GIT AND GITHUB MODULE

SUBMITTED BY – ADESH ARUN ADHAV

SUBMITTED TO – VIKUL SIR

BATCH NO.- SA2409031

DATE -8/12/2024

L3 - Using Local and Remote git repositories demonstrate git pull and git fetch.

Compare the difference

STEP 1: CREATE GIT REPOSITIRY

- Login to the github
- Create repository

STEP 2: CONNECT GIT TO GITHUB

- Connect local to github

(Git remote add origin master https://github.com/adesh8484/github)

STEP 3: CREATE A FILE IN LOCAL MACHINE

- Create the file in local machine and then push to github
  (git push -u origin master)
- Check the status (*git status*)
- Check the file in master
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STEP 4: GIT PULL

- Add new file in github
- This file is not in present in your local and remote repository so to add to those location we use git push command (*git pull*)
- It will add file to loacal as well remote repository

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STEP 5: GIT FETCH

- In git fetch the will only appear in local repository (*git fetch*)
- To appear file in remote repository we have to merge it.(*git merge*)

STEP 6: COMPARISON BETWEEN GIT PULL AND GIT FETCH

- **`git fetch:`**

  - *Downloads changes from the remote repository.*
  - *Does not merge changes into your local branch.*
  - *Allows you to review changes before merging.*

- **`git pull: git fetch + git merge`**

  - *Combines `git fetch` and `git merge`.*
  - *Downloads and merges changes from the remote repository into your local branch.*
  - *Faster for quick updates but can lead to conflicts if not reviewed.*

```
Administrator@LAPTOP-5SOJAQVO MINGW64 ~/Desktop/New folder (master)
$ ls
file1

Administrator@LAPTOP-5SOJAQVO MINGW64 ~/Desktop/New folder (master)
$ git push -u origin master
Enumerating objects: 3, done.
Counting objects: 100% (3/3), done.
Writing objects: 100% (3/3), 200 bytes | 50.00 KiB/s, done.
Total 3 (delta 0), reused 0 (delta 0), pack-reused 0 (from 0)
remote:
remote: Create a pull request for 'master' on GitHub by visiting:
remote:      https://github.com/adesh8484/github/pull/new/master
remote:
To https://github.com/adesh8484/github
 * [new branch]      master -> master
branch 'master' set up to track 'origin/master'.

Administrator@LAPTOP-5SOJAQVO MINGW64 ~/Desktop/New folder (master)
$ vi file1

Administrator@LAPTOP-5SOJAQVO MINGW64 ~/Desktop/New folder (master)
$ git push -u origin master
branch 'master' set up to track 'origin/master'.
Everything up-to-date

Administrator@LAPTOP-5SOJAQVO MINGW64 ~/Desktop/New folder (master)
$ git pull
remote: Enumerating objects: 7, done.
remote: Counting objects: 100% (7/7), done.
remote: Compressing objects: 100% (3/3), done.
remote: Total 6 (delta 0), reused 0 (delta 0), pack-reused 0 (from 0)
Unpacking objects: 100% (6/6), 1.72 KiB | 37.00 KiB/s, done.
From https://github.com/adesh8484/github
   cfeff72..7e74223  master     -> origin/master
 * [new branch]      main       -> origin/main
Updating cfeff72..7e74223
Fast-forward
 adesh.html | 1 +
 1 file changed, 1 insertion(+)
 create mode 100644 adesh.html

Administrator@LAPTOP-5SOJAQVO MINGW64 ~/Desktop/New folder (master)
$ ls
adesh.html  file1

Administrator@LAPTOP-5SOJAQVO MINGW64 ~/Desktop/New folder (master)
$ |
```
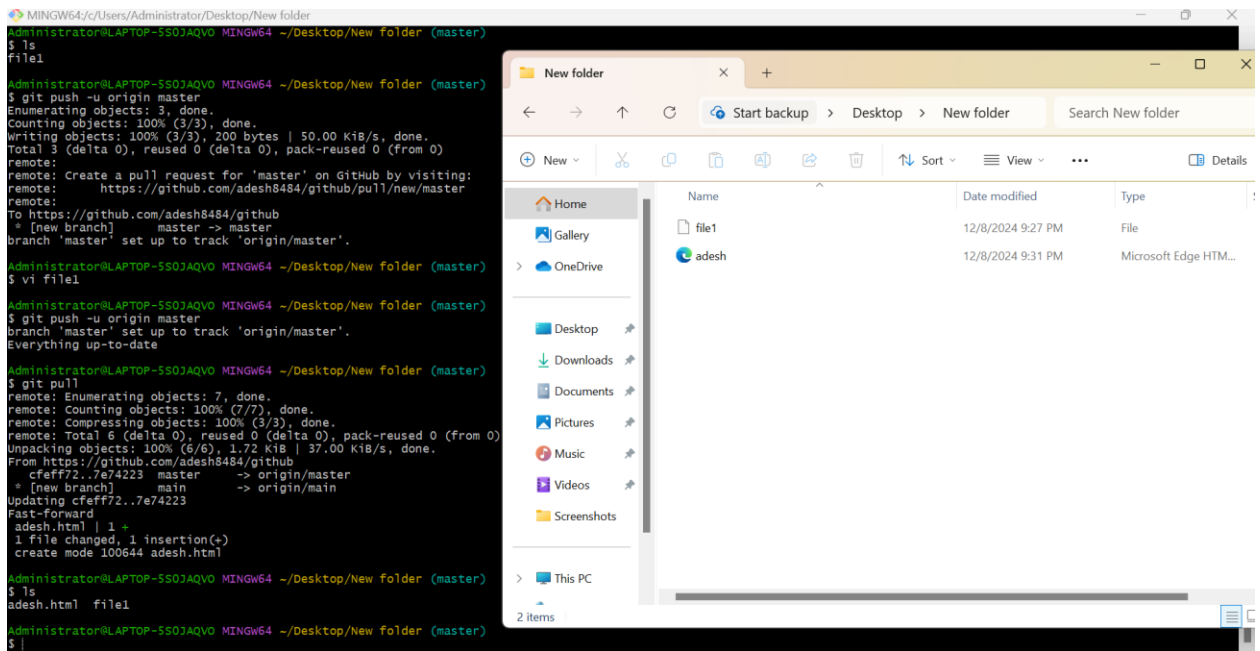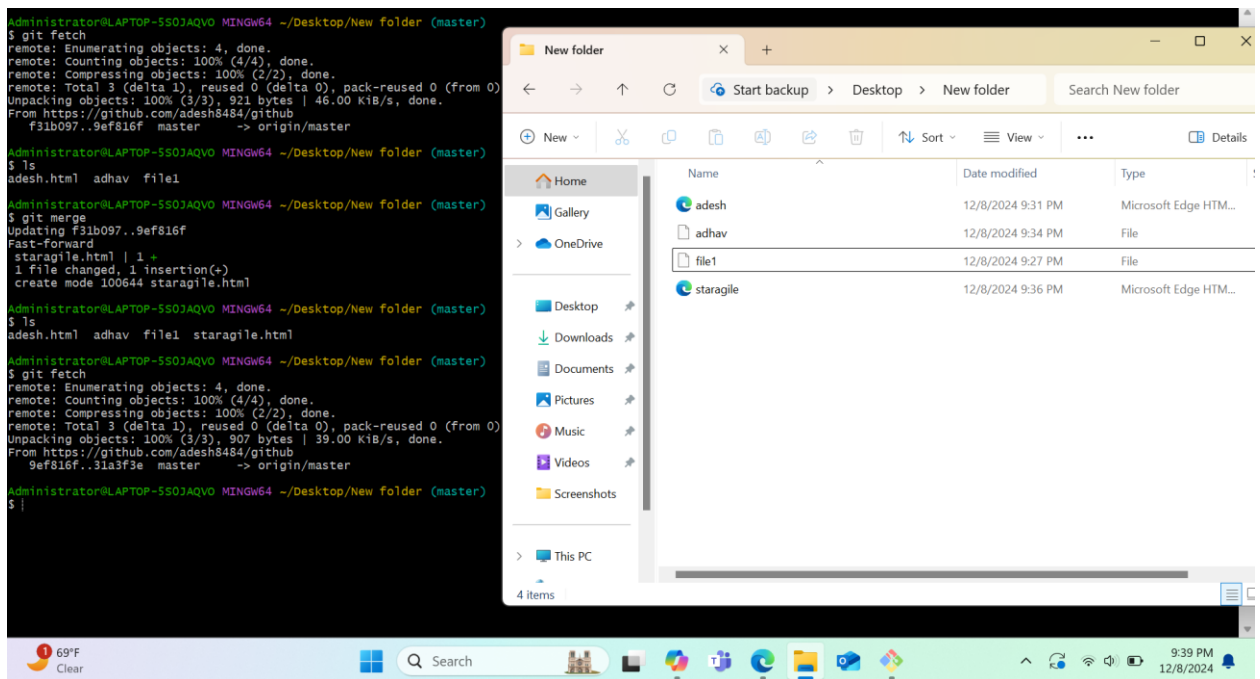
- **GIT PULL**

- **GIT FETCH**

- **GIT MERGE**
  -

```
remote: Enumerating objects: 4, done.
remote: Counting objects: 100% (4/4), done.
remote: Compressing objects: 100% (2/2), done.
remote: Total 3 (delta 1), reused 0 (delta 0), pack-reused 0 (from 0)
Unpacking objects: 100% (3/3), 921 bytes | 46.00 KiB/s, done.
From https://github.com/adesh8484/github
   f31b097..9ef816f  master     -> origin/master

Administrator@LAPTOP-5SOJAQVO MINGW64 ~/Desktop/New folder (master)
$ ls
adesh.html  adhav  file1

Administrator@LAPTOP-5SOJAQVO MINGW64 ~/Desktop/New folder (master)
$ git merge
Updating f31b097..9ef816f
Fast-forward
 staragile.html | 1 +
 1 file changed, 1 insertion(+)
 create mode 100644 staragile.html

Administrator@LAPTOP-5SOJAQVO MINGW64 ~/Desktop/New folder (master)
$ ls
adesh.html  adhav  file1  staragile.html

Administrator@LAPTOP-5SOJAQVO MINGW64 ~/Desktop/New folder (master)
$ git fetch
remote: Enumerating objects: 4, done.
remote: Counting objects: 100% (4/4), done.
remote: Compressing objects: 100% (2/2), done.
remote: Total 3 (delta 1), reused 0 (delta 0), pack-reused 0 (from 0)
Unpacking objects: 100% (3/3), 907 bytes | 39.00 KiB/s, done.
From https://github.com/adesh8484/github
   9ef816f..31a3f3e  master     -> origin/master

Administrator@LAPTOP-5SOJAQVO MINGW64 ~/Desktop/New folder (master)
$ git merge
Updating 9ef816f..31a3f3e
Fast-forward
 github | 1 +
 1 file changed, 1 insertion(+)
 create mode 100644 github

Administrator@LAPTOP-5SOJAQVO MINGW64 ~/Desktop/New folder (master)
$ ls
adesh.html  adhav  file1  github  staragile.html

Administrator@LAPTOP-5SOJAQVO MINGW64 ~/Desktop/New folder (master)
$ |
```
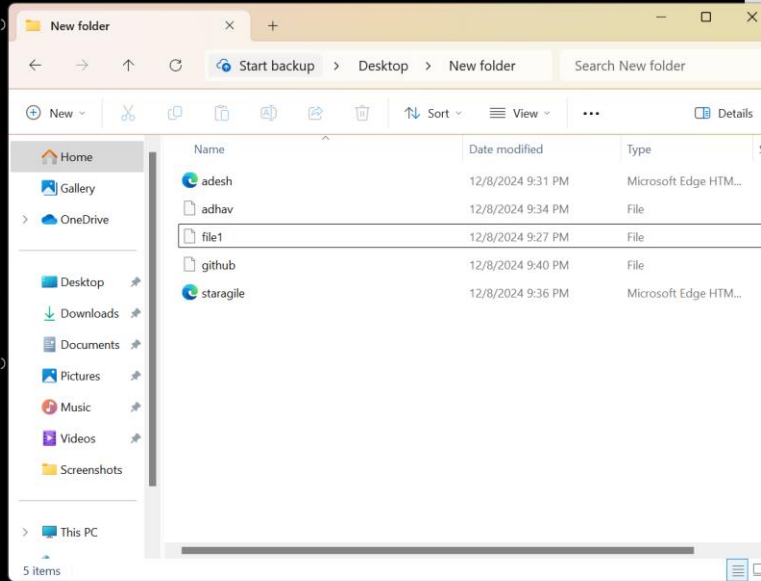
File Explorer — New folder (Start backup > Desktop > New folder)

Name	Date modified	Type
adesh	12/8/2024 9:31 PM	Microsoft Edge HTM...
adhav	12/8/2024 9:34 PM	File
file1	12/8/2024 9:27 PM	File
github	12/8/2024 9:40 PM	File
staragile	12/8/2024 9:36 PM	Microsoft Edge HTM...

5 items

```
git init
git add origin master https://github.com/adesh8484/github
git config --global user.name "adesh"
git config --global user.email "adeshadhav8484@gmail.com"
git remote add origin https://github.com/adesh8484/github
git remote -v
git push origin master -u
git push -u origin master
git status
touch file1
git add file1
git commit -m "c1"
ls
git push -u origin master
vi file1
git push -u origin master
git pull
ls
clear
git fetch
ls
touch adhav
vi adhav
git add adhav
git add adhav
git commit -m "c2"
git push -u origin master
ls
clear
git fetch
ls
git merge
ls
git fetch
git merge
ls
clear
history

strator@LAPTOP-5SOJAQVO MINGW64 ~/Desktop/New folder (master)
```