

Git Commands

1. Open Git bash shell and create a new folder “**GitDemo**” and initialize as git repository
2. Git bash initializes the “**GitDemo**” repository.

```
pavithra.r@PTPLL446 MINGW64 ~/Desktop/Day11_handson
$ mkdir Gitdemo

pavithra.r@PTPLL446 MINGW64 ~/Desktop/Day11_handson
$ cd Gitdemo

pavithra.r@PTPLL446 MINGW64 ~/Desktop/Day11_handson/Gitdemo
$ git init
Initialized empty Git repository in C:/Users/pavithra.r/Desktop/Day11_handson/Gitdemo/.git/

pavithra.r@PTPLL446 MINGW64 ~/Desktop/Day11_handson/Gitdemo (master)
$ |
```

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

```
pavithra.r@PTPLL446 MINGW64 ~/Desktop/Day11_handson/Gitdemo (master)
$ echo "This is welcome text using echo" >welcome.txt

pavithra.r@PTPLL446 MINGW64 ~/Desktop/Day11_handson/Gitdemo (master)
$ cat welcome.txt
This is welcome text using echo
```

4. To verify if the file “welcome.txt” is created, execute ls -al

```
pavithra.r@PTPLL446 MINGW64 ~/Desktop/Day11_handson/Gitdemo (master)
$ ls -al
total 5
drwxr-xr-x 1 pavithra.r 1049089  0 Jul 21 16:46 ./
drwxr-xr-x 1 pavithra.r 1049089  0 Jul 21 16:36 ../
drwxr-xr-x 1 pavithra.r 1049089  0 Jul 21 16:38 .git/
-rw-r--r-- 1 pavithra.r 1049089 32 Jul 21 16:46 welcome.txt
```

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

```
pavithra.r@PTPLL446 MINGW64 ~/Desktop/Day11_handson/Gitdemo (master)
$ cat welcome.txt
This is welcome text using echo
```

6. Execute git status

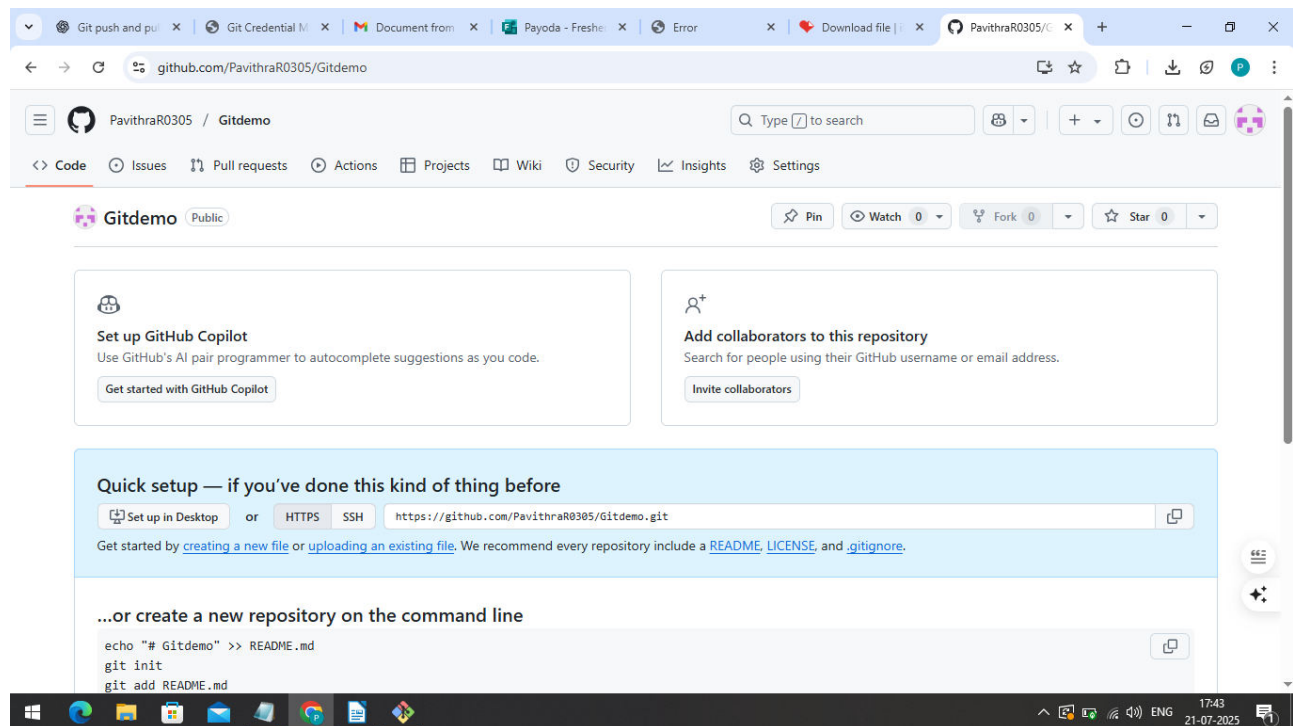
```
pavithra.r@PTPLL446 MINGW64 ~/Desktop/Day11_handson/Gitdemo (master)
$ git status
On branch master

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)
```

7 Signup with GitHub and create a remote repository “GitDemo”



8. Add remote origin

```
pavithra.r@PTPLL446 MINGW64 ~/Desktop/Day11_handon/Gitdemo (master)
$ git remote add origin https://github.com/PavithraR0305/Gitdemo.git
```

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

```
pavithra.r@PTPLL446 MINGW64 ~/Desktop/Day11_handon/Gitdemo (main)
$ git add .
warning: in the working copy of 'welcome.txt', LF will be replaced by CRLF the next time Git touches it

pavithra.r@PTPLL446 MINGW64 ~/Desktop/Day11_handon/Gitdemo (main)
$ git status
On branch main

No commits yet

Changes to be committed:
  (use "git rm --cached <file>..." to unstage)
    new file:   welcome.txt

pavithra.r@PTPLL446 MINGW64 ~/Desktop/Day11_handon/Gitdemo (main)
$ git commit -m "first commit"
[main (root-commit) d9c7538] first commit
 1 file changed, 1 insertion(+)
 create mode 100644 welcome.txt

pavithra.r@PTPLL446 MINGW64 ~/Desktop/Day11_handon/Gitdemo (main)
$ git push
fatal: The current branch main has no upstream branch.
To push the current branch and set the remote as upstream, use

    git push --set-upstream origin main

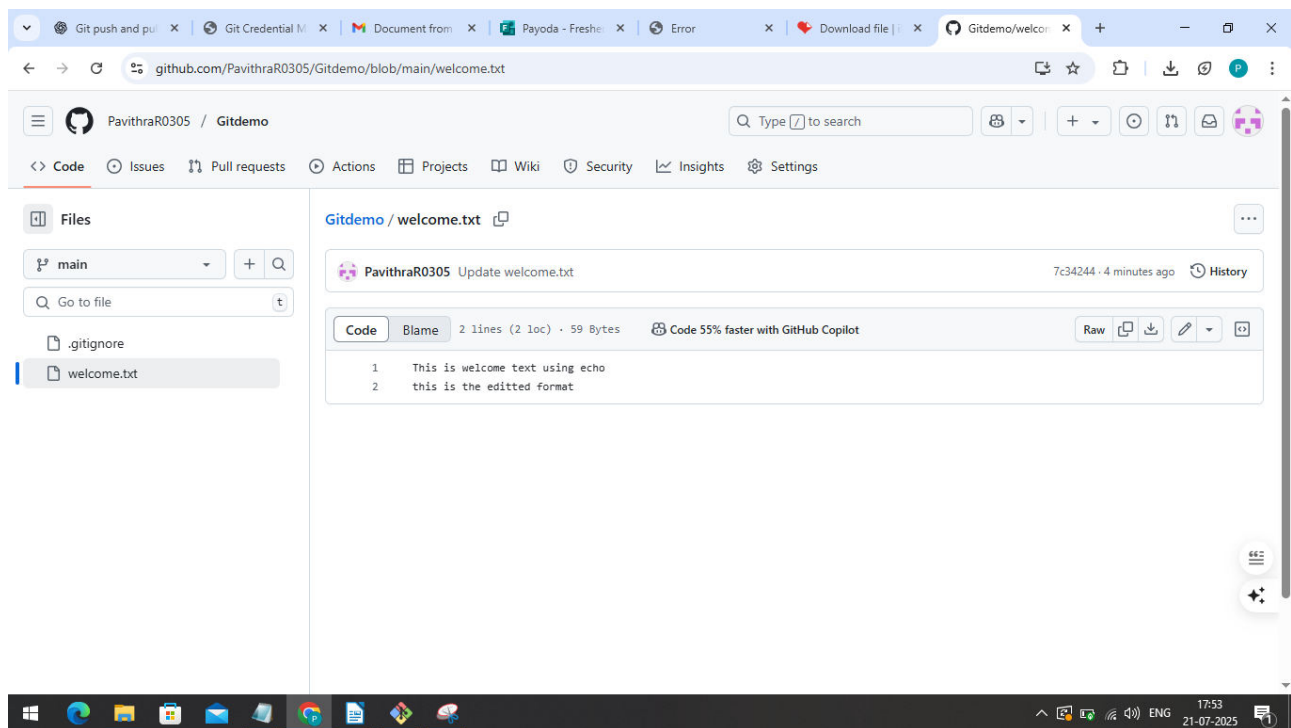
To have this happen automatically for branches without a tracking
upstream, see 'push.autoSetupRemote' in 'git help config'.

pavithra.r@PTPLL446 MINGW64 ~/Desktop/Day11_handon/Gitdemo (main)
$ git push -u origin main
Enumerating objects: 3, done.
Counting objects: 100% (3/3), done.
Writing objects: 100% (3/3), 250 bytes | 125.00 KiB/s, done.
Total 3 (delta 0), reused 0 (delta 0), pack-reused 0 (from 0)
To https://github.com/PavithraR0305/Gitdemo.git
 * [new branch]      main -> main
branch 'main' set up to track 'origin/main'.
```

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

```
pavithra.r@PTPLL446 MINGW64 ~/Desktop/Day11_handon/Gitdemo (main)
$ git pull origin main
remote: Enumerating objects: 5, done.
remote: Counting objects: 100% (5/5), done.
remote: Compressing objects: 100% (2/2), done.
remote: Total 3 (delta 0), reused 0 (delta 0), pack-reused 0 (from 0)
Unpacking objects: 100% (3/3), 945 bytes | 32.00 KiB/s, done.
From https://github.com/PavithraR0305/Gitdemo
* branch      main      -> FETCH_HEAD
   d9c7538..7c34244 main    -> origin/main
Updating d9c7538..7c34244
Fast-forward
 welcome.txt | 1 +
 1 file changed, 1 insertion(+)
```

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



```

pavithra.r@PTPLL446 MINGW64 ~/Desktop/Day11_handon/Gitdemo (main)
$ mkdir tempt

pavithra.r@PTPLL446 MINGW64 ~/Desktop/Day11_handon/Gitdemo (main)
$ echo "git">tempt/test.txt

pavithra.r@PTPLL446 MINGW64 ~/Desktop/Day11_handon/Gitdemo (main)
$ git add .
warning: in the working copy of '.gitignore', LF will be replaced by CRLF the next time Git touches it

pavithra.r@PTPLL446 MINGW64 ~/Desktop/Day11_handon/Gitdemo (main)
$ git status
On branch main
Your branch is up to date with 'origin/main'.

Changes to be committed:
  (use "git restore --staged <file>..." to unstage)
        new file:   .gitignore

pavithra.r@PTPLL446 MINGW64 ~/Desktop/Day11_handon/Gitdemo (main)
$ git commit -m"test file"
[main cde2dfa] test file
1 file changed, 1 insertion(+)
create mode 100644 .gitignore

pavithra.r@PTPLL446 MINGW64 ~/Desktop/Day11_handon/Gitdemo (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), 290 bytes | 96.00 KiB/s, done.
Total 3 (delta 0), reused 0 (delta 0), pack-reused 0 (from 0)
To https://github.com/PavithraR0305/Gitdemo.git
7c34244..cde2dfa  main -> main

```

Docker

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

```

pavithra.r@PTPLL446 MINGW64 ~/Desktop/Day11_handon/Gitdemo (main)
$ touch Docker-compose.yaml

pavithra.r@PTPLL446 MINGW64 ~/Desktop/Day11_handon/Gitdemo (main)
$ touch Docker-compose.yml

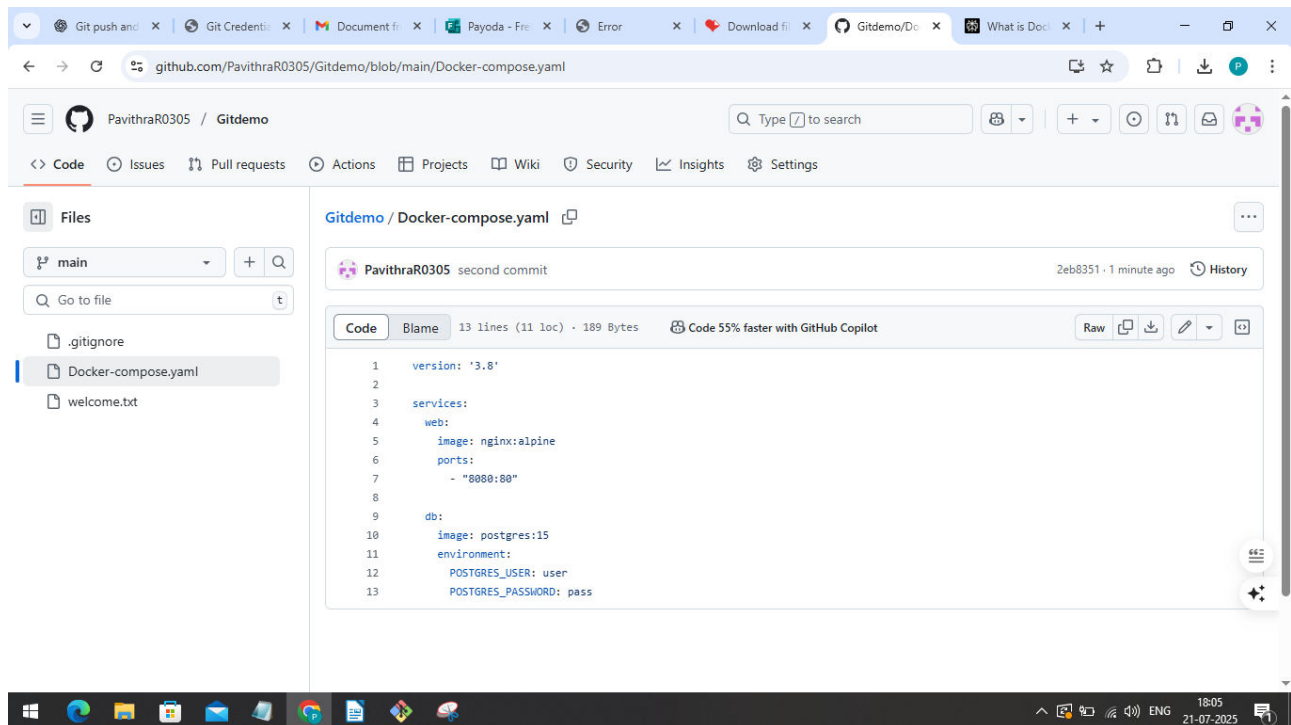
pavithra.r@PTPLL446 MINGW64 ~/Desktop/Day11_handon/Gitdemo (main)
$ nano Docker-compose.yaml

pavithra.r@PTPLL446 MINGW64 ~/Desktop/Day11_handon/Gitdemo (main)
$ git add .
warning: in the working copy of 'Docker-compose.yaml', LF will be replaced by CRLF the next time Git touches it

pavithra.r@PTPLL446 MINGW64 ~/Desktop/Day11_handon/Gitdemo (main)
$ git commit -m "second commit"
[main 2eb8351] second commit
1 file changed, 13 insertions(+)
create mode 100644 Docker-compose.yaml

pavithra.r@PTPLL446 MINGW64 ~/Desktop/Day11_handon/Gitdemo (main)
$ git push
Enumerating objects: 4, done.
Counting objects: 100% (4/4), done.
Delta compression using up to 4 threads
Compressing objects: 100% (3/3), done.
Writing objects: 100% (3/3), 464 bytes | 154.00 KiB/s, done.
Total 3 (delta 0), reused 0 (delta 0), pack-reused 0 (from 0)
To https://github.com/PavithraR0305/Gitdemo.git
cde2dfa..2eb8351  main -> main

```



2. What is DOCKER HUB

Docker Hub is a **cloud-based registry service** where you can **Store, share,** and **distribute** Docker images, **Search** for public images (like Node.js, Python, Ubuntu, MySQL, etc.), **Push** your own custom images for use on any machine, **Collaborate** on containerized projects with teams

Uses:

- centralised distribution
- reliable base image
- efficiency
- collaboration
- extensibility

Docker Hub is the go-to-platform for most Docker users to share and consume container images, automate their pipeline, and manage both community and proprietary software deployments in a scalable, integrated environment