

EX NO 3

Install Git version control system and configure with GitHub

AIM:

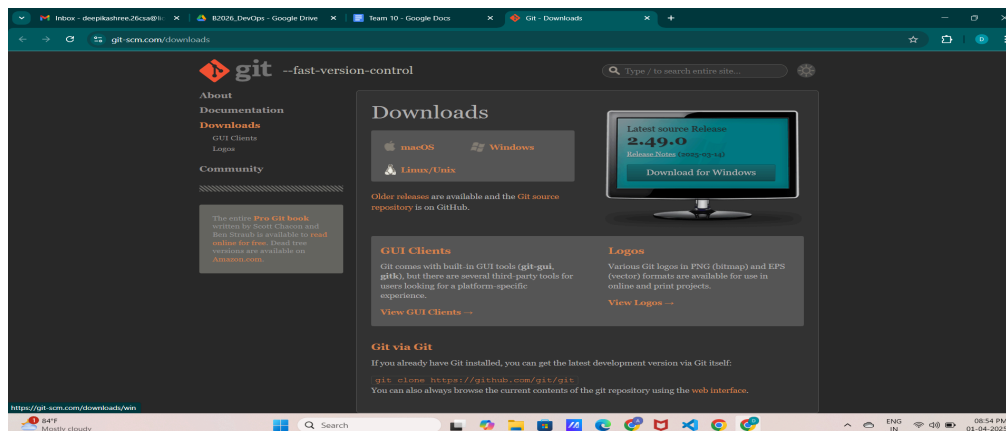
To install git version control and configure with github.

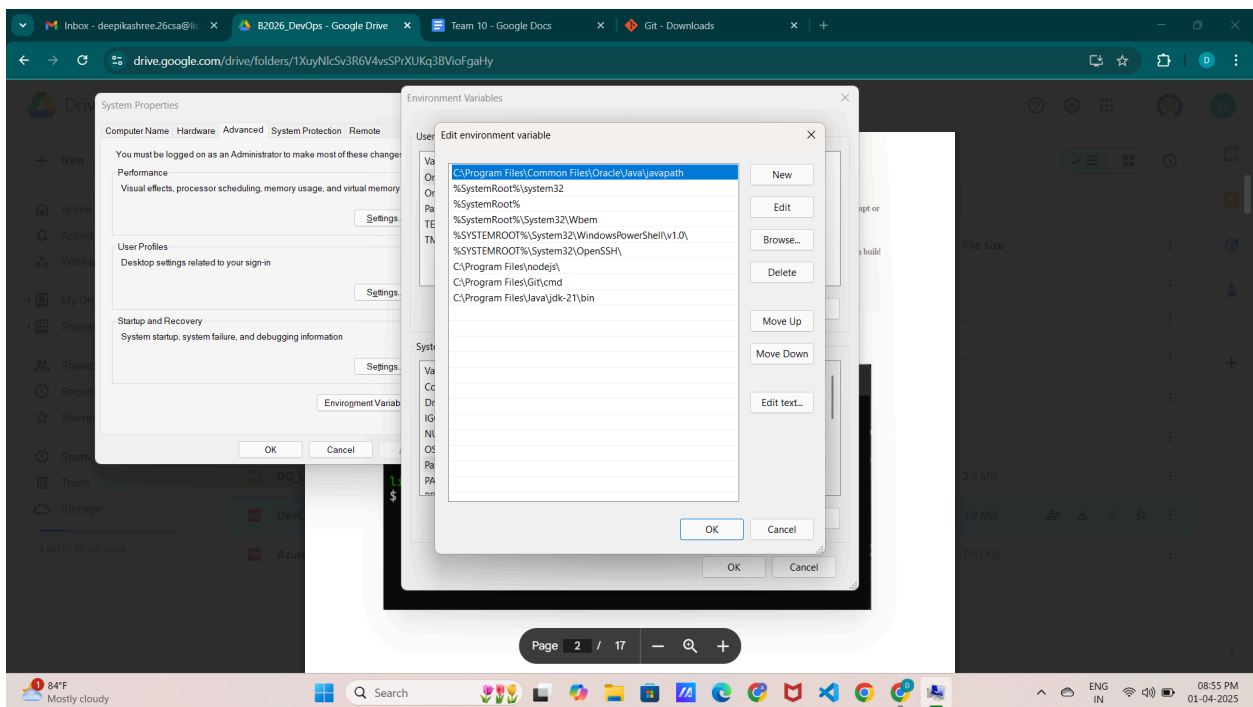
BASIC COMMANDS:

1. `git add "file name"`
2. `git add .`
3. `git commit -m "msg"`
4. `git status`
5. `git log`
6. `git branch -m main`
7. `git remote add origin "URL"`
8. `git push -m origin "branch name"`
9. `git checkout -b "new branch name"`
10. `git switch -c "new branch name"`
11. `git checkout/switch "branch name"`
12. `git pull origin "branch name"`
13. `git merge "source branch name"`
14. `git tag "tag name"`
15. `git tag -a "tag name" -m "message"`
16. `git push origin tag name`
17. `git merge <source_branch>`

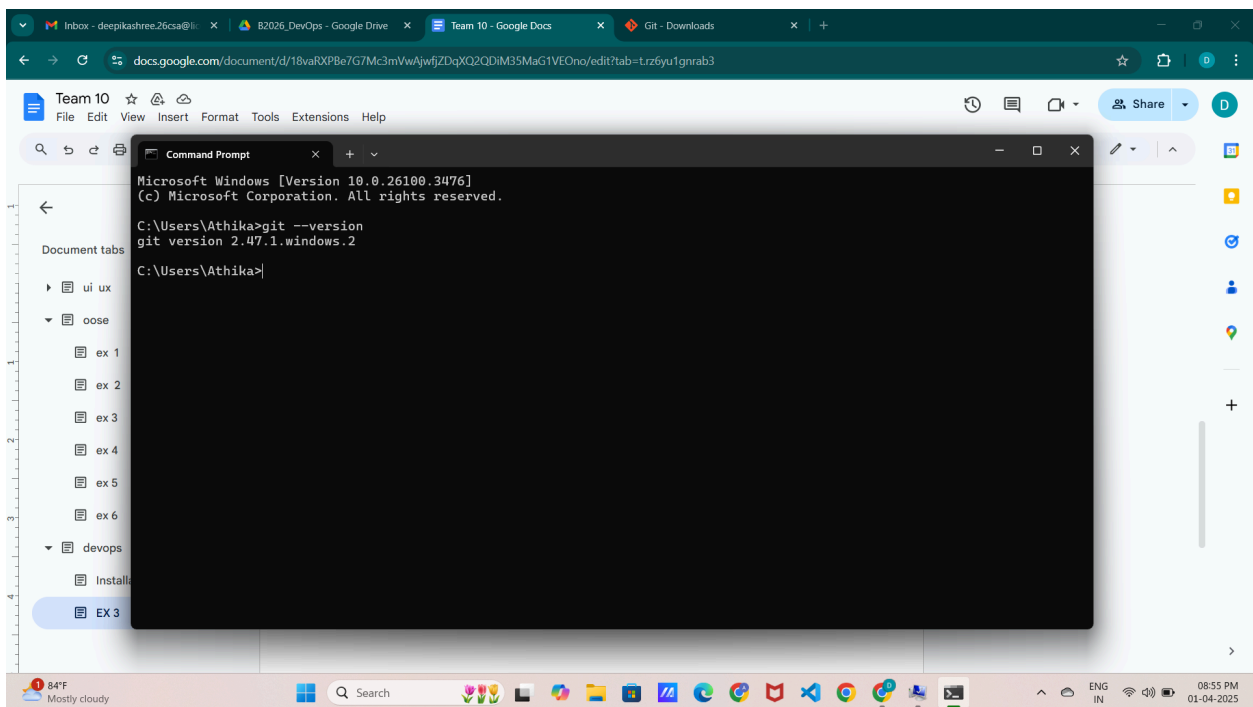
PROCEDURE:

Step 1: To install git on windows à Go to the Git official website: <https://git-scm.com/downloads>





Step 2: Run the setup and install git



Step 3: To initialize new repository run the following command “Git init”

Set the git configuration using the below commands

```
git config --global --user.name "*****"
```

```
git config --global --user.Email "*****"
```

Set the configuration using the command “git config --global --list”

```
Microsoft Windows [Version 10.0.19045.5371]
(c) Microsoft Corporation. All rights reserved.

D:\Demo>git init
Initialized empty Git repository in D:/Demo/.git/

D:\Demo>git config --global user.name "srideepi2005"

D:\Demo>git config --global user.email "srideepi2005@gmail.com"
```

Step 4: The git add command is used in Git to add changes or files to the staging area. This staging area is where you prepare your changes before committing them to the repository. Here's how to use git add: “git add .”

```
D:\Demo>git remote add origin https://github.com/srideepi/demo001

D:\Demo>git remote -v
origin https://github.com/srideepi/demo001 (fetch)
origin https://github.com/srideepi/demo001 (push)

D:\Demo>git add .

D:\Demo>git commit -m "Initial commit"
[master (root-commit) a7e0e44] Initial commit
1 file changed, 115 insertions(+)
create mode 100644 login.html

D:\Demo>git push -u origin main
error: src refspec main does not match any
error: failed to push some refs to 'https://github.com/srideepi/demo001'

D:\Demo>git push -u origin master
Enumerating objects: 3, done.
Counting objects: 100% (3/3), done.
Delta compression using up to 4 threads
Compressing objects: 100% (2/2), done.
Writing objects: 100% (3/3), 1.46 KiB | 373.00 KiB/s, done.
Total 3 (delta 0), reused 0 (delta 0), pack-reused 0 (from 0)
To https://github.com/srideepi/demo001
 * [new branch]      master -> master
branch 'master' set up to track 'origin/master'.

D:\Demo>git push
Everything up-to-date
```

Step 5: The “git log” command is used in Git to view the commit history of a repository. It displays a list of commits along with their commit messages, author details, commit dates, and commit hashes.

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

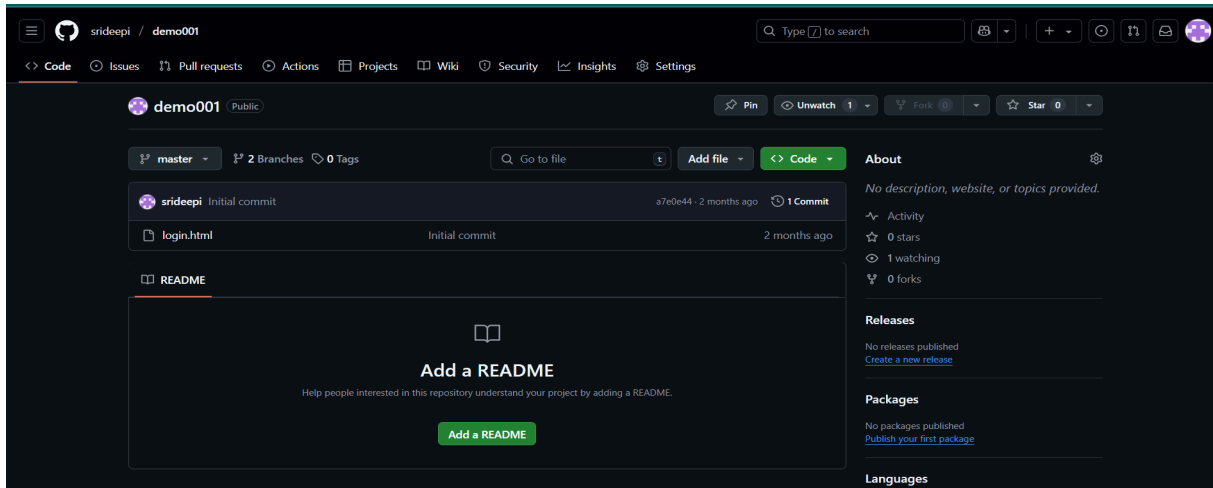
C:\Users\Athika>git status
warning: could not open directory 'Application Data/': Permission denied
warning: could not open directory 'Cookies/': Permission denied
warning: could not open directory 'Documents/My Music/': Permission denied
warning: could not open directory 'Documents/My Pictures/': Permission denied
warning: could not open directory 'Documents/My Videos/': Permission denied
warning: could not open directory 'Local Settings/': Permission denied
warning: could not open directory 'My Documents/': Permission denied
warning: could not open directory 'NetHood/': Permission denied
warning: could not open directory 'PrintHood/': Permission denied
warning: could not open directory 'Recent/': Permission denied
warning: could not open directory 'SendTo/': Permission denied
warning: could not open directory 'Start Menu/': Permission denied
warning: could not open directory 'Templates/': Permission denied
On branch master

No commits yet
```

```
C:\Users\Athika>git log
fatal: your current branch 'master' does not have any commits yet

C:\Users\Athika>|
```

Step 6: Log into github and create a new repository and change the branch master to main “git branch -m main” (optional)



Step 7: Copy github repository URL

Step 8: Run the git remote command “git remote add origin "URL"” to connect to the github remote repository (origin) git push -m origin "branch name"

```
D:\Demo\Devops>git remote -v
origin https://github.com/srideepi/Devops.git (fetch)
origin https://github.com/srideepi/Devops.git (push)

D:\Demo\Devops>git pull origin main
fatal: couldn't find remote ref main

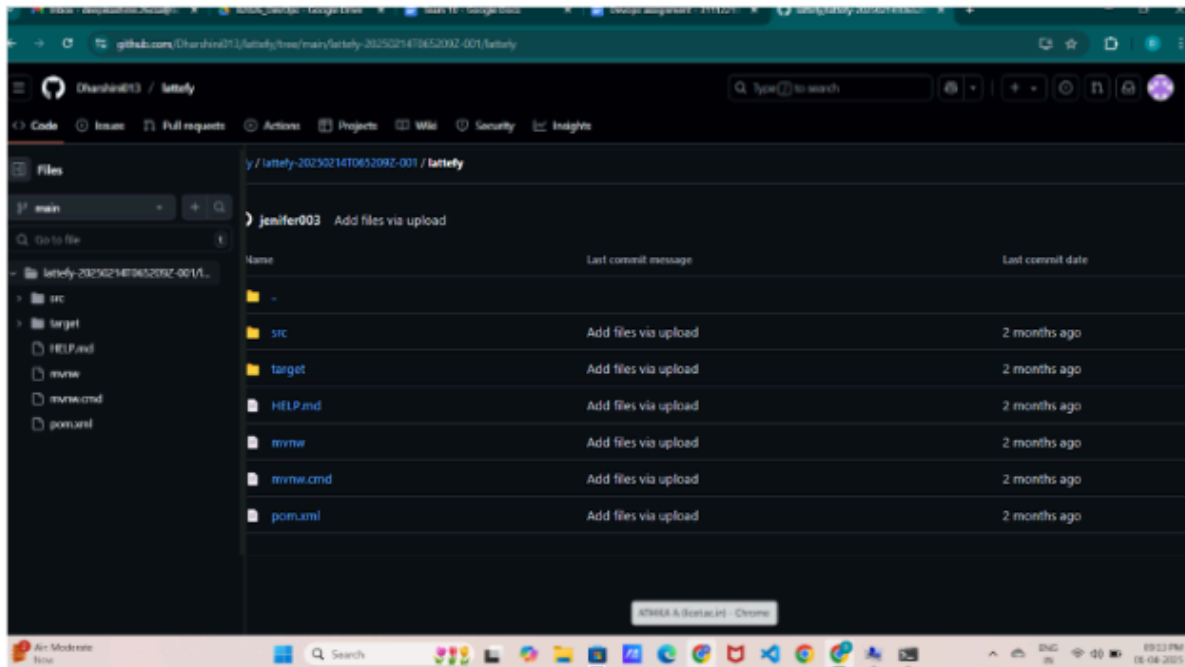
D:\Demo\Devops>git pull origin athika
From https://github.com/srideepi/Devops
* branch athika -> FETCH_HEAD
Already up to date.

D:\Demo\Devops>git checkout - feature-branch
error: pathspec '-' did not match any file(s) known to git
error: pathspec 'feature-branch' did not match any file(s) known to git

D:\Demo\Devops>git checkout -b feature-branch
Switched to a new branch 'feature-branch'

D:\Demo\Devops>git add .

D:\Demo\Devops>git commit -m "Describe your changes"
On branch feature-branch
nothing to commit, working tree clean
```



RESULT:

Thus the git is installed and the basic commands are executed and the output is verified.