Name: Kushagra Singh
Github Assignment

We will set up the git repository on disk first

```
C:\Windows\System32\cmd.exe                                          —   □   ✕

Microsoft Windows [Version 10.0.19045.5247]
(c) Microsoft Corporation. All rights reserved.

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

D:\Git_Assignment>_
```

Then, we will add, commit and connect it to our github repository

```
C:\Windows\System32\cmd.exe                                          —   □   ✕

D:\Git_Assignment>git status
On branch master

No commits yet

Untracked files:
  (use "git add <file>..." to include in what will be committed)
        hello.txt

nothing added to commit but untracked files present (use "git add" to track)

D:\Git_Assignment>git add .

D:\Git_Assignment>git commit -m "Adding a text file"
[master (root-commit) b4c3046] Adding a text file
 1 file changed, 1 insertion(+)
 create mode 100644 hello.txt

D:\Git_Assignment>git remote add origin https://github.com/Kushagra2025/Git_Assignment.git

D:\Git_Assignment>_
```

Then, we'll switch branch to main branch and push it to the github repository

```
D:\Git_Assignment>git remote add origin https://github.com/Kushagra2025/Git_Assignment.git

D:\Git_Assignment>git branch -M main

D:\Git_Assignment>git push -u origin main
Enumerating objects: 3, done.
Counting objects: 100% (3/3), done.
Writing objects: 100% (3/3), 236 bytes | 118.00 KiB/s, done.
Total 3 (delta 0), reused 0 (delta 0), pack-reused 0 (from 0)
To https://github.com/Kushagra2025/Git_Assignment.git
 * [new branch]      main -> main
branch 'main' set up to track 'origin/main'.

D:\Git_Assignment>
```

Then, we'll create branch feature/update-readme, create README.md, and push it to feature branch of github repository.

```
D:\Git_Assignment>git checkout -b feature/update-readme
Switched to a new branch 'feature/update-readme'

D:\Git_Assignment>echo This is a readme file > README.md

D:\Git_Assignment>git status
On branch feature/update-readme
Untracked files:
  (use "git add <file>..." to include in what will be committed)
        README.md

nothing added to commit but untracked files present (use "git add" to track)

D:\Git_Assignment>git add .

D:\Git_Assignment>git commit -m "Adding readme file"
[feature/update-readme cdf2e5a] Adding readme file
 1 file changed, 1 insertion(+)
 create mode 100644 README.md

D:\Git_Assignment>
```

```
D:\Git_Assignment>git push -u origin feature/update-readme
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), 308 bytes | 154.00 KiB/s, done.
Total 3 (delta 0), reused 0 (delta 0), pack-reused 0 (from 0)
remote:
remote: Create a pull request for 'feature/update-readme' on GitHub by visiting:
remote:      https://github.com/Kushagra2025/Git_Assignment/pull/new/feature/update-readme
remote:
To https://github.com/Kushagra2025/Git_Assignment.git
 * [new branch]      feature/update-readme -> feature/update-readme
branch 'feature/update-readme' set up to track 'origin/feature/update-readme'.

D:\Git_Assignment>
```

Then, we'll merge the feature and main branches, both locally and remote.

```
D:\Git_Assignment>git checkout main
Switched to branch 'main'
Your branch is up to date with 'origin/main'.

D:\Git_Assignment>git pull origin main
remote: Enumerating objects: 1, done.
remote: Counting objects: 100% (1/1), done.
remote: Total 1 (delta 0), reused 0 (delta 0), pack-reused 0 (from 0)
Unpacking objects: 100% (1/1), 910 bytes | 101.00 KiB/s, done.
From https://github.com/Kushagra2025/Git_Assignment
 * branch            main       -> FETCH_HEAD
   b4c3046..0b2c13e  main       -> origin/main
Updating b4c3046..0b2c13e
Fast-forward
 README.md | 1 +
 1 file changed, 1 insertion(+)
 create mode 100644 README.md

D:\Git_Assignment>
```

Then, we'll delete feature branch, both locally and remote.

```
D:\Git_Assignment>git branch
  feature/update-readme
* main

D:\Git_Assignment>git branch -d feautre/update-readme
error: branch 'feautre/update-readme' not found

D:\Git_Assignment>git branch -d feature/update-readme
Deleted branch feature/update-readme (was cdf2e5a).

D:\Git_Assignment>git push origin --delete feature/update-readme
To https://github.com/Kushagra2025/Git_Assignment.git
 - [deleted]         feature/update-readme

D:\Git_Assignment>
```

KEY QUESTIONS:

1. HOW WILL YOU SET UP THE PROJECT FOR VERSION CONTROL AND PUSH IT TO GITHUB?

   git init
   git add .
   git commit -m "commit message"
   git remote add origin <repo name>
   git branch -M main
   git push -u origin main

2. WHAT STEPS WILL YOU TAKE TO CREATE, PUSH AND MANAGE BRANCHES EFFECTIVELY?
git checkout -b feature/update-readme
git add .
git commit -m "commit message"
git push -u origin feature/update-readme

3. HOW WILL YOU ENSURE THE CHANGES IN THE BRANCH ARE MERGED INTO THE MAIN BRANCH?
git checkout main
git merge feature/update-readme
git push origin main

or

git push origin feature/update-readme
Ceate Pull request on Github
Click "Merge Pull Request" after pull request is reviewed.
Pull the merged changes:
git pull origin main

4. WHAT COMMANDS WILL YOU USE TO CLEAN UP THE UNUSED BRANCHES LOCALLY AND REMOTELY?
git branch -d feature/update-readme
git push origin –delete feature/update-readme