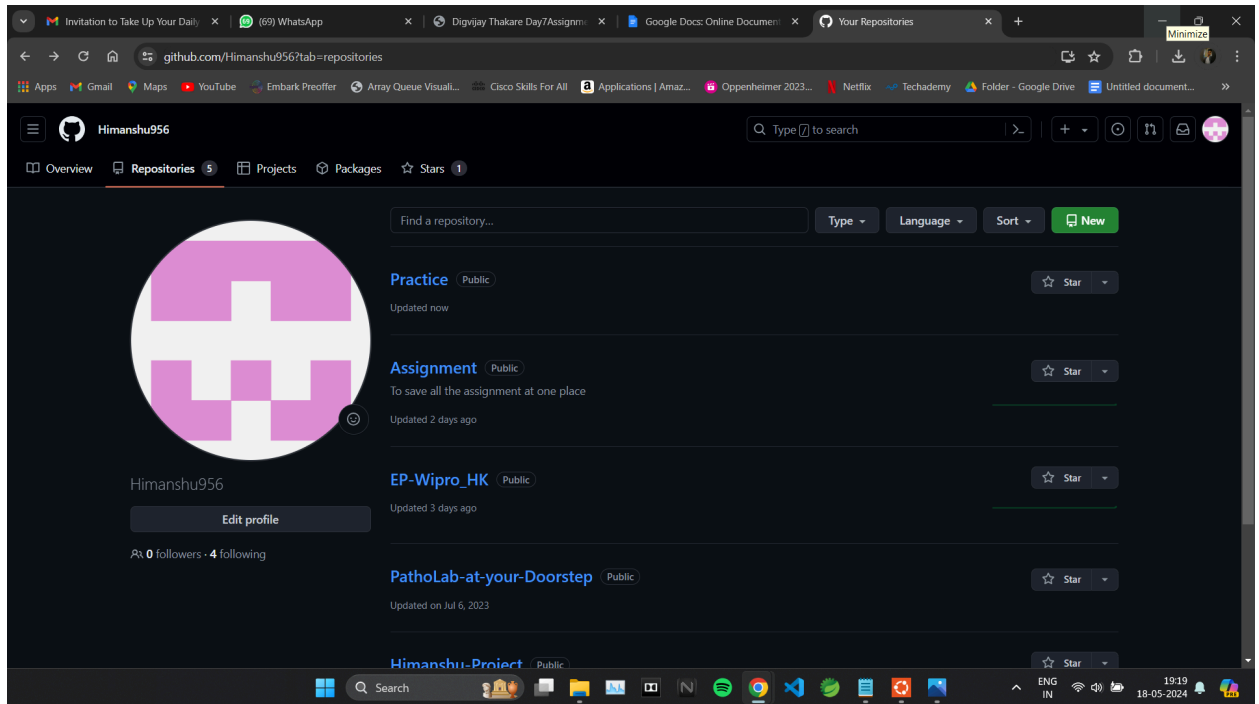


Assignment 1: Initialize a new Git repository in a directory of your choice. Add a simple text file to the repository and make the first commit.

Answer=>

1. Created a Repository named "Practice"



2. Added a text file “Hi.txt” in the repository using the git commands

```
C:\Windows\System32\cmd.exe
Microsoft Windows [Version 10.0.22621.3593]
(c) Microsoft Corporation. All rights reserved.

G:\New folder>git init
Initialized empty Git repository in G:/New folder/.git/

G:\New folder>git remote add origin https://github.com/Himanshu956/Practice.git

G:\New folder>git add .

G:\New folder>git status
On branch master

No commits yet

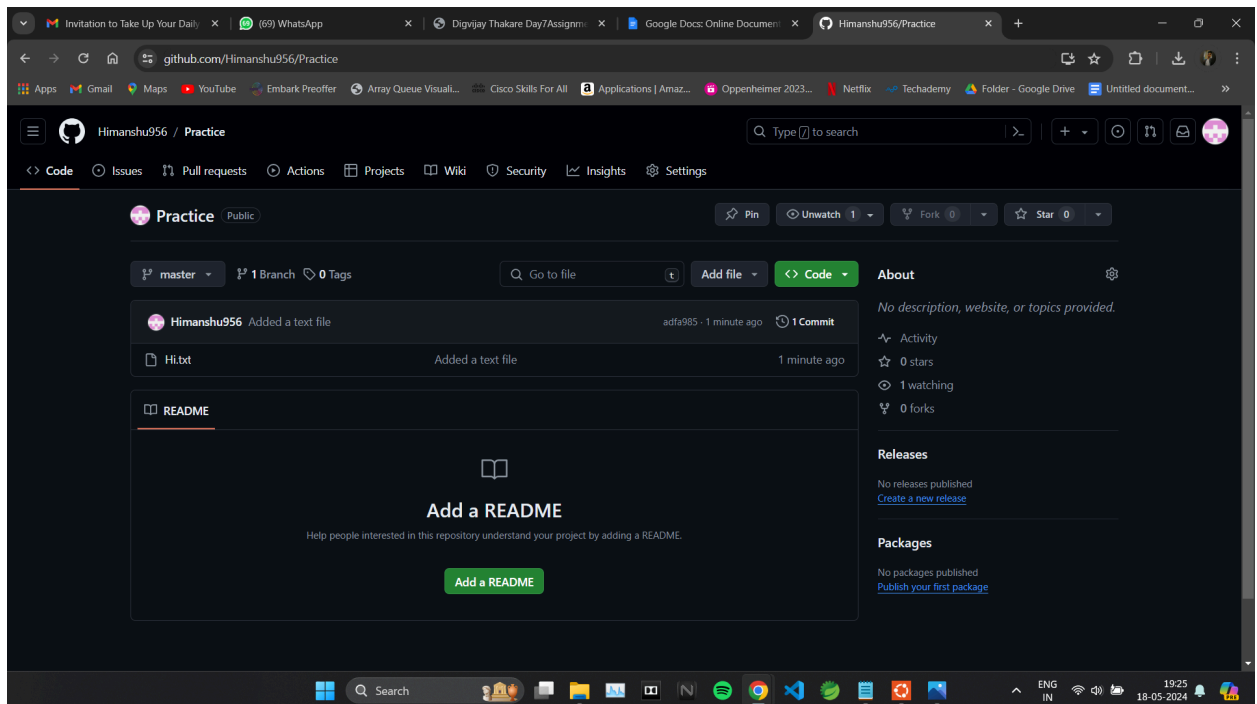
Changes to be committed:
  (use "git rm --cached <file>..." to unstage)
        new file:   Hi.txt

G:\New folder>git commit -m "Added a text file"
[master (root-commit) adfa985] Added a text file
 1 file changed, 1 insertion(+)
 create mode 100644 Hi.txt

G:\New folder>git push origin master
Enumerating objects: 3, done.
Counting objects: 100% (3/3), done.
Writing objects: 100% (3/3), 223 bytes | 223.00 KiB/s, done.
Total 3 (delta 0), reused 0 (delta 0), pack-reused 0 (from 0)
To https://github.com/Himanshu956/Practice.git
 * [new branch]      master -> master

G:\New folder>
```

3. The file is reflected on the git repository



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.

Answer=>

1. Created a branch called "feature" and added a file "Hello.txt" in the feature branch using following commands

```
C:\Windows\System32\cmd.exe
Microsoft Windows [Version 10.0.22621.3593]
(c) Microsoft Corporation. All rights reserved.

G:\Demo>git branch feature

G:\Demo>git checkout feature
Switched to branch 'feature'

G:\Demo>git fetch

G:\Demo>git add .

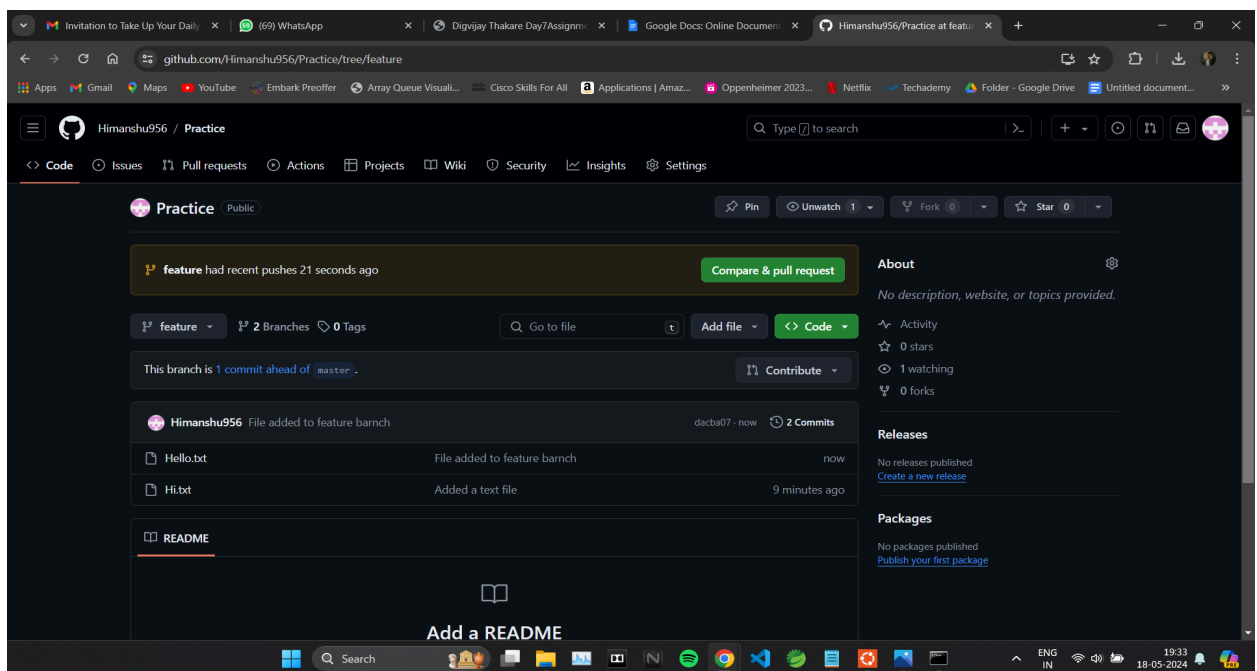
G:\Demo>git status
On branch feature
Changes to be committed:
  (use "git restore --staged <file>..." to unstage)
        new file:   Hello.txt

G:\Demo>git commit -m "File added to feature branch"
[feature d6ba07] File added to feature branch
 1 file changed, 1 insertion(+)
 create mode 100644 Hello.txt

G:\Demo>git push origin feature
Enumerating objects: 4, done.
Counting objects: 100% (4/4), done.
Delta compression using up to 8 threads
Compressing objects: 100% (2/2), done.
Writing objects: 100% (3/3), 290 bytes | 290.00 KiB/s, done.
Total 3 (delta 0), reused 0 (delta 0), pack-reused 0 (from 0)
remote:
remote: Create a pull request for 'feature' on GitHub by visiting:
remote:   https://github.com/Himanshu956/Practice/pull/new/feature
remote:
To https://github.com/Himanshu956/Practice.git
 * [new branch]      feature -> feature

G:\Demo>
```

2. Branch is created and file is reflected in the feature branch



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.

Answer=>

1. Created a HotFix branch and pushed a file using commands

```
C:\Windows\System32\cmd.exe
Microsoft Windows [Version 10.0.22621.3593]
(c) Microsoft Corporation. All rights reserved.

G:\Demo>git branch HotFix

G:\Demo>git branch
* HotFix
  feature
  master

G:\Demo>git checkout HotFix
Switched to branch 'HotFix'

G:\Demo>git fetch

G:\Demo>git add .

G:\Demo>git status
On branch HotFix
Changes to be committed:
  (use "git restore --staged <file>..." to unstage)
        new file:   Details.txt

G:\Demo>git commit -m "File added in HotFix branch"
[HotFix 0892b1e] File added in HotFix branch
 1 file changed, 0 insertions(+), 0 deletions(-)
 create mode 100644 Details.txt

G:\Demo>git push origin HotFix
Enumerating objects: 4, done.
Counting objects: 100% (4/4), done.
Delta compression using up to 8 threads
Compressing objects: 100% (2/2), done.
Writing objects: 100% (3/3), 319 bytes | 319.00 KiB/s, done.
Total 3 (delta 0), reused 0 (delta 0), pack-reused 0 (from 0)
remote:
remote: Create a pull request for 'HotFix' on GitHub by visiting:
remote:   https://github.com/Himanshu956/Practice/pull/new/HotFix
remote:
To https://github.com/Himanshu956/Practice.git
 * [new branch]      HotFix -> HotFix
```

2. Merging HotFix branch to the master branch

```
C:\Windows\System32\cmd.exe
Microsoft Windows [Version 10.0.22621.3593]
(c) Microsoft Corporation. All rights reserved.

G:\Demo>git branch
* HotFix
  feature
  master

G:\Demo>git checkout master
Switched to branch 'master'

G:\Demo>git merge HotFix
Updating adfa985..0892b1e
Fast-forward
 Details.txt | 0
 Hello.txt   | 1 +
 2 files changed, 1 insertion(+)
 create mode 100644 Details.txt
 create mode 100644 Hello.txt

G:\Demo>
```

3. Confirming merge request

This screenshot shows a GitHub pull request for the repository 'Himanshu956/Practice'. The pull request is titled 'File added to HotFix Branch by...' and is in the 'closed' state. The commit history shows two commits: 'File added to feature barnch' and 'File added in HotFix branch'. The pull request was successfully merged into the 'master' branch. The right sidebar shows the 'Reviews' section with 'No reviews' and the 'Assignees' section with 'No one—assign yourself'. The 'Labels' section shows 'None yet'. The 'Projects' section shows 'None yet'. The 'Milestone' section shows 'No milestone'. The 'Development' section shows 'Successfully merging this pull request may close these issues.' and 'None yet'. The 'Notifications' section shows 'You're receiving notifications because you're watching this repository.' and an 'Unsubscribe' button.

This screenshot shows the GitHub repository page for 'Himanshu956/Practice'. The repository is public and has 0 stars and 0 forks. The 'feature' branch is selected, which is 1 commit ahead of 'master'. The commit history shows two commits: 'File added to feature barnch' and 'Added a text file'. The repository has a 'README' file. The right sidebar shows the 'About' section with 'No description, website, or topics provided.' and the 'Releases' section with 'No releases published'. The 'Packages' section shows 'No packages published'.