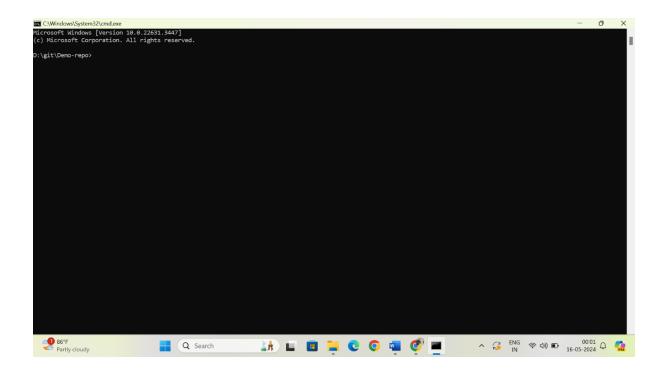
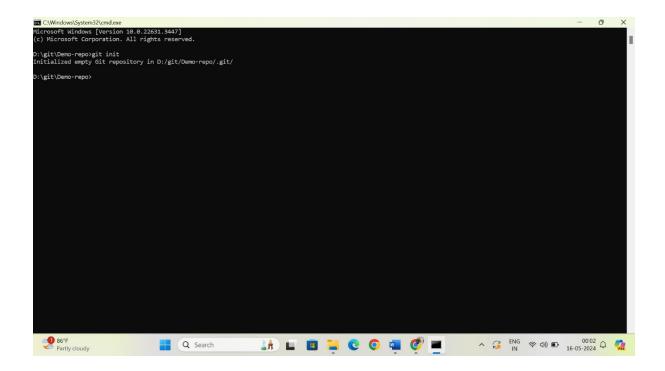
ASSIGNMENT 1: Initialize a new Git repository in a directory of your choice.

Add a simple text file to the repository and make the first commit.

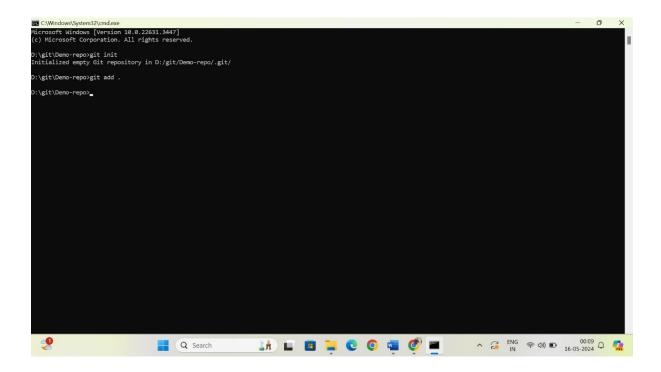
• First we will open the cmd of the local path to the directory where we want to create git repository.



- Here we set the d path of the directory ,where the local repository is available .
- After that we use "git init" command to create a new Git repository. This
 command sets up all the necessary Git files and directories within the
 current directory.



• After we will add the file in repository using "git add."



• After using "git add." we type and check the" git status" of the repository status of files available

```
C:\Windows\System32\cmd.exe
Microsoft Windows [Version 10.0.22631.3447]
(c) Microsoft Corporation. All rights reserved.

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

D:\git\Demo-repo>git add .

D:\git\Demo-repo>git status
On branch master

No commits yet

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

D:\git\Demo-repo>
```

 Here we finally use "git commit " command to commit the staged changes to the repository. we can include a message summarizing the changes using the "-m" to follow of message

```
C:\Windows\System32\cmd.exe
Microsoft Windows [Version 10.0.22631.3447]
(c) Microsoft Corporation. All rights reserved.
D:\git\Demo-repo>git init
Initialized empty Git repository in D:/git/Demo-repo/.git/
D:\git\Demo-repo>git add .
D:\git\Demo-repo>git status
On branch master
No commits yet
Changes to be committed:
  (use "git rm --cached <file>..." to unstage)
       new file: hello.txt
D:\git\Demo-repo>git commit -m"add file"
[master (root-commit) 57c5c23] add file
1 file changed, 1 insertion(+)
create mode 100644 hello.txt
D:\git\Demo-repo>
```

ASSIGNMENT 2: Branch Creation and Switching Create a new branch named 'feature' and switch to it. Make changes in the 'feature' branch and commit them.

Creating a New Branch:

Here we create a new branch named "Feature" using the command "git branch feature".

```
C:\Windows\System32\cmd.exe

D:\git\Demo-repo\git push origin master
Enumerating objects: 3, done.

Counting objects: 100% (3/3), done.

Writing objects: 100% (3/3), 222 bytes | 222.00 KiB/s, done.

Total 3 (delta 0), reused 0 (delta 0), pack-reused 0 (from 0)

To https://github.com/KDeepak08/Demo-repo.git

* [new branch] master -> master

D:\git\Demo-repo\git branch feature

D:\git\Demo-repo>
```

• This command creates a new branch named 'feature' based on the current branch (usually 'main' or 'master')

Switching the branch to feature:

- In this step we use the command of "git checkout feature " to change the branch to master to feature branch.
- In the below image shows the creating branch and switching of branch

```
C:\Windows\System32\cmd.exe
and the repository exists.

D:\git\Demo-repo>git remote add origin https://github.com/KDeepak08/Demo-repo.git

D:\git\Demo-repo>git push origin master
Enumerating objects: 3, done.

Counting objects: 100% (3/3), done.

Writing objects: 100% (3/3), 222 bytes | 222.00 KiB/s, done.
Total 3 (delta 0), reused 0 (delta 0), pack-reused 0 (from 0)

To https://github.com/KDeepak08/Demo-repo.git

* [new branch] master -> master

D:\git\Demo-repo>git branch feature

D:\git\Demo-repo>git checkout feature

Switched to branch 'feature'

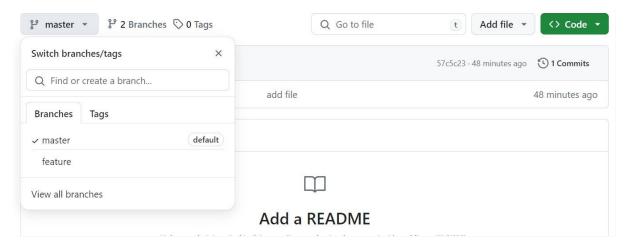
D:\git\Demo-repo>
```

Adding file to feature branch:

We use the command of "git add . " to the add file to changes in the feature.

Commit to the feature branch:

We use the command "git commit -m" changes made in feature " to commit in the feature branch.



Here we created and shown the the two branches

 After push origin master command which transfers the files to the other branch feature makes an change and will we commit it and it show like Clean.

```
D:\git\Demo-repo>git add .

D:\git\Demo-repo>git push origin feature
Total 0 (delta 0), reused 0 (delta 0), pack-reused 0 (from 0)
remote:
remote: Create a pull request for 'feature' on GitHub by visiting:
remote: https://github.com/KDeepak08/Demo-repo/pull/new/feature
remote:
To https://github.com/KDeepak08/Demo-repo.git
* [new branch] feature -> feature

D:\git\Demo-repo>git commit -m"made changes in feature"
On branch feature
nothing to commit, working tree clean

D:\git\Demo-repo>
```

Assignment 3: Feature Branches and Hotfixes

Create a 'hotfix' branch to fix an issue in the main code. Merge the 'hotfix' branch into 'main' ensuring that the issue is resolved."

SET THE PATH DIRECTORY:

• Using the cd command setting the correct path to save the file for the git

CREATING AND SWITCHING TO THE HOTFIX BRANCH:

• we Created the new Branch named as "Master".

ADDING A FILE, STATUS, COMMIT:

adding a text file using "git add ." and checking the status "git status"

- using "git command -m "adding a file " inserting the new file
- after we "git push origin master" to push file in the naster branch"

```
D:\git\hotfix>git add .

D:\git\hotfix>git status
On branch master

No commits yet

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

D:\git\hotfix>git branch

D:\git\hotfix>git commit -m"adding a new file"
[master (root-commit) b4a0aac] adding a new file

1 file changed, 1 insertion(+)
   create mode 100644 hotfixtext.txt
```

```
D:\git\hotfix>git push origin master
Enumerating objects: 3, done.
Counting objects: 100% (3/3), done.
Writing objects: 100% (3/3), 236 bytes | 236.00 KiB/s, done.
Total 3 (delta 0), reused 0 (delta 0), pack-reused 0 (from 0)
To https://github.com/KDeepak08/hotfix.git
* [new branch] master -> master
```

CREATING AN OTHER BRANCH TO MERGE:

• "git checkout -b hotfix" and modification to switch to the master branch

MERGE THE BRANCHES (MASTER AND HOTFIX):

- "git merge hotfix" and push to hotfix.
- Below attaching the picture of the two repositorys of the merge

