AGCKR MINGW64 /c/ost (master)
$ touch sample.txt

student@DESKTOP-14AGCKR MINGW64 /c/ost (master)
$ ls
sample.txt

student@DESKTOP-14AGCKR MINGW64 /c/ost (master)
$ echo Hello > sample.txt

student@DESKTOP-14AGCKR MINGW64 /c/ost (master)
$ type sample.txt
bash: type: sample.txt: not found

student@DESKTOP-14AGCKR MINGW64 /c/ost (master)
$ cat file
cat: file: No such file or directory

student@DESKTOP-14AGCKR MINGW64 /c/ost (master)
$ 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)

student@DESKTOP-14AGCKR MINGW64 /c/ost (master)
$ git add sample.txt
warning: in the working copy of 'sample.txt', LF will be replaced by CRLF the next
time Git touches it

student@DESKTOP-14AGCKR MINGW64 /c/ost (master)
$ ^[[200~ls
bash: $'\E[200~ls': command not found
cat sample.txt
```

```
git status
git add sample.txt
git commit -m "Added sample.txt"

student@DESKTOP-14AGCKR MINGW64 /c/ost (master)
$ echo Hello > sample.txt

student@DESKTOP-14AGCKR MINGW64 /c/ost (master)
$ cat sample.txt
Hello

student@DESKTOP-14AGCKR MINGW64 /c/ost (master)
$ git status
On branch master

No commits yet

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


student@DESKTOP-14AGCKR MINGW64 /c/ost (master)
$ git add sample.txt
warning: in the working copy of 'sample.txt', LF will be replaced by CRLF the next
time Git touches it

student@DESKTOP-14AGCKR MINGW64 /c/ost (master)
$ git commit -m "Added sample.txt"
[master (root-commit) e4a53e6] Added sample.txt
 1 file changed, 1 insertion(+)
 create mode 100644 sample.txt

student@DESKTOP-14AGCKR MINGW64 /c/ost (master)
$ git branch
* master

student@DESKTOP-14AGCKR MINGW64 /c/ost (master)
$ git branch -m master main

student@DESKTOP-14AGCKR MINGW64 /c/ost (main)
$ git branch
* main

student@DESKTOP-14AGCKR MINGW64 /c/ost (main)
$ git checkout main
Already on 'main'

student@DESKTOP-14AGCKR MINGW64 /c/ost (main)
$ git checkout -b dev
Switched to a new branch 'dev'

student@DESKTOP-14AGCKR MINGW64 /c/ost (dev)
$ echo Hello from dev>>sample.txt

student@DESKTOP-14AGCKR MINGW64 /c/ost (dev)
$ git add .
warning: in the working copy of 'sample.txt', LF will be replaced by CRLF the next
time Git touches it

student@DESKTOP-14AGCKR MINGW64 /c/ost (dev)
```

```
$ git commit -m "Add sample.txt from dev branch"
git checkout main
git merge dev
[dev 88554d4] Add sample.txt from dev branch
 1 file changed, 1 insertion(+)
Switched to branch 'main'
Updating e4a53e6..88554d4
Fast-forward
 sample.txt | 1 +
 1 file changed, 1 insertion(+)

student@DESKTOP-14AGCKR MINGW64 /c/ost (main)
$ dir
sample.txt

student@DESKTOP-14AGCKR MINGW64 /c/ost (main)
$ type sample.txt
bash: type: sample.txt: not found

student@DESKTOP-14AGCKR MINGW64 /c/ost (main)
$ cat sample.txt
Hello
Hello from dev

student@DESKTOP-14AGCKR MINGW64 /c/ost (main)
$ git remote -v

student@DESKTOP-14AGCKR MINGW64 /c/ost (main)
$ git remote add origin
usage: git remote add [<options>] <name> <url>

    -f, --[no-]fetch       fetch the remote branches
    --[no-]tags            import all tags and associated objects when fetching
                           or do not fetch any tag at all (--no-tags)
    -t, --[no-]track <branch>
                           branch(es) to track
    -m, --[no-]master <branch>
                           master branch
    --[no-]mirror[=(push|fetch)]
                           set up remote as a mirror to push to or fetch from


student@DESKTOP-14AGCKR MINGW64 /c/ost (main)
$ git remote add origin https://github.com/Rajnish131216/OST_Rajnish_Sinh

student@DESKTOP-14AGCKR MINGW64 /c/ost (main)
$ git remote -v
origin  https://github.com/Rajnish131216/OST_Rajnish_Sinh (fetch)
origin  https://github.com/Rajnish131216/OST_Rajnish_Sinh (push)

student@DESKTOP-14AGCKR MINGW64 /c/ost (main)
$ git push -u origin main
fatal: User cancelled dialog.
error: unable to read askpass response from 'C:/Program Files/Git/mingw64/bin/git-
askpass.exe'
Username for 'https://github.com':
error: unable to read askpass response from 'C:/Program Files/Git/mingw64/bin/git-
askpass.exe'
Merge branch 'main' of https://github.com/Rajnish131216/OST_Rajnish_Sinh

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), 307.03 KiB | 976.00 KiB/s, done.
From https://github.com/Rajnish131216/OST_Rajnish_Sinh
 * branch            main        -> FETCH_HEAD
 * [new branch]      main        -> origin/main
Merge made by the 'ort' strategy.
 01CE0618 – Open Source Technologies Syllabus.pdf | 5757 +++++++++++++++++++++
 Experiment_1.docx                                |  Bin 0 -> 15443 bytes
 Experiment_1.pdf                                 |  Bin 0 -> 153519 bytes
 README.md                                        |    2 +
 4 files changed, 5759 insertions(+)
 create mode 100644 01CE0618 – Open Source Technologies Syllabus.pdf
 create mode 100644 Experiment_1.docx
 create mode 100644 Experiment_1.pdf
 create mode 100644 README.md
Enumerating objects: 9, done.
Counting objects: 100% (9/9), done.
Delta compression using up to 12 threads
Compressing objects: 100% (4/4), done.
Writing objects: 100% (8/8), 807 bytes | 807.00 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/Rajnish131216/OST_Rajnish_Sinh
   714e566..b01b627  main -> main
branch 'main' set up to track 'origin/main'.

student@DESKTOP-14AGCKR MINGW64 /c/ost (main)
```