

Assignment1: Initialize a new Git repository in a directory of your choice. Add a simple text file to the repository and make the first commit

```
MINGW64:/d/wipdemo/fol1/Demo
Initialized empty Git repository in D:/WipDemo/fol1/.git/

Suraj@DESKTOP-UROJLRH MINGW64 /d/wipdemo/fol1 (master)
$ git config --global user.name "SurajPandav"

Suraj@DESKTOP-UROJLRH MINGW64 /d/wipdemo/fol1 (master)
$ git config --global user.email surajpandav642@gmail.com

Suraj@DESKTOP-UROJLRH MINGW64 /d/wipdemo/fol1 (master)
$ git clone https://github.com/SurajPandav/Demo.git
Cloning into 'Demo'...
remote: Enumerating objects: 3, done.
remote: Counting objects: 100% (3/3), done.
remote: Total 3 (delta 0), reused 0 (delta 0), pack-reused 0
Receiving objects: 100% (3/3), done.

Suraj@DESKTOP-UROJLRH MINGW64 /d/wipdemo/fol1 (master)
$ cd Demo/

Suraj@DESKTOP-UROJLRH MINGW64 /d/wipdemo/fol1/Demo (main)
$ ls
README.md

Suraj@DESKTOP-UROJLRH MINGW64 /d/wipdemo/fol1/Demo (main)
$ echo "Welcome Suraj" > myfile.txt

Suraj@DESKTOP-UROJLRH MINGW64 /d/wipdemo/fol1/Demo (main)
$ git add .
warning: in the working copy of 'myfile.txt', LF will be replaced by CRLF the next time Git touches it

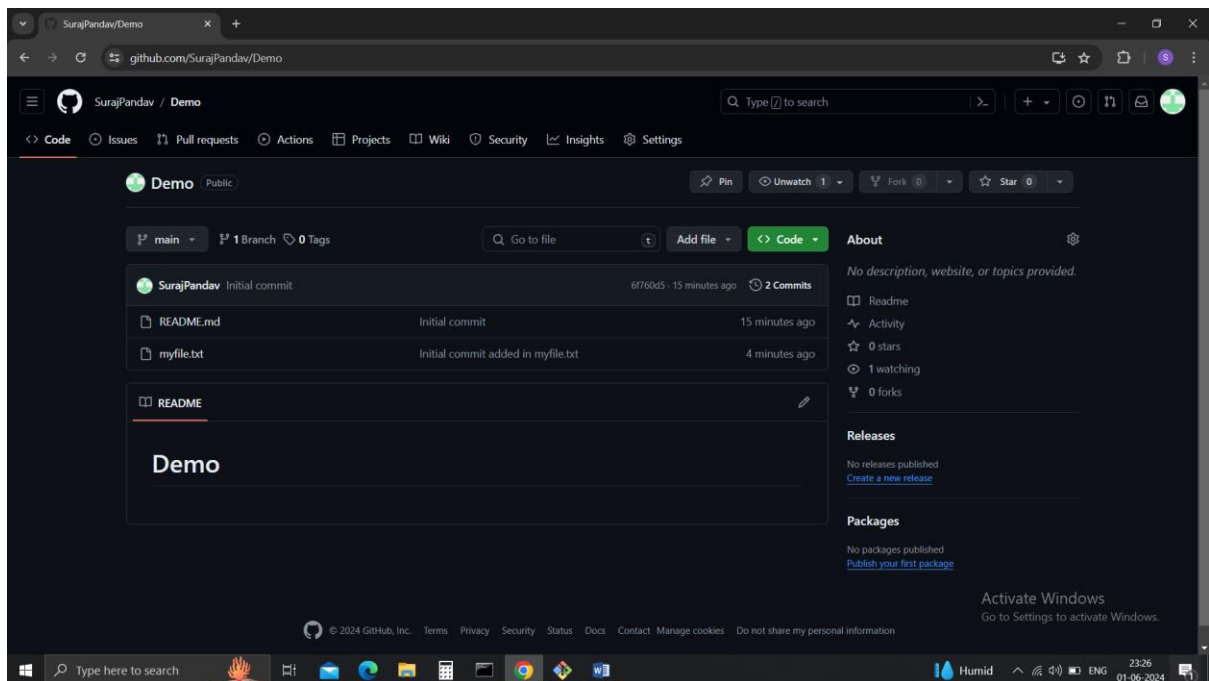
Suraj@DESKTOP-UROJLRH MINGW64 /d/wipdemo/fol1/Demo (main)
$ git commit -m "Initial commit added in myfile.txt"
[main 9cc5c1c] Initial commit added in myfile.txt
1 file changed, 1 insertion(+)
create mode 100644 myfile.txt

Suraj@DESKTOP-UROJLRH MINGW64 /d/wipdemo/fol1/Demo (main)
$ git status
On branch main
Your branch is ahead of 'origin/main' by 1 commit.
  (use "git push" to publish your local commits)

nothing to commit, working tree clean

Suraj@DESKTOP-UROJLRH MINGW64 /d/wipdemo/fol1/Demo (main)
$ git push
Enumerating objects: 4, done.
Counting objects: 100% (4/4), done.
Delta compression using up to 4 threads
Compressing objects: 100% (2/2), done.
Writing objects: 100% (3/3), 310 bytes | 310.00 KiB/s, done.
Total 3 (delta 0), reused 0 (delta 0), pack-reused 0 (from 0)
To https://github.com/SurajPandav/Demo.git
6f760d5..9cc5c1c  main -> main

Suraj@DESKTOP-UROJLRH MINGW64 /d/wipdemo/fol1/Demo (main)
$ |
```



Assignment 2: Branch Creation and Switching

Create a new branch named 'feature' and switch to it. Make changes in the 'feature' branch and commit them.

```
Suraj@DESKTOP-UROJLRH MINGW64 /d/wipdemo/foll/Demo (main)
$ git branch feature

Suraj@DESKTOP-UROJLRH MINGW64 /d/wipdemo/foll/Demo (main)
$ git status
On branch main
Your branch is up to date with 'origin/main'.

nothing to commit, working tree clean

Suraj@DESKTOP-UROJLRH MINGW64 /d/wipdemo/foll/Demo (main)
$ git checkout feature
Switched to branch 'feature'

Suraj@DESKTOP-UROJLRH MINGW64 /d/wipdemo/foll/Demo (feature)
$ ls
README.md  myfile.txt

Suraj@DESKTOP-UROJLRH MINGW64 /d/wipdemo/foll/Demo (feature)
$ echo "You are in feature branch" > file1.txt

Suraj@DESKTOP-UROJLRH MINGW64 /d/wipdemo/foll/Demo (feature)
$ git add .
warning: in the working copy of 'file1.txt', LF will be replaced by CRLF the next time Git touches it

Suraj@DESKTOP-UROJLRH MINGW64 /d/wipdemo/foll/Demo (feature)
$ git commit -m "file1 created in feature branch"
[feature 14f24e3] file1 created in feature branch
1 file changed, 1 insertion(+)
create mode 100644 file1.txt

Suraj@DESKTOP-UROJLRH MINGW64 /d/wipdemo/foll/Demo (feature)
$ git status
On branch feature
nothing to commit, working tree clean

Suraj@DESKTOP-UROJLRH MINGW64 /d/wipdemo/foll/Demo (feature)
$ ls
README.md  file1.txt  myfile.txt

Suraj@DESKTOP-UROJLRH MINGW64 /d/wipdemo/foll/Demo (feature)
$ |
```

Assignment 3: Feature Branches and Hotfixes

Create a 'hotfix' branch to fix an issue in the main code. Merge the 'hotfix' branch into 'main' ensuring that the issue is resolved.

```
Suraj@DESKTOP-UROJLRH MINGW64 /d/wipdemo/foll/Demo (hotfix)
$ git checkout main
Switched to branch 'main'
Your branch is ahead of 'origin/main' by 3 commits.
  (use "git push" to publish your local commits)

Suraj@DESKTOP-UROJLRH MINGW64 /d/wipdemo/foll/Demo (main)
$ ls
README.md  myfile.txt

Suraj@DESKTOP-UROJLRH MINGW64 /d/wipdemo/foll/Demo (main)
$ cat myfile.txt

Welcome Suraj,Bug is fixed now.

Welcome Suraj Fixed bug again!
```

```
Suraj@DESKTOP-UROJLRH MINGW64 /d/wipdemo/foll/Demo (main)
$ git branch hotfix

Suraj@DESKTOP-UROJLRH MINGW64 /d/wipdemo/foll/Demo (main)
$ git checkout hotfix
Switched to branch 'hotfix'

Suraj@DESKTOP-UROJLRH MINGW64 /d/wipdemo/foll/Demo (hotfix)
$ ls
README.md  myfile.txt
```

```
Suraj@DESKTOP-UROJLRH MINGW64 /d/wipdemo/foll/Demo (hotfix)
$ cat myfile.txt

Welcome Suraj,Bug is fixed now.

Welcome Suraj Fixed bug again!

Suraj@DESKTOP-UROJLRH MINGW64 /d/wipdemo/foll/Demo (hotfix)
$ vim myfile.txt

Suraj@DESKTOP-UROJLRH MINGW64 /d/wipdemo/foll/Demo (hotfix)
$ git add .

Suraj@DESKTOP-UROJLRH MINGW64 /d/wipdemo/foll/Demo (hotfix)
$ git commit -m "All bugs in code fixed in myfile.txt in hotfix branch"
[hotfix 2e932fa] All bugs in code fixed in myfile.txt in hotfix branch
1 file changed, 1 insertion(+), 3 deletions(-)

Suraj@DESKTOP-UROJLRH MINGW64 /d/wipdemo/foll/Demo (hotfix)
$ git status
On branch hotfix
nothing to commit, working tree clean

Suraj@DESKTOP-UROJLRH MINGW64 /d/wipdemo/foll/Demo (hotfix)
$ cat myfile.txt

Welcome Suraj All bugs are fixed now.
```

```
Suraj@DESKTOP-UROJLRH MINGW64 /d/wipdemo/foll/Demo (hotfix)
$ git checkout main
Switched to branch 'main'
Your branch is ahead of 'origin/main' by 3 commits.
  (use "git push" to publish your local commits)

Suraj@DESKTOP-UROJLRH MINGW64 /d/wipdemo/foll/Demo (main)
$ cat myfile.txt

Welcome Suraj,Bug is fixed now.

Welcome Suraj Fixed bug again!

Suraj@DESKTOP-UROJLRH MINGW64 /d/wipdemo/foll/Demo (main)
$ git merge hotfix
Updating ff5201b..2e932fa
Fast-forward
 myfile.txt | 4 +---
 1 file changed, 1 insertion(+), 3 deletions(-)

Suraj@DESKTOP-UROJLRH MINGW64 /d/wipdemo/foll/Demo (main)
$ git status
On branch main
Your branch is ahead of 'origin/main' by 4 commits.
  (use "git push" to publish your local commits)

nothing to commit, working tree clean

Suraj@DESKTOP-UROJLRH MINGW64 /d/wipdemo/foll/Demo (main)
$ cat myfile.txt

Welcome Suraj All bugs are fixed now.
```

```
Suraj@DESKTOP-UROJLRH MINGW64 /d/wipdemo/foll/Demo (main)
$ git push
Enumerating objects: 14, done.
Counting objects: 100% (14/14), done.
Delta compression using up to 4 threads
Compressing objects: 100% (9/9), done.
Writing objects: 100% (12/12), 1.21 KiB | 248.00 KiB/s, done.
Total 12 (delta 1), reused 0 (delta 0), pack-reused 0 (from 0)
remote: Resolving deltas: 100% (1/1), done.
To https://github.com/SurajPandav/Demo.git
    9cc5c1c..2e932fa  main -> main

Suraj@DESKTOP-UROJLRH MINGW64 /d/wipdemo/foll/Demo (main)
$ git push origin hotfix
Total 0 (delta 0), reused 0 (delta 0), pack-reused 0 (from 0)
remote:
remote: Create a pull request for 'hotfix' on GitHub by visiting:
remote:   https://github.com/SurajPandav/Demo/pull/new/hotfix
remote:
To https://github.com/SurajPandav/Demo.git
 * [new branch]      hotfix -> hotfix

Suraj@DESKTOP-UROJLRH MINGW64 /d/wipdemo/foll/Demo (main)
$ git status
On branch main
Your branch is up to date with 'origin/main'.

nothing to commit, working tree clean
```

