

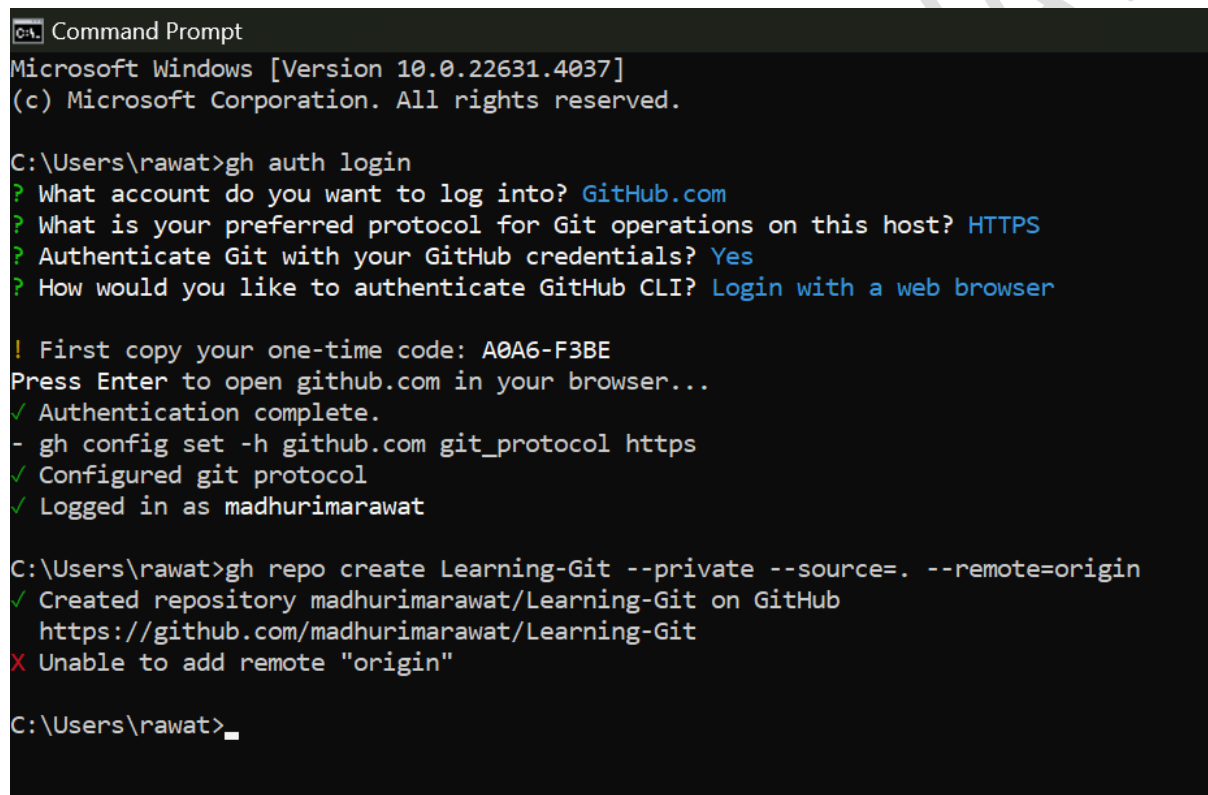
## Experiment 2

**Aim:** Version Control with Git: Practice basic Git operations such as repository creation, file addition, committing changes, and pushing to a remote repository.

### 1. Creating Repository:

After installing the GitHub CLI, run the following command to create a new private GitHub repository named Learning-Git and set it as the remote origin:

**gh repo create Learning-Git --private --source=. --remote=origin**



```
C:\Users\rawat>gh auth login
Microsoft Windows [Version 10.0.22631.4037]
(c) Microsoft Corporation. All rights reserved.

C:\Users\rawat>gh auth login
? What account do you want to log into? GitHub.com
? What is your preferred protocol for Git operations on this host? HTTPS
? Authenticate Git with your GitHub credentials? Yes
? How would you like to authenticate GitHub CLI? Login with a web browser

! First copy your one-time code: A0A6-F3BE
Press Enter to open github.com in your browser...
✓ Authentication complete.
- gh config set -h github.com git_protocol https
✓ Configured git protocol
✓ Logged in as madhurimarawat

C:\Users\rawat>gh repo create Learning-Git --private --source=. --remote=origin
✓ Created repository madhurimarawat/Learning-Git on GitHub
  https://github.com/madhurimarawat/Learning-Git
X Unable to add remote "origin"

C:\Users\rawat>
```

*Fig 1: Creating GitHub Repository Using GitHub CLI*

### 2. Creating a local repository and pushing changes to GitHub Using Git:

Start by initializing a new Git repository locally with **git init**, then add your files using **git add .**

Commit the changes with **git commit -m "Initial commit"**. Finally, link to a remote GitHub repository with **git remote add origin https://github.com/madhurimarawat/Learning-Git.git** and push the changes using **git push -u origin main**.

```

MINGW64/c/Users/rawat/Desktop/Learning-Git
rawat@MADHURIMA-RAWAT MINGW64 ~ (master)
$ cd Desktop\
> cd Desktop
bash: cd: too many arguments

rawat@MADHURIMA-RAWAT MINGW64 ~ (master)
$ cd Desktop

rawat@MADHURIMA-RAWAT MINGW64 ~/Desktop (master)
$ mkdir Learning-Git

rawat@MADHURIMA-RAWAT MINGW64 ~/Desktop (master)
$ cd Learning-Git

rawat@MADHURIMA-RAWAT MINGW64 ~/Desktop/Learning-Git (master)
$ git init
Initialized empty Git repository in C:/Users/rawat/Desktop/Learning-Git/.git/

rawat@MADHURIMA-RAWAT MINGW64 ~/Desktop/Learning-Git (master)
$ echo "#My New Repository for learning Git">>README.md

rawat@MADHURIMA-RAWAT MINGW64 ~/Desktop/Learning-Git (master)
$ git add .
warning: in the working copy of 'README.md', LF will be replaced by CRLF the next time git touches it

rawat@MADHURIMA-RAWAT MINGW64 ~/Desktop/Learning-Git (master)
$ git commit -m "Initial Commit"
[master (root-commit) 00135cd] Initial Commit
1 file changed, 1 insertion(+)
create mode 100644 README.md

rawat@MADHURIMA-RAWAT MINGW64 ~/Desktop/Learning-Git (master)
$ git auth
git: 'auth' is not a git command. See 'git --help'.

The most similar commands are
  push
  status

rawat@MADHURIMA-RAWAT MINGW64 ~/Desktop/Learning-Git (master)
$ git auth login
git: 'auth' is not a git command. See 'git --help'.

The most similar commands are
  push
  status

```

**Fig 2: Making Local Repository**

```

MINGW64/c/Users/rawat/Desktop/Learning-Git
bash: '$[E[200-git': command not found

rawat@MADHURIMA-RAWAT MINGW64 ~/Desktop/Learning-Git (master)
$ git branch
* master

rawat@MADHURIMA-RAWAT MINGW64 ~/Desktop/Learning-Git (master)
$ git branch -m master main

rawat@MADHURIMA-RAWAT MINGW64 ~/Desktop/Learning-Git (main)
$ git push -u origin main
Enumerating objects: 3, done.
Counting objects: 100% (3/3), done.
Writing objects: 100% (3/3), 253 bytes | 253.00 KiB/s, done.
Total 3 (delta 0), reused 0 (delta 0), pack-reused 0 (from 0)
To https://github.com/madhurimarawat/Learning-Git.git
 * [new branch]    main -> main
branch 'main' set up to track 'origin/main'.

rawat@MADHURIMA-RAWAT MINGW64 ~/Desktop/Learning-Git (main)
$ git commit -m "Add readme.txt with sample content"
On branch main
Your branch is up to date with 'origin/main'.

nothing to commit, working tree clean

rawat@MADHURIMA-RAWAT MINGW64 ~/Desktop/Learning-Git (main)
$ git add ^C

rawat@MADHURIMA-RAWAT MINGW64 ~/Desktop/Learning-Git (main)
$ echo "# MIT License for Learning Git">>LICENSE.md

rawat@MADHURIMA-RAWAT MINGW64 ~/Desktop/Learning-Git (main)
$ git add ^C

rawat@MADHURIMA-RAWAT MINGW64 ~/Desktop/Learning-Git (main)
$ git add LICENSE.md
warning: in the working copy of 'LICENSE.md', LF will be replaced by CRLF the next time Git touches it

rawat@MADHURIMA-RAWAT MINGW64 ~/Desktop/Learning-Git (main)
$ echo "print('Hello world')>>TRIAL.py

rawat@MADHURIMA-RAWAT MINGW64 ~/Desktop/Learning-Git (main)
$ git add TRIAL.py
warning: in the working copy of 'TRIAL.py', LF will be replaced by CRLF the next time Git touches it

rawat@MADHURIMA-RAWAT MINGW64 ~/Desktop/Learning-Git (main)
$

```

**Fig 3: Pushing Files and Making Changes**

```

MINGW64/c/Users/rawat/Desktop/Learning-Git
The most similar commands are
  push
  status

rawat@MADHURIMA-RAWAT MINGW64 ~/Desktop/Learning-Git (master)
$ ^[[200-git remote add origin https://github.com/madhurimarawat/Learning-Git.git
bash: '$[E[200-git': command not found

rawat@MADHURIMA-RAWAT MINGW64 ~/Desktop/Learning-Git (master)
$ git remote add origin https://github.com/madhurimarawat/Learning-Git.git

rawat@MADHURIMA-RAWAT MINGW64 ~/Desktop/Learning-Git (master)
$ git push -u origin main
error: src refspec main does not match any
error: failed to push some refs to 'https://github.com/madhurimarawat/Learning-Git.git'

rawat@MADHURIMA-RAWAT MINGW64 ~/Desktop/Learning-Git (master)
$ ^C

rawat@MADHURIMA-RAWAT MINGW64 ~/Desktop/Learning-Git (master)
$ ^[[200-git branch
bash: '$[E[200-git': command not found

rawat@MADHURIMA-RAWAT MINGW64 ~/Desktop/Learning-Git (master)
$ git branch
* master

rawat@MADHURIMA-RAWAT MINGW64 ~/Desktop/Learning-Git (master)
$ git branch -m master main

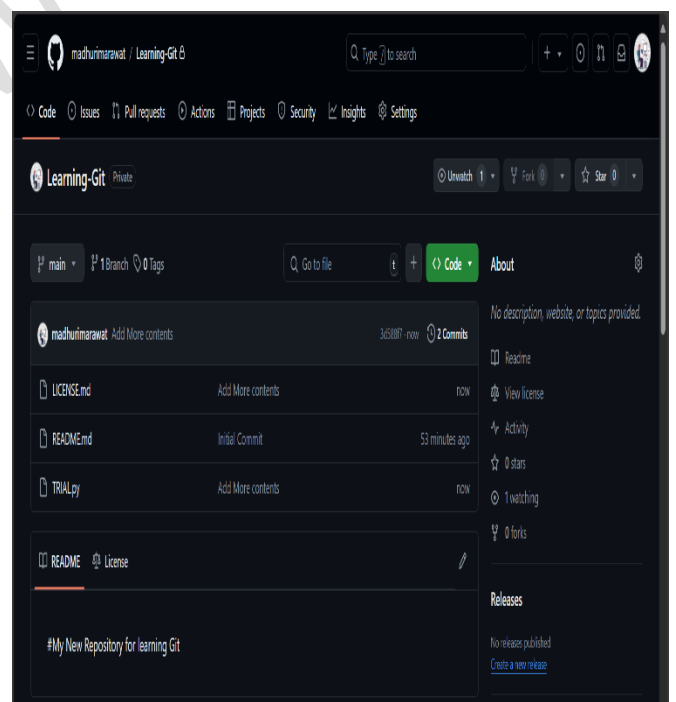
rawat@MADHURIMA-RAWAT MINGW64 ~/Desktop/Learning-Git (main)
$ git push -u origin main
Enumerating objects: 3, done.
Counting objects: 100% (3/3), done.
Writing objects: 100% (3/3), 253 bytes | 253.00 KiB/s, done.
Total 3 (delta 0), reused 0 (delta 0), pack-reused 0 (from 0)
To https://github.com/madhurimarawat/Learning-Git.git
 * [new branch]    main -> main
branch 'main' set up to track 'origin/main'.

rawat@MADHURIMA-RAWAT MINGW64 ~/Desktop/Learning-Git (main)
$ git commit -m "Add readme.txt with sample content"
On branch main
Your branch is up to date with 'origin/main'.

nothing to commit, working tree clean

```

**Fig 4: Committing Changes to Remote Repository**



**Fig 5: Repository Updated With Changes**