Date: 21.07.2025

Name:Nancy M

## **Git Commands**

1. Open Git bash shell and create a new folder "GitDemo" and initialize as git repository

mkdir GitDemo cd GitDemo

2. Git bash initializes the "GitDemo" repository.

Git init

3. Create a file "welcome.txt" and add content to the file (use echo or cat command)

Echo "Welcome to Git" > welcome.txt

4. To verify if the file "welcome.txt" is created, execute Is-al

ls -al

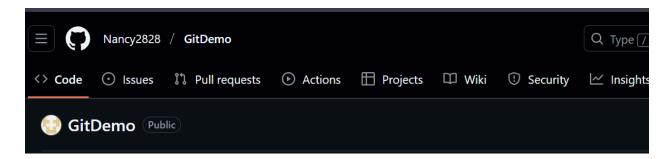
5. To verify the content, execute the command cat filename

cat welcome.txt

6. Execute git status

git status

7. Signup with GitHub and create a remote repository "GitDemo"



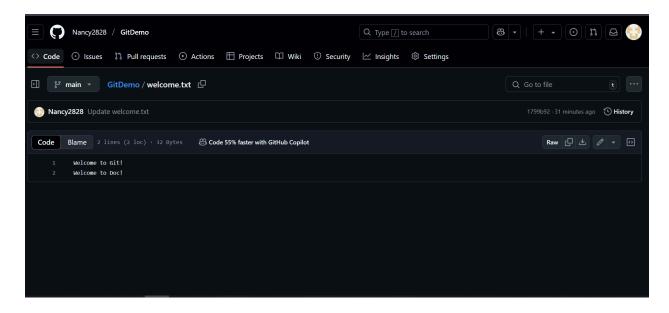
8. Add remote origin

git remote add origin https://github.com/Nancy2828/GitDemo.git

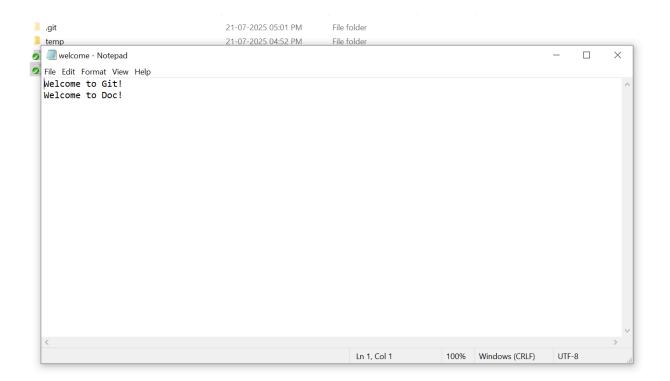
9. Crete files and and push the local to remote repository.

git add . git commit -m "sample" git branch -m main git push -u origin main

10. Make changes in the remote and pull the changes to the local.



git pull origin main



## 11. Create a .gitignore file to ignore contents of temp folder

mkdir temp echo "temp/" > .gitignore git add . git commit -m "add gitignore" git push -u origin main

```
NINGW64:/c/Users/nancy.m/GitDemo
                                                                                              \times
nancy.m@PTPLL466 MINGW64 ~
$ mkdir GitDemo
nancy.m@PTPLL466 MINGW64 ~
$ cd GitDemo
nancy.m@PTPLL466 MINGW64 ~/GitDemo
$ git init
Initialized empty Git repository in C:/Users/nancy.m/GitDemo/.git/
nancy.m@PTPLL466 MINGW64 ~/GitDemo (master)
$ echo "Welcome to Git!" > welcome.txt
nancy.m@PTPLL466 MINGW64 ~/GitDemo (master)
$ 1s -a1
total 25
drwxr-xr-x 1 nancy.m 1049089 0 Jul 21 16:39 ./
drwxr-xr-x 1 nancy.m 1049089 0 Jul 21 16:35 ../
drwxr-xr-x 1 nancy.m 1049089 0 Jul 21 16:36 .git/
-rw-r--r-- 1 nancy.m 1049089 16 Jul 21 16:39 welcome.txt
nancy.m@PTPLL466 MINGW64 ~/GitDemo (master)
$ cat welcome.txt
Welcome to Git!
```

```
MINGW64:/c/Users/nancy.m/GitDemo
                                                                         X
Welcome to Git!
nancy.m@PTPLL466 MINGW64 ~/GitDemo (master)
$ git status
On branch master
No commits yet
Untracked files:
  (use "git add <file>..." to include in what will be committed)
nothing added to commit but untracked files present (use "git add" to track)
nancy.m@PTPLL466 MINGW64 ~/GitDemo (master)
$ git status
On branch master
No commits yet
Untracked files:
  (use "git add <file>..." to include in what will be committed)
        welcome.txt
nothing added to commit but untracked files present (use "git add" to track)
```

```
nothing added to commit but untracked files present (use "git add" to track)
nancy.m@PTPLL466 MINGW64 ~/GitDemo (master)
$ git remote add origin https://github.com/Nancy2828/GitDemo.git
nancy.m@PTPLL466 MINGW64 ~/GitDemo (master)
git add .
warning: in the working copy of 'welcome.txt', LF will be replaced by CRLF the n
ext time Git touches it
ancy.m@PTPLL466 MINGW64 ~/GitDemo (master)
 git commit -m "sample"
[master (root-commit) 232f808] sample
1 file changed, 1 insertion(+)
create mode 100644 welcome.txt
nancy.m@PTPLL466 MINGW64 ~/GitDemo (master)
$ git branch -m main
nancy.m@PTPLL466 MINGW64 ~/GitDemo (main)
$ git push -u origin main
Enumerating objects: 3, done.
Counting objects: 100% (3/3), done.
Writing objects: 100% (3/3), 232 bytes | 77.00 KiB/s, done.
Total 3 (delta 0), reused 0 (delta 0), pack-reused 0 (from 0)
```

X

```
MINGW64:/c/Users/nancy.m/GitDemo
                                                                                               П
                                                                                                       X
nancy.m@PTPLL466 MINGW64 ~/GitDemo (main)
$ git pull origin main
From https://github.com/Nancy2828/GitDemo
 * branch
                                       -> FETCH_HEAD
                           main
Already up to date.
nancy.m@PTPLL466 MINGW64 ~/GitDemo (main)
$ git pull origin main
remote: Enumerating objects: 5, done.
remote: Counting objects: 1, done.
remote: Counting objects: 100% (5/5), done.
remote: Total 3 (delta 0), reused 0 (delta 0), pack-reused 0 (from 0)
Unpacking objects: 100% (3/3), 919 bytes | 39.00 KiB/s, done.
From https://github.com/Nancy2828/GitDemo
 * branch
                                         -> FETCH_HEAD
                           main
    232f808..1799b92 main
                                          -> origin/main
Updating 232f808..1799b92
Fast-forward
 welcome.txt | 1 +
 1 file changed, 1 insertion(+)
nancy.m@PTPLL466 MINGW64 ~/GitDemo (main)
$ mkdir temp
nancy.m@PTPLL466 MINGW64 ~/GitDemo (main)
```

```
nancy.m@PTPLL466 MINGW64 ~/GitDemo (main)
$ mkdir temp
nancy.m@PTPLL466 MINGW64 ~/GitDemo (main)
$ echo "temp/" > .gitignore
nancy.m@PTPLL466 MINGW64 ~/GitDemo (main)
$ git commit -m "Add gitignore"
On branch main
Your branch is up to date with 'origin/main'.
Untracked files:
 (use "git add <file>..." to include in what will be committed)
nothing added to commit but untracked files present (use "git add" to track)
nancy.m@PTPLL466 MINGW64 ~/GitDemo (main)
$ git add .gitignore
warning: in the working copy of '.gitignore', LF will be replaced by CRLF the ne
xt time Git touches it
nancy.m@PTPLL466 MINGW64 ~/GitDemo (main)
$ git commit -m "Add gitignore"
```

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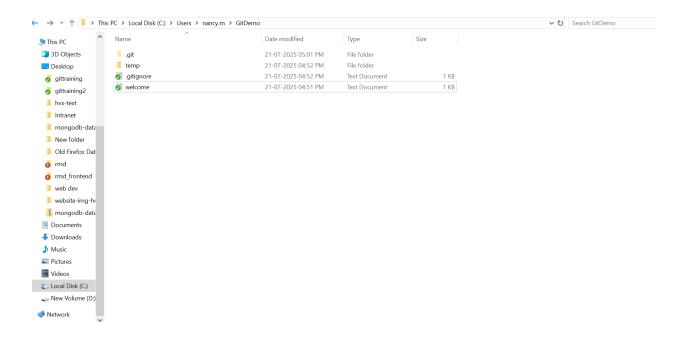
```
MINGW64:/c/Users/nancy.m/GitDemo
```

```
[main a527a68] Add gitignore
    1 file changed, 1 insertion(+)
    create mode 100644 .gitignore

nancy.m@PTPLL466 MINGW64 ~/GitDemo (main)
$ git push -u origin main
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), 289 bytes | 96.00 KiB/s, done.
Total 3 (delta 0), reused 0 (delta 0), pack-reused 0 (from 0)
To https://github.com/Nancy2828/GitDemo.git
    1799b92..a527a68 main -> main
branch 'main' set up to track 'origin/main'.

nancy.m@PTPLL466 MINGW64 ~/GitDemo (main)
$ git status
On branch main
Your branch is up to date with 'origin/main'.

nothing to commit, working tree clean
nancy.m@PTPLL466 MINGW64 ~/GitDemo (main)
```



## **Docker**

1. What is Docker-compose.yaml file? Give sample docker-compose file.

The docker-compose.yml file is a configuration file used by Docker Compose to define and run multi-container Docker applications.

Instead of running each container with long docker run commands, you define all your services (containers), volumes, networks, and configurations in a single .yml file and run them with one command

version: '3.8'
services:
app:
image: node:18
volumes:
- .:/app
ports:
- 3000:3000

command: npm start
depends\_on:
 - mongo

mongo:
image: mongo
volumes:

- mongo-data:/data/db

volumes:

mongo-data:

## What is Docker hub?

Docker Hub is a cloud-based registry where you can:

- Find, share, and store Docker container images
- Pull images like nginx, mysql, node, etc.
- Push your own Docker images for others or for use in your projects