

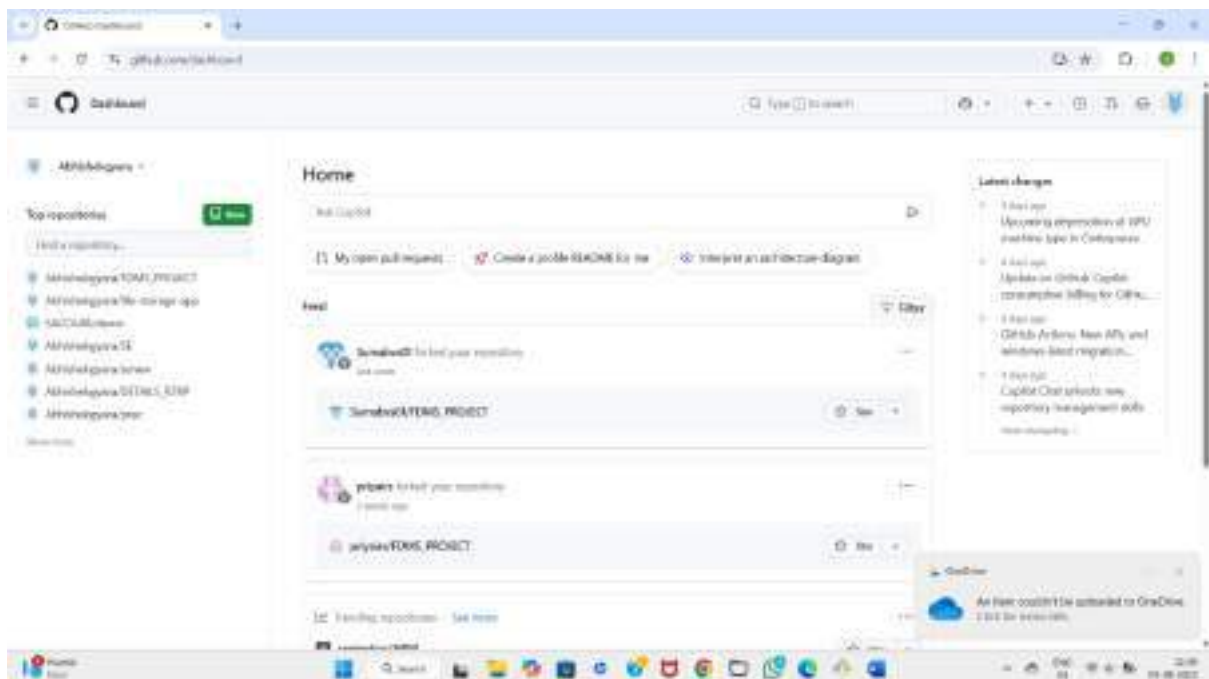
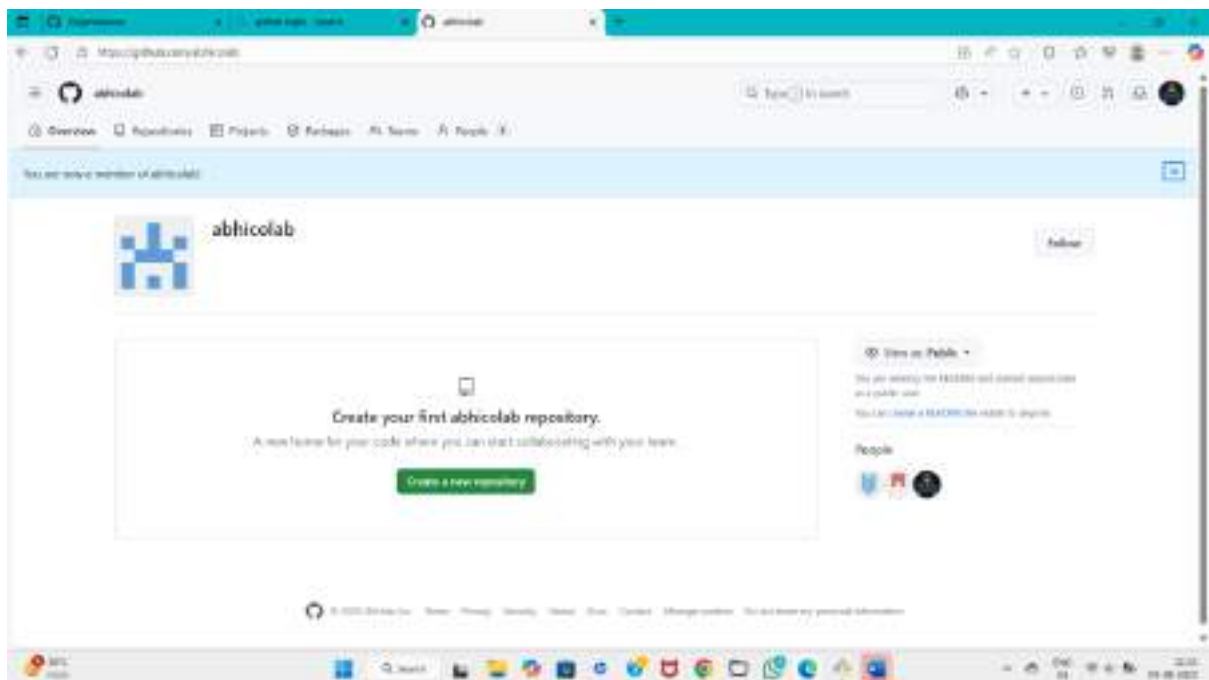
SE LAB WEEK 4

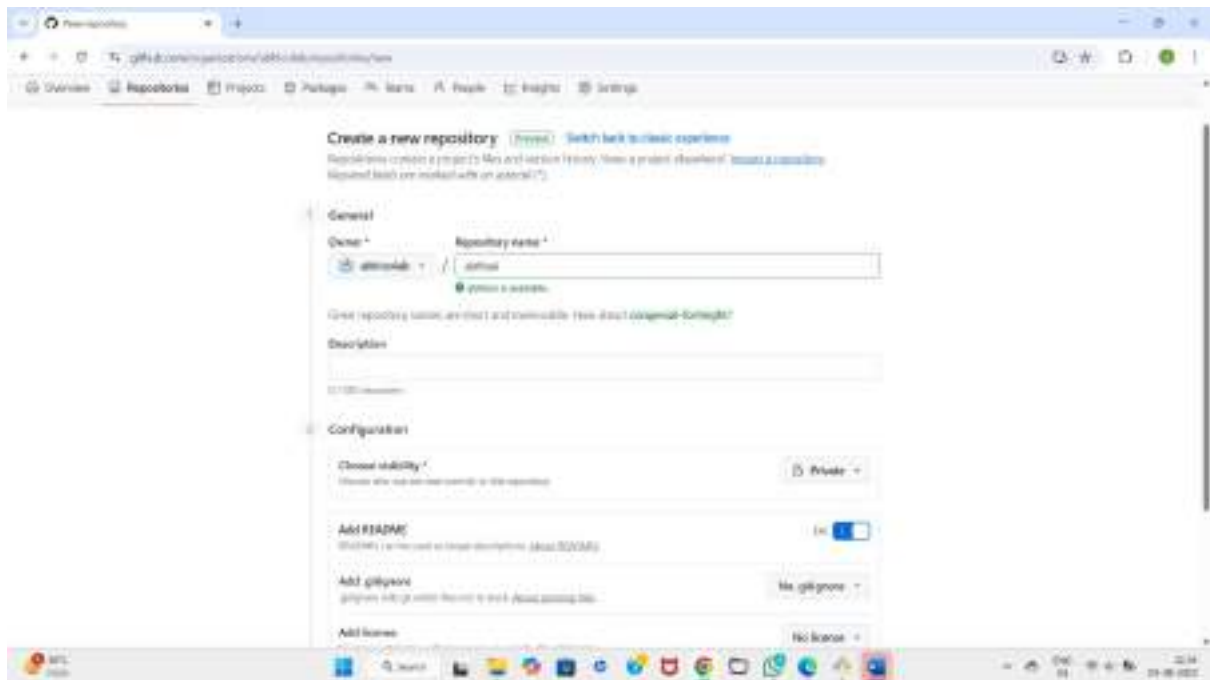
NAME: G. ABHISHEK BHAN

ROLL NO: 23BD1A6793

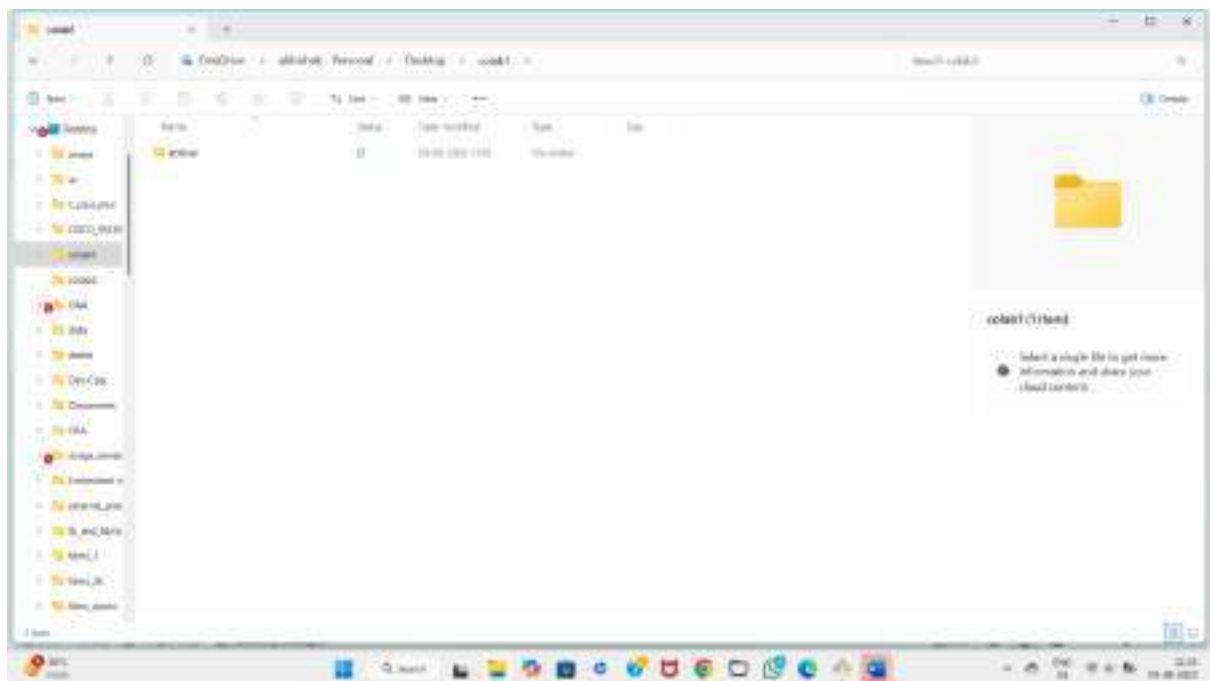
TASK 1

COLLABORATOR 1:





```
Abhishek_Bhan@LAPTOP-31SMVRRN MINGW64 ~/OneDrive/Desktop/colab1 (master)
$ git clone https://github.com/abhisai/abhisai.git
Cloning into 'abhisai'...
remote: Enumerating objects: 3, done.
remote: Counting objects: 100% (3/3), done.
remote: Total 3 (delta 0), reused 0 (delta 0), pack-reused 0 (from 0)
Receiving objects: 100% (3/3), done.
```



```

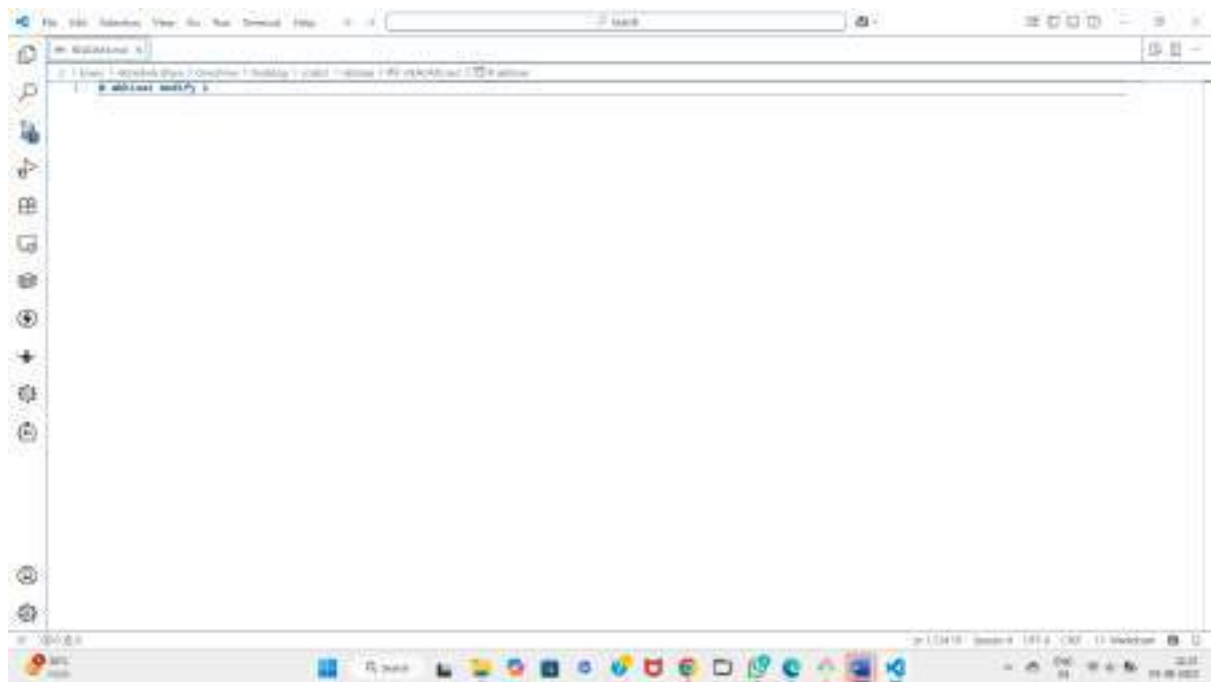
Abhishek_Bhan@LAPTOP-31SMVRRN MINGW64 ~/OneDrive/Desktop/colab1 (master)
$ cd abhisai

Abhishek_Bhan@LAPTOP-31SMVRRN MINGW64 ~/OneDrive/Desktop/colab1/abhisai (main)
$ git status
On branch main
Your branch is up to date with 'origin/main'.

nothing to commit, working tree clean

Abhishek_Bhan@LAPTOP-31SMVRRN MINGW64 ~/OneDrive/Desktop/colab1/abhisai (main)
$ ls
README.md

```



```

Abhishek_Bhan@LAPTOP-31SMVRRN MINGW64 ~/OneDrive/Desktop/colab1/abhisai (main)
$ git status
On branch main
Your branch is up to date with 'origin/main'.

Changes not staged for commit:
  (use "git add <file>..." to update what will be committed)
  (use "git restore <file>..." to discard changes in working directory)
        modified:   README.md

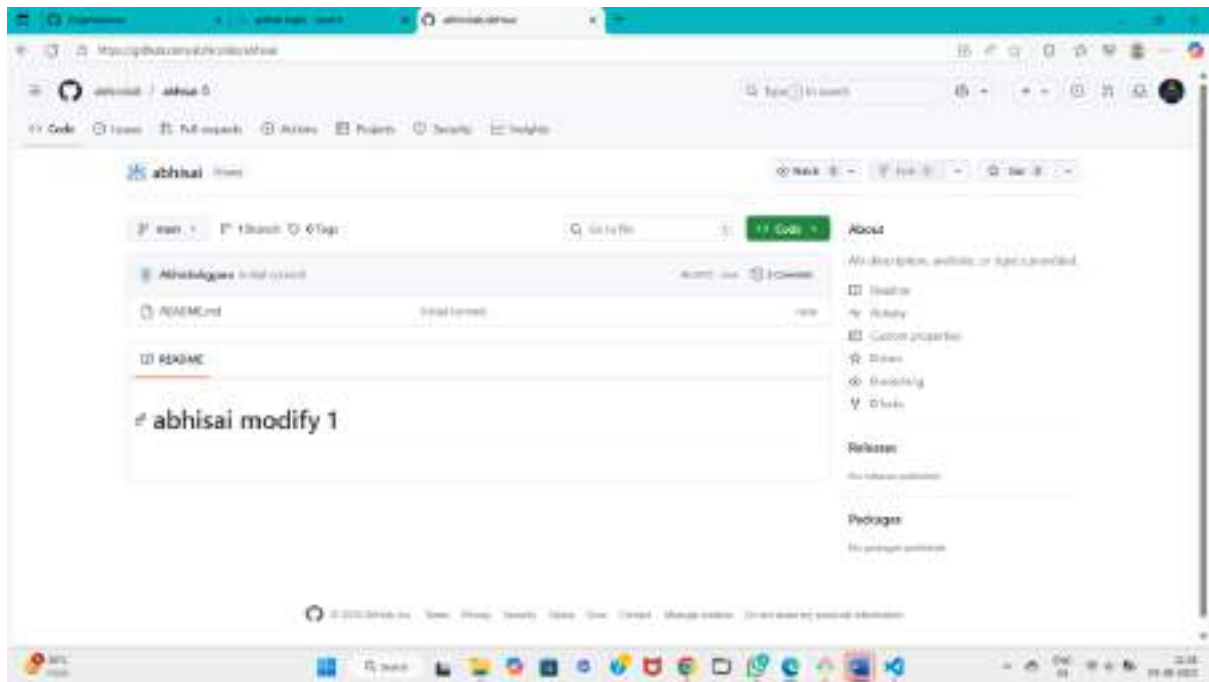
no changes added to commit (use "git add" and/or "git commit -a")

Abhishek_Bhan@LAPTOP-31SMVRRN MINGW64 ~/OneDrive/Desktop/colab1/abhisai (main)
$ git add .

Abhishek_Bhan@LAPTOP-31SMVRRN MINGW64 ~/OneDrive/Desktop/colab1/abhisai (main)
$ git commit -m "Initial commit"
[main 46c40f2] Initial commit
 1 file changed, 1 insertion(+), 1 deletion(-)

Abhishek_Bhan@LAPTOP-31SMVRRN MINGW64 ~/OneDrive/Desktop/colab1/abhisai (main)
$ git push origin main
Enumerating objects: 5, done.
Counting objects: 100% (5/5), done.
Writing objects: 100% (3/3), 263 bytes | 65.00 KiB/s, done.
Total 3 (delta 0), reused 0 (delta 0), pack-reused 0 (from 0)
To https://github.com/abhiscolab/abhisai.git
bb90303..46c40f2  main -> main

```



COLLABORATOR 2:

```
Abhishek_Bhan@LAPTOP-31SMVRRN MINGW64 ~/OneDrive/Desktop/colab2 (master)
$ git clone https://github.com/abhisai/abhisai.git
Cloning into 'abhisai'...
remote: Enumerating objects: 6, done.
remote: Counting objects: 100% (6/6), done.
remote: Compressing objects: 100% (2/2), done.
remote: Total 6 (delta 0), reused 3 (delta 0), pack-reused 0 (from 0)
Receiving objects: 100% (6/6), done.
```

```

Abhishek_Bhan@LAPTOP-31SMVRRN MINGW64 ~/OneDrive/Desktop/colab2/abhisai (main)
$ git status
On branch main
Your branch is up to date with 'origin/main'.

Changes not staged for commit:
  (use "git add <file>..." to update what will be committed)
  (use "git restore <file>..." to discard changes in working directory)
        modified:   README.md

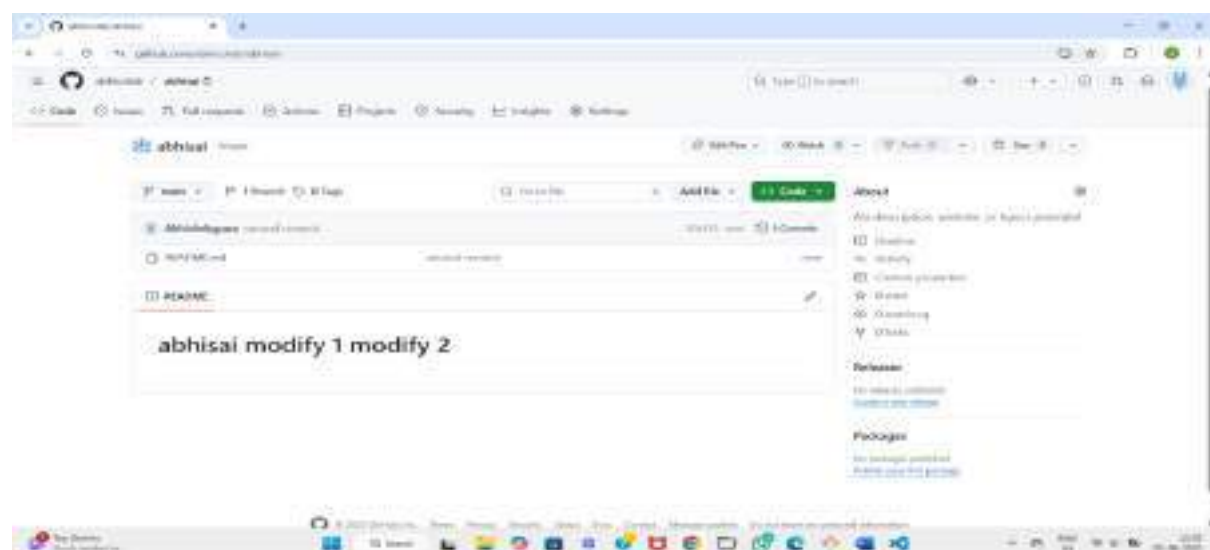
no changes added to commit (use "git add" and/or "git commit -a")

Abhishek_Bhan@LAPTOP-31SMVRRN MINGW64 ~/OneDrive/Desktop/colab2/abhisai (main)
$ git add .

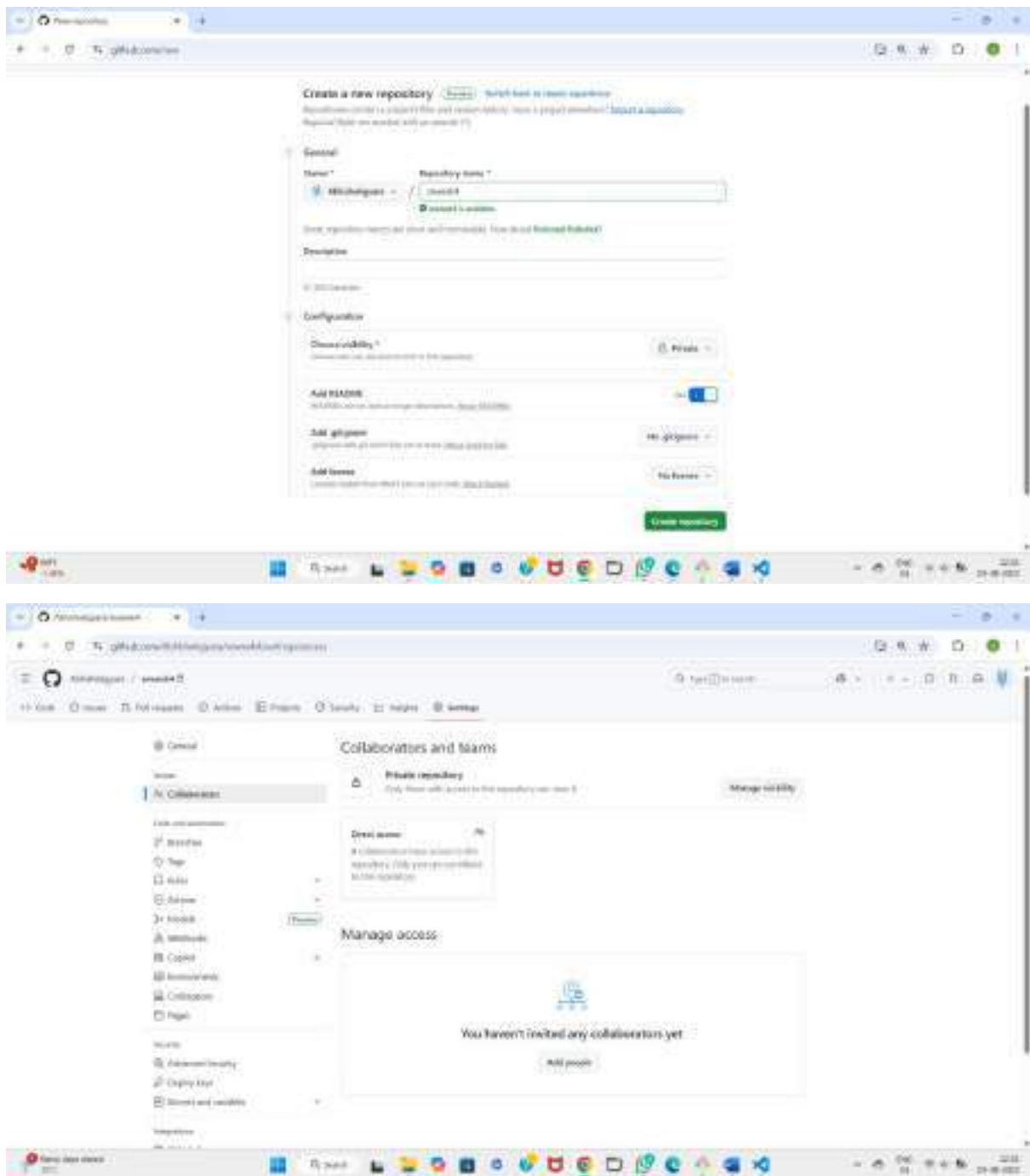
Abhishek_Bhan@LAPTOP-31SMVRRN MINGW64 ~/OneDrive/Desktop/colab2/abhisai (main)
$ git commit -m "second commit"
[main 3f3c313] second commit
1 file changed, 1 insertion(+), 1 deletion(-)

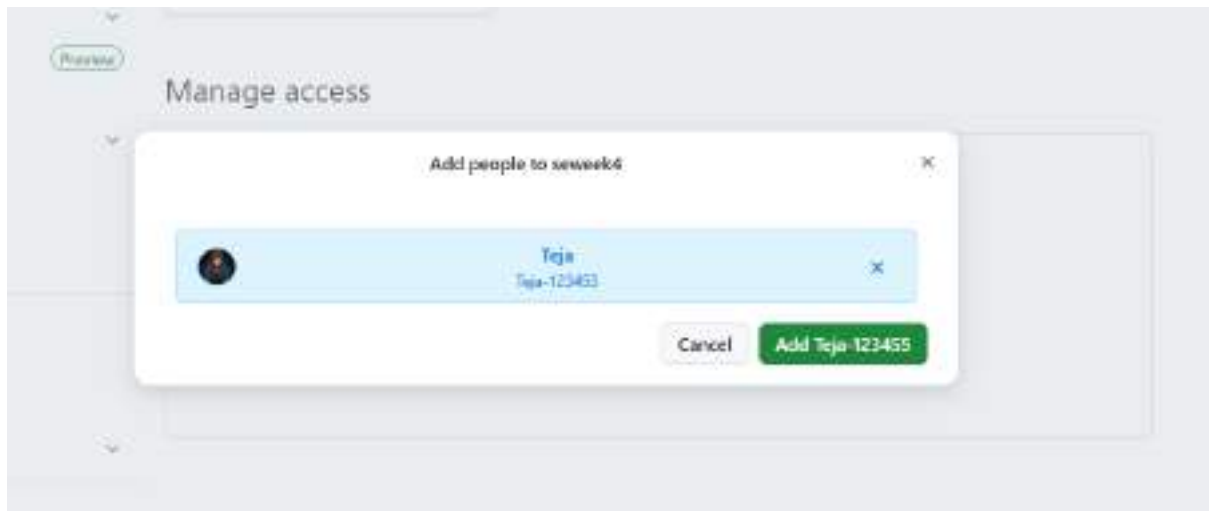
Abhishek_Bhan@LAPTOP-31SMVRRN MINGW64 ~/OneDrive/Desktop/colab2/abhisai (main)
$ git push origin main
Enumerating objects: 5, done.
Counting objects: 100% (5/5), done.
Writing objects: 100% (3/3), 263 bytes | 131.00 KiB/s, done.
Total 3 (delta 0), reused 0 (delta 0), pack-reused 0 (from 0)
To https://github.com/abhicolab/abhisai.git
   46c40f2..3f3c313  main -> main

```



TASK 2





```
Abhishek_Bhan@LAPTOP-31SMVRRN MINGW64 ~/OneDrive/Desktop/colab2 (master)
$ git clone https://github.com/Abhishekgyara/seweek4.git
Cloning into 'seweek4'...
remote: Enumerating objects: 3, done.
remote: Counting objects: 100% (3/3), done.
remote: Total 3 (delta 0), reused 0 (delta 0), pack-reused 0 (from 0)
Receiving objects: 100% (3/3), done.
```

```
Abhishek_Bhan@LAPTOP-31SMVRRN MINGW64 ~/OneDrive/Desktop/colab2 (master)
$ cd seweek4

Abhishek_Bhan@LAPTOP-31SMVRRN MINGW64 ~/OneDrive/Desktop/colab2/seweek4 (main)
$ git checkout -b b2
Switched to a new branch 'b2'
```

```

Abhishek Bhan@LAPTOP-31SMVRRN MINGW64 ~/OneDrive/Desktop/colab2/seweek4 (main)
$ git checkout -b b2
Switched to a new branch 'b2'

Abhishek Bhan@LAPTOP-31SMVRRN MINGW64 ~/OneDrive/Desktop/colab2/seweek4 (b2)
$ git status
On branch b2
nothing to commit, working tree clean

Abhishek Bhan@LAPTOP-31SMVRRN MINGW64 ~/OneDrive/Desktop/colab2/seweek4 (b2)
$ git status
On branch b2
Changes not staged for commit:
  (use "git add <file>..." to update what will be committed)
  (use "git restore <file>..." to discard changes in working directory)
        modified:   README.md

no changes added to commit (use "git add" and/or "git commit -a")

Abhishek Bhan@LAPTOP-31SMVRRN MINGW64 ~/OneDrive/Desktop/colab2/seweek4 (b2)
$ git add .

Abhishek Bhan@LAPTOP-31SMVRRN MINGW64 ~/OneDrive/Desktop/colab2/seweek4 (b2)
$ git push origin b2
Total 0 (delta 0), reused 0 (delta 0), pack-reused 0 (from 0)
remote:
remote: Create a pull request for 'b2' on GitHub by visiting:
remote:   https://github.com/Abhishekgyara/seweek4/pull/new/b2
remote:
To https://github.com/Abhishekgyara/seweek4.git
 * [new branch]      b2 -> b2

Abhishek Bhan@LAPTOP-31SMVRRN MINGW64 ~/OneDrive/Desktop/colab2/seweek4 (b2)
$ git commit -m 'change 1'
>
[b2 d4388bc] change 1
1 file changed, 1 insertion(+), 1 deletion(-)

Abhishek Bhan@LAPTOP-31SMVRRN MINGW64 ~/OneDrive/Desktop/colab2/seweek4 (b2)
$ git push origin b2
Enumerating objects: 5, done.
Counting objects: 100% (5/5), done.
Writing objects: 100% (3/3), 256 bytes | 23.00 KiB/s, done.
Total 3 (delta 0), reused 0 (delta 0), pack-reused 0 (from 0)
To https://github.com/Abhishekgyara/seweek4.git
   ac6ccd..d4388bc  b2 -> b2

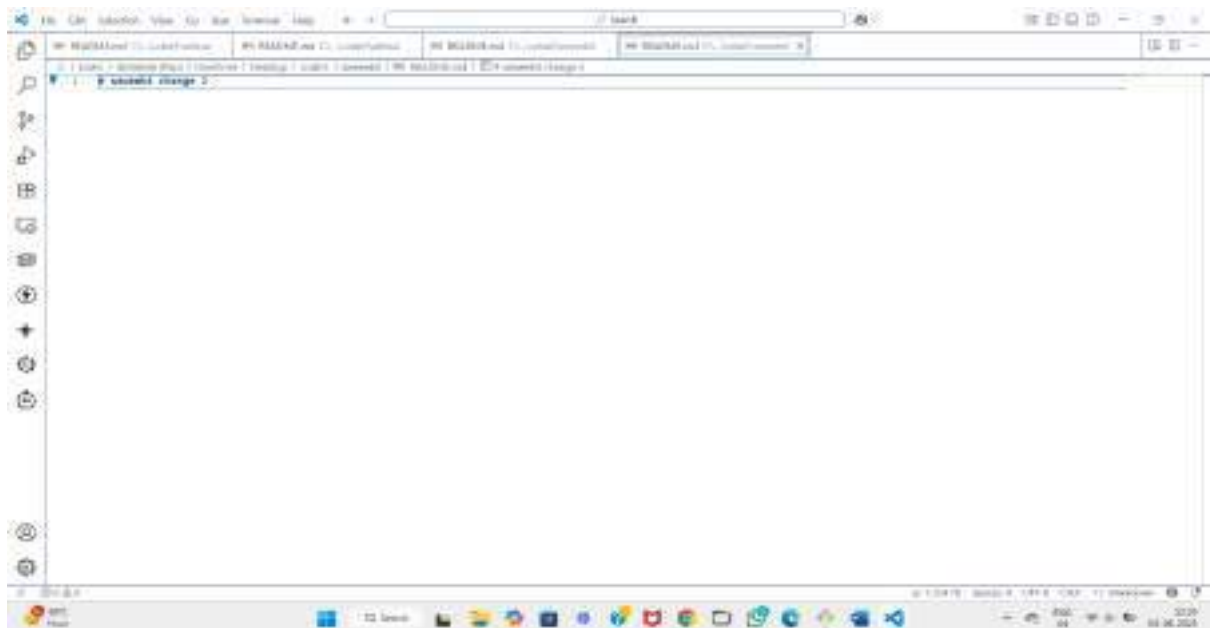
```

```

Abhishek Bhan@LAPTOP-31SMVRRN MINGW64 ~/OneDrive/Desktop/colab1/abhisai (main)
$ cd 'c:/Users/Abhishek Bhan/OneDrive/Desktop/colab1'

Abhishek Bhan@LAPTOP-31SMVRRN MINGW64 ~/OneDrive/Desktop/colab1 (master)
$ git clone https://github.com/Abhishekgyara/seweek4.git
Cloning into 'seweek4'...
remote: Enumerating objects: 6, done.
remote: Counting objects: 100% (6/6), done.
remote: Compressing objects: 100% (2/2), done.
remote: Total 6 (delta 0), reused 3 (delta 0), pack-reused 0 (from 0)
Receiving objects: 100% (6/6), done.

```

```
Abhishek Bhan@LAPTOP-3ISMVRRN MINGW64 ~/OneDrive/Desktop/colab1/seweek4 (main)
$ git checkout -b b1
Switched to a new branch 'b1'

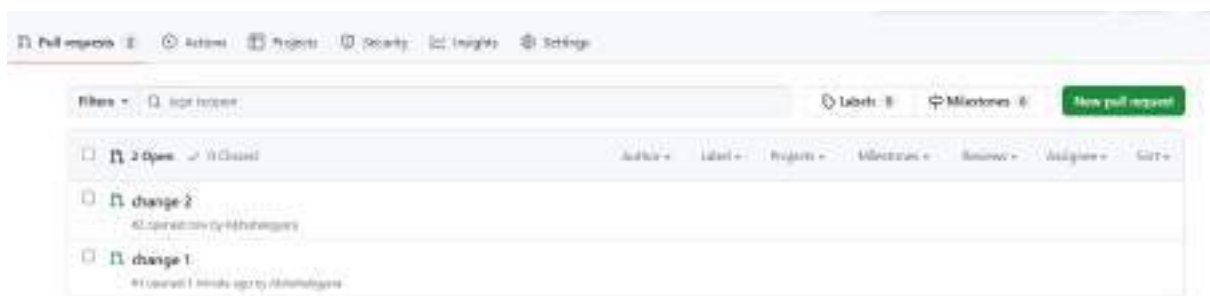
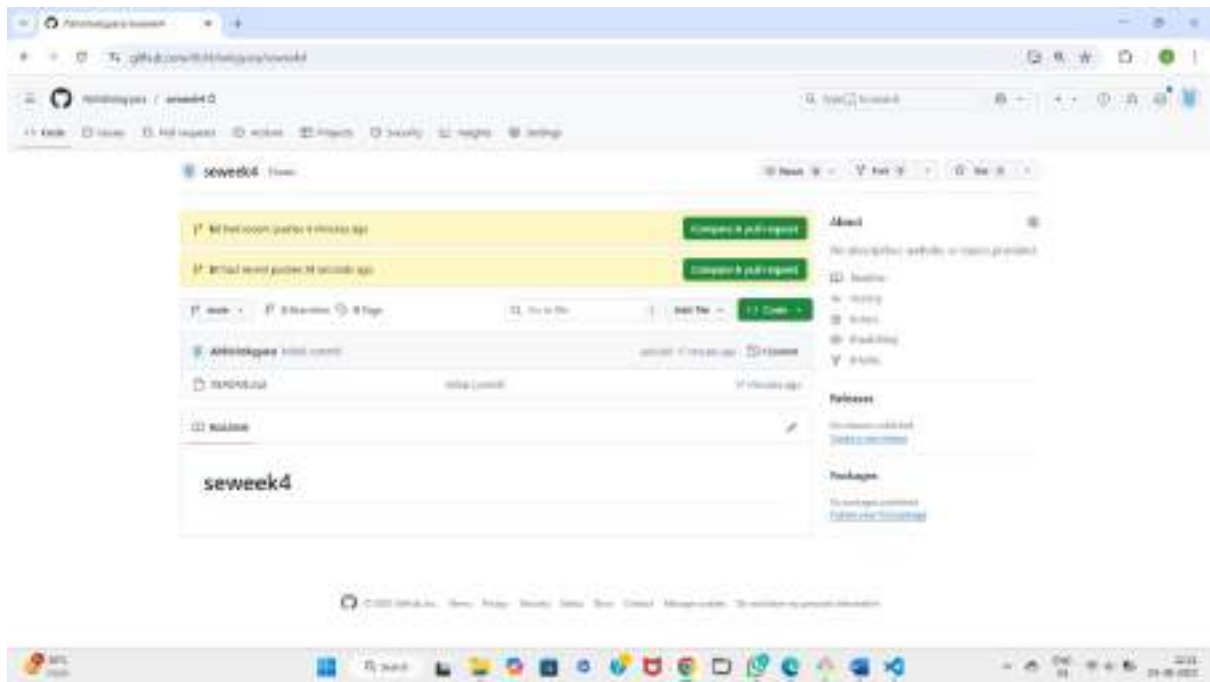
Abhishek Bhan@LAPTOP-3ISMVRRN MINGW64 ~/OneDrive/Desktop/colab1/seweek4 (b1)
$ git status
On branch b1
Changes not staged for commit:
  (use "git add <file>..." to update what will be committed)
  (use "git restore <file>..." to discard changes in working directory)
        modified:   README.md

no changes added to commit (use "git add" and/or "git commit -a")

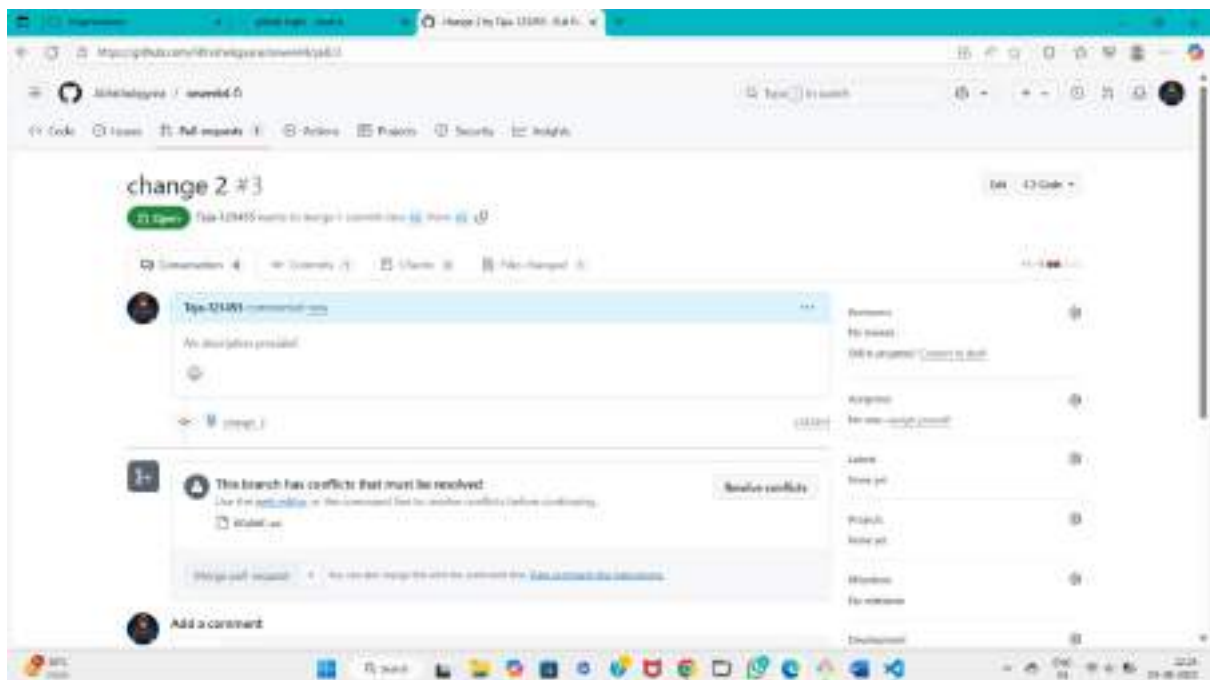
Abhishek Bhan@LAPTOP-3ISMVRRN MINGW64 ~/OneDrive/Desktop/colab1/seweek4 (b1)
$ git add .

Abhishek Bhan@LAPTOP-3ISMVRRN MINGW64 ~/OneDrive/Desktop/colab1/seweek4 (b1)
$ git commit -m 'change 2'
[b1 c7476ff] change 2
1 file changed, 1 insertion(+), 1 deletion(-)

Abhishek Bhan@LAPTOP-3ISMVRRN MINGW64 ~/OneDrive/Desktop/colab1/seweek4 (b1)
$ git push origin b1
Enumerating objects: 5, done.
Counting objects: 100% (5/5), done.
Writing objects: 100% (3/3), 256 bytes | 64.00 KiB/s, done.
Total 3 (delta 0), reused 0 (delta 0), pack-reused 0 (from 0)
remote:
remote: Create a pull request for 'b1' on GitHub by visiting:
remote:   https://github.com/Abhishekgyara/seweek4/pull/new/b1
remote:
To https://github.com/Abhishekgyara/seweek4.git
^ [new branch]      b1 -> b1
```



CONFLICTS:




RESOLVING CONFLICTS:

change 2 #3

Resolving conflicts between `b1` and `b2` and committing changes → `b1`

1 conflicting file

 README.md
README.md

README.md

```
1 <<<<<< b1
2 # seweek4 change 2
3 =====
4 # seweek4 change1
5 >>>>>> b2
6
```

change 2 #3


Resolving conflicts between `b1` and `b2` and committing changes → `b1`

1 conflicting file


 README.md
README.md


README.md


```
1
2 # seweek4 change
3 # seweek4 change1
4
5
```



 **Teja-123455** commented 1 minute ago

No description provided.

 **Abhishekgyara** and others added 2 commits 4 minutes ago

 `change_2` c7d26

 Merge branch 'b2' into b1 Verified 36728

  **No conflicts with base branch**
Merging can be performed automatically.

Merge pull request

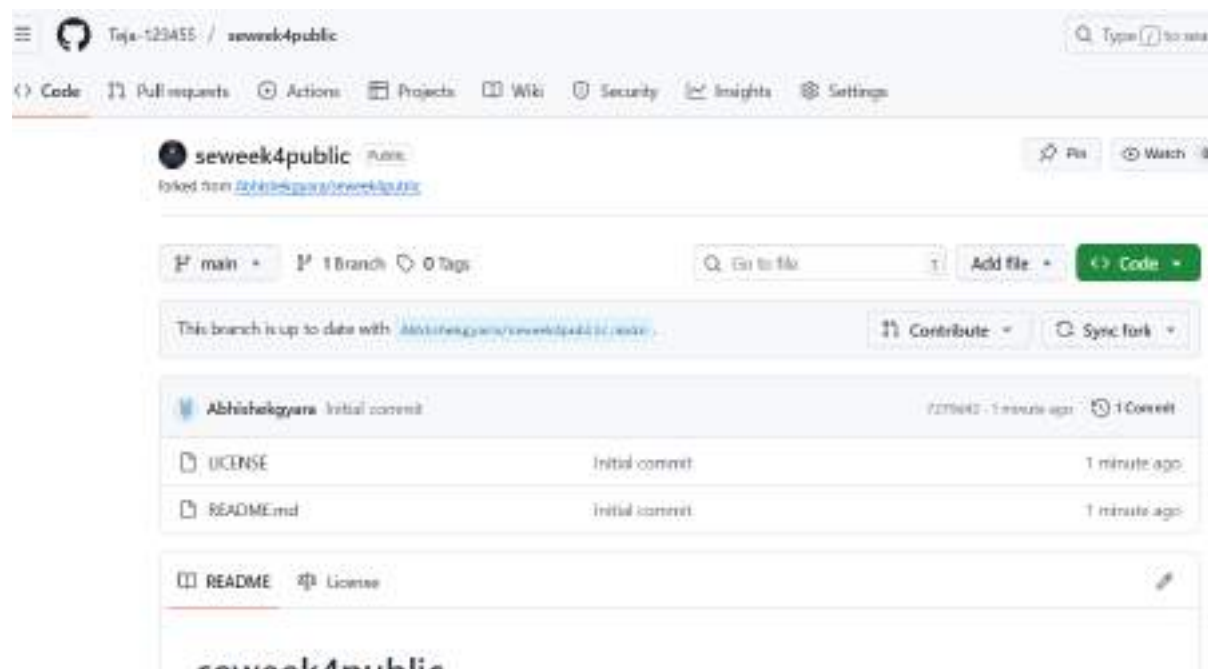
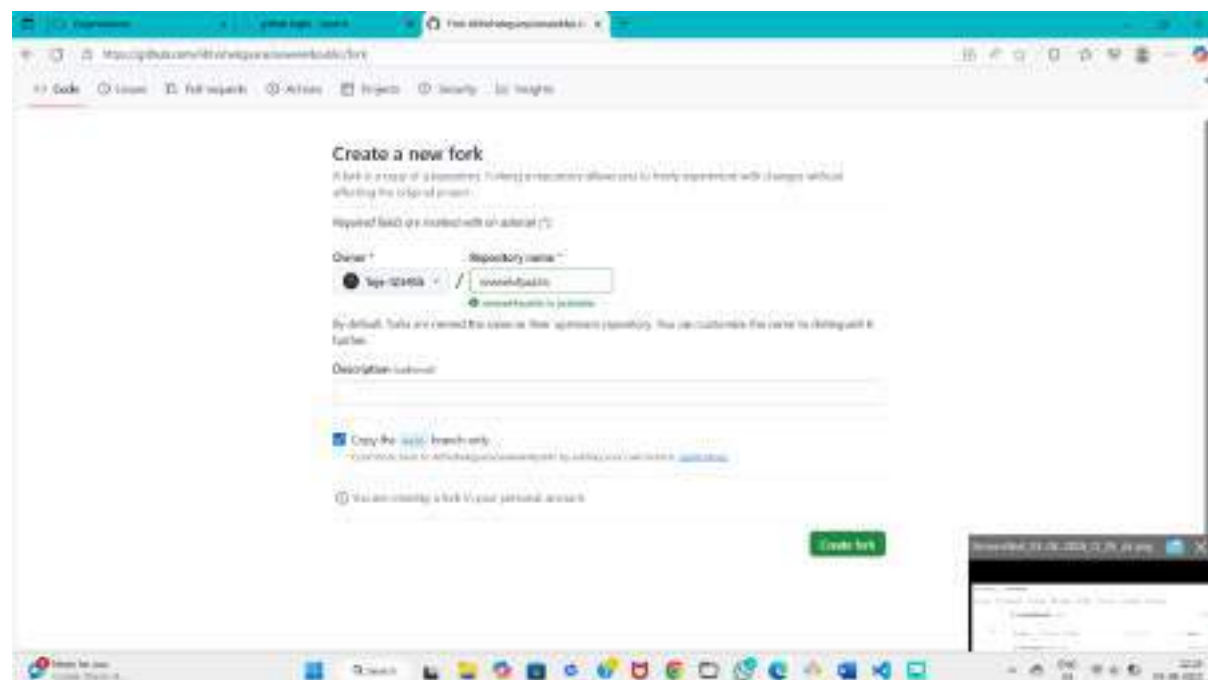
You can also merge this with the command line. [View command line instructions.](#)

TASK 3

The screenshot shows the 'Create a new repository' page on GitHub. The form is titled 'Create a new repository' and includes a link to 'Switch back to a team repository'. Below the title, there is a note: 'Repositories created on GitHub are public and cannot be made private. Have a project idea? See GitHub Sponsors.' The form is divided into two main sections: 'General' and 'Configuration'. In the 'General' section, the 'Owner' is 'Abhishekgyara' and the 'Repository name' is 'seweek4public'. There is a checkbox for 'Private' which is currently unchecked. The 'Description' field is empty. In the 'Configuration' section, there is a checkbox for 'Add README' which is checked. There is a link to 'Add license' and a dropdown menu for 'Add license' showing 'MIT License' as the selected option. A green 'Create repository' button is at the bottom right of the form.

The screenshot shows the GitHub repository page for 'seweek4public' by 'Abhishekgyara'. The repository is public. The page includes a navigation bar with links to 'Issues', 'Pull requests', 'Actions', 'Projects', 'Wiki', 'Security', 'Insights', and 'Settings'. Below the navigation bar, there is a section for the repository name 'seweek4public' and a 'Public' label. There are buttons for 'Pin' and 'Watch'. The main content area shows the repository's structure with a 'main' branch and 1 branch. There are buttons for 'Go to file', 'Add file', and 'Code'. Below this, there is a table of files and their commit history. The table has columns for the file name, the commit message, and the commit hash. The files listed are 'LICENSE' and 'README.md', both with an 'initial commit' message and a commit hash of '1279a32'. There is a 'README' link and a 'GPL-3.0 license' link. The repository name 'seweek4public' is displayed at the bottom of the page.

The screenshot shows the GitHub search results for 'seweek4public'. The search bar at the top contains 'seweek4public'. Below the search bar, there is a section for '1 result (149 ms)'. The results are sorted by 'Best match'. The first result is 'Abhishekgyara/seweek4public', which has 0 stars and was updated 41 seconds ago. There is a 'Star' button next to the result. On the left side of the page, there is a sidebar with a search bar and a list of results. The list shows '0' results for 'seweek4public' and '1' result for 'Abhishekgyara/seweek4public'.




```

Abhishek Bhan@LAPTOP-31SMVRRN MINGW64 ~/OneDrive/Desktop/colab2/seweek4 (b2)
$ cd "C:/Users/Abhishek Bhan/OneDrive/Desktop/colab2"

Abhishek Bhan@LAPTOP-31SMVRRN MINGW64 ~/OneDrive/Desktop/colab2 (master)
$ git clone https://github.com/Abhishekgyara/seweek4public.git
Cloning into 'seweek4public'...
remote: Enumerating objects: 4, done.
remote: Counting objects: 100% (4/4), done.
remote: Compressing objects: 100% (3/3), done.
remote: Total 4 (delta 0), reused 0 (delta 0), pack-reused 0 (from 0)
Receiving objects: 100% (4/4), 12.74 KiB | 1.82 MiB/s, done.

Abhishek Bhan@LAPTOP-31SMVRRN MINGW64 ~/OneDrive/Desktop/colab2 (master)
$ ls
abhisai/  seweek4/  seweek4public/

Abhishek Bhan@LAPTOP-31SMVRRN MINGW64 ~/OneDrive/Desktop/colab2 (master)
$ cd seweek4public

Abhishek Bhan@LAPTOP-31SMVRRN MINGW64 ~/OneDrive/Desktop/colab2/seweek4public (main)
$ ls
LICENSE  README.md

```

```

C: > Users > Abhishek Bhan > OneDrive > Desktop > colab2
1 # seweek4public change 1

```

```

Abhishek Bhan@LAPTOP-31SMVRRN MINGW64 ~/OneDrive/Desktop/colab2/seweek4public (main)
$ git status
On branch main
Your branch is up to date with 'origin/main'.

Changes not staged for commit:
  (use "git add <file>..." to update what will be committed)
  (use "git restore <file>..." to discard changes in working directory)
        modified:   README.md

no changes added to commit (use "git add" and/or "git commit -a")

Abhishek Bhan@LAPTOP-31SMVRRN MINGW64 ~/OneDrive/Desktop/colab2/seweek4public (main)
$ git add .

Abhishek Bhan@LAPTOP-31SMVRRN MINGW64 ~/OneDrive/Desktop/colab2/seweek4public (main)
$ git commit -m '1 commit'
[main 7a8ca77] 1 commit
 1 file changed, 1 insertion(+), 1 deletion(-)

Abhishek Bhan@LAPTOP-31SMVRRN MINGW64 ~/OneDrive/Desktop/colab2/seweek4public (main)
$ git push origin main
Enumerating objects: 5, done.
Counting objects: 100% (5/5), done.
Delta compression using up to 12 threads
Compressing objects: 100% (2/2), done.
Writing objects: 100% (3/3), 294 bytes | 73.00 KiB/s, done.
Total 3 (delta 0), reused 0 (delta 0), pack-reused 0 (from 0)
To https://github.com/Abhishekgyara/seweek4public.git
  7279d42..7a8ca77  main -> main

```

```

Abhishek Bhan@LAPTOP-3ISMVRRN MINGW64 ~/OneDrive/Desktop/colab1 (master)
$ cd 'C:/Users/Abhishek Bhan/OneDrive/Desktop/colab1'

Abhishek Bhan@LAPTOP-3ISMVRRN MINGW64 ~/OneDrive/Desktop/colab1 (master)
$ git clone https://github.com/Abhishekgyara/seweek4public.git
Cloning into 'seweek4public'...
remote: Enumerating objects: 7, done.
remote: Counting objects: 100% (7/7), done.
remote: Compressing objects: 100% (5/5), done.
remote: Total 7 (delta 0), reused 3 (delta 0), pack-reused 0 (from 0)
Receiving objects: 100% (7/7), 12.99 KiB | 511.00 KiB/s, done.

Abhishek Bhan@LAPTOP-3ISMVRRN MINGW64 ~/OneDrive/Desktop/colab1/seweek4public (main)
$ ls
LICENSE  README.md

```

> Users > Abhishek Bhan > OneDrive > Desktop > colab1 > seweek4public
 1 # seweek4public change 1 change 2

```

Abhishek Bhan@LAPTOP-3ISMVRRN MINGW64 ~/OneDrive/Desktop/colab1/seweek4public (main)
$ git status
On branch main
Your branch is up to date with 'origin/main'.

Changes not staged for commit:
  (use "git add <file>..." to update what will be committed)
  (use "git restore <file>..." to discard changes in working directory)
        modified:   README.md

no changes added to commit (use "git add" and/or "git commit -a")

Abhishek Bhan@LAPTOP-3ISMVRRN MINGW64 ~/OneDrive/Desktop/colab1/seweek4public (main)
$ git add .

Abhishek Bhan@LAPTOP-3ISMVRRN MINGW64 ~/OneDrive/Desktop/colab1/seweek4public (main)
$ git commit -m '2 commit'
[main 81bc06a] 2 commit
 1 file changed, 1 insertion(+), 1 deletion(-)

Enumerating objects: 5, done.
Counting objects: 100% (5/5), done.
Delta compression using up to 12 threads
Compressing objects: 100% (2/2), done.
Writing objects: 100% (3/3), 297 bytes | 148.00 KiB/s, done.
Total 3 (delta 0), reused 0 (delta 0), pack-reused 0 (from 0)
To https://github.com/Abhishekgyara/seweek4public.git
   7a8ca77..81bc06a  main -> main

```

> Users > Abhishek Bhan > OneDrive > Desktop > colab1 > seweek4public >  README
 1 # seweek4public change 1 change 2 change 3

```

Abhishek_Bhan@LAPTOP-31SMVRRN MINGW64 ~/OneDrive/Desktop/colab2/seweek4public (b1)
$ git status
On branch b1
Changes not staged for commit:
  (use "git add <file>..." to update what will be committed)
  (use "git restore <file>..." to discard changes in working directory)
        modified:   README.md

no changes added to commit (use "git add" and/or "git commit -a")

Abhishek_Bhan@LAPTOP-31SMVRRN MINGW64 ~/OneDrive/Desktop/colab2/seweek4public (b1)
$ git add .

Abhishek_Bhan@LAPTOP-31SMVRRN MINGW64 ~/OneDrive/Desktop/colab2/seweek4public (b1)
$ git commit -m '3 commit'
[b1 2af4723] 3 commit
 1 file changed, 1 insertion(+), 1 deletion(-)

Abhishek_Bhan@LAPTOP-31SMVRRN MINGW64 ~/OneDrive/Desktop/colab2/seweek4public (b1)
$ git push origin b1
Enumerating objects: 10, done.
Counting objects: 100% (10/10), done.
Delta compression using up to 12 threads
Compressing objects: 100% (7/7), done.
Writing objects: 100% (10/10), 13.25 KiB | 2.21 MiB/s, done.
Total 10 (delta 0), reused 4 (delta 0), pack-reused 0 (from 0)
remote:
remote: Create a pull request for 'b1' on GitHub by visiting:
remote:   https://github.com/Abhishekgyara/seweek4public/pull/new/b1
remote:
To https://github.com/Abhishekgyara/seweek4public.git
   = [new branch]      b1 -> b1

```

```

Abhishek_Bhan@LAPTOP-31SMVRRN MINGW64 ~/OneDrive/Desktop/colab1/seweek4public (main)
$ git status
On branch main
Your branch is up to date with 'origin/main'.

Changes not staged for commit:
  (use "git add <file>..." to update what will be committed)
  (use "git restore <file>..." to discard changes in working directory)
        modified:   README.md

no changes added to commit (use "git add" and/or "git commit -a")

Abhishek_Bhan@LAPTOP-31SMVRRN MINGW64 ~/OneDrive/Desktop/colab1/seweek4public (main)
$ git add .

Abhishek_Bhan@LAPTOP-31SMVRRN MINGW64 ~/OneDrive/Desktop/colab1/seweek4public (main)
$ git commit -m '4 commit'
[main 3180bdc] 4 commit
 1 file changed, 1 insertion(+), 1 deletion(-)

Abhishek_Bhan@LAPTOP-31SMVRRN MINGW64 ~/OneDrive/Desktop/colab1/seweek4public (main)
$ git push origin main
Enumerating objects: 5, done.
Counting objects: 100% (5/5), done.
Delta compression using up to 12 threads
Compressing objects: 100% (2/2), done.
Writing objects: 100% (3/3), 299 bytes | 149.00 KiB/s, done.
Total 3 (delta 0), reused 0 (delta 0), pack-reused 0 (from 0)
To https://github.com/Abhishekgyara/seweek4public.git
   81bc06a..3180bdc  main -> main

```


3 commit #1

 Open Abhishekgyara wants to merge 1 commit into [main](#) from [bi](#)


 Conversation **0**  Commits **1**  Checks **0**  Files changed **1**

**Abhishekgyara** commented [now](#) Owner ...


No description provided.



 3 commit 2af0723

 **This branch has conflicts that must be resolved** Resolve conflicts

Use the [web editor](#) or the command line to resolve conflicts before continuing.

 README.ed

Merge pull request • You can also merge this with the command line. [View command line instructions.](#)



README.ed

1
2
3 # soweek4public change 1 change 2 change 3
4
5

 **No conflicts with base branch**
Merging can be performed automatically.

Merge pull request • You can also merge this with the command line. [View command line instructions.](#)

 Add a comment

Verified [2af0723](#)
Prog
Mon
Mia
No
Dev
Sun
1998

TASK 4:

```
Abhishek_Bhan@LAPTOP-31SMVRRN MINGW64 ~/OneDrive/Desktop/colab1/seweek4public (main)
$ git log
commit 3180bdcd0716313bfa07ccc926cf8ee1278c072e (HEAD -> main, origin/main, origin/HEAD)
Author: abhi <abhishekbhang2006@gmail.com>
Date: Tue Aug 5 12:40:26 2025 +0530

    4 commit

commit 81bc06ae3d2ed24ade0a0cb9418bc975cc417f6b
Author: abhi <abhishekbhang2006@gmail.com>
Date: Tue Aug 5 12:36:22 2025 +0530

    2 commit

commit 7a8ca771b5e14fc08d0a2aca1b8f3561e8581369
Author: abhi <abhishekbhang2006@gmail.com>
Date: Tue Aug 5 12:33:27 2025 +0530

    1 commit

commit 7279d4253d82bd06e7fae748b6d8ef81223e2e6a
Author: GYARA ABHISHEK BHAN <abhishekbhang2006@gmail.com>
Date: Tue Aug 5 12:28:34 2025 +0530

    initial commit
```

```
Abhishek_Bhan@LAPTOP-31SMVRRN MINGW64 ~/OneDrive/Desktop/colab1/seweek4public (main)
$ git format-patch -1
0001-4-commit.patch
```

```
Abhishek_Bhan@LAPTOP-31SMVRRN MINGW64 ~/OneDrive/Desktop/colab1/seweek4public (main)
$ git format-patch -2
0001-2-commit.patch
0002-4-commit.patch
```



```
0001-2-commit.patch
11 From 81bc06ae3d2ed24ade0a0cb9418bc975cc417f6b Mon Sep 17 00:00:00 2000
12 From: abhi <abhishekbhang2006@gmail.com>
13 Date: Tue, 5 Aug 2025 12:33:27 +0530
14 Subject: [PATCH] 2 commit
15
16 ---
17 README.md | 2 +-
18 1 file changed, 1 insertion(+), 1 deletion(-)
19
20 diff --git a/README.md a/README.md
21 index 1c298b..504090..100000
22 --- a/README.md
23 +++ b/README.md
24 @@ -1,1 +1,2 @@
25 -# week4public
26 +# week4public (change 1)
27 +no newline at end of file
28 +# week4public (change 1 change 2)
29 +no newline at end of file
30 ---
31 2,10,1,addition,1
32
33
```



```
Abhishek.Bhan@LAPTOP-31SMVRRN MINGW64 ~/OneDrive/Desktop/colab1/seweek4public (main)
$ git status
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)
    0001-2-commit.patch
    0001-4-commit.patch
    0002-4-commit.patch

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

Abhishek.Bhan@LAPTOP-31SMVRRN MINGW64 ~/OneDrive/Desktop/colab1/seweek4public (main)
$ git apply 0001-4-commit.patch
```

SCENARIO BASED QUESTIONS

1. You've cloned a repository and made some changes to a local branch. Now you want to push these changes to the remote repository, but you're getting an error saying "rejected - non-fast-forward." How would you resolve this?

ANS: This happens when the remote branch has new commits that your local branch doesn't. To fix:



```

$ git status
On branch main
Your branch is up to date with 'origin/main'.

Changes not staged for commit:
  (use "git add <file>..." to update what will be committed)
  (use "git restore <file>..." to discard changes in working directory)
        modified:   README.md

Untracked files:
  (use "git add <file>..." to include in what will be committed)
        0003-4-commit.patch
        0002-4-commit.patch
        trail.txt

no changes added to commit (use "git add" and/or "git commit -a")

Abhishek_Bhan@LAPTOP-31SMVRRN MINGW64 ~/OneDrive/Desktop/colab1/seweek4public (main)
$ git add README.md

Abhishek_Bhan@LAPTOP-31SMVRRN MINGW64 ~/OneDrive/Desktop/colab1/seweek4public (main)
$ git push origin main
To https://github.com/Abhishekgyara/seweek4public.git
! [rejected]        main -> main (fetch first)
error: failed to push some refs to 'https://github.com/Abhishekgyara/seweek4public.git'
hint: updates were rejected because the remote contains work that you do not
hint: have locally. This is usually caused by another repository pushing to
hint: the same ref. If you want to integrate the remote changes, use
hint: 'git pull' before pushing again.
hint: See the 'Note about fast-forwards' in 'git push --help' for details.

```

Accept Current Change	Accept Incoming Change	Accept Both Changes	Compare Changes
<<<<<< HEAD (Current Change)			
# seweek4public change 1 change 2 change 3 change 4 modified notepad			
=====			
# seweek4public change 1 change 2 change 3 change 4 modified github			
>>>>>> a3fc179e7d2589c131915ffc8f98dea3e47729cb (Incoming Change)			

```

Abhishek_Bhan@LAPTOP-31SMVRRN MINGW64 ~/OneDrive/Desktop/colab1/seweek4public (main|MERGING)
$ git add README.md

Abhishek_Bhan@LAPTOP-31SMVRRN MINGW64 ~/OneDrive/Desktop/colab1/seweek4public (main|MERGING)
$ git commit -m "resolved conflict"
[main 35d4bc1] resolved conflict

Abhishek_Bhan@LAPTOP-31SMVRRN MINGW64 ~/OneDrive/Desktop/colab1/seweek4public (main)
$ git push origin main
Enumerating objects: 13, done.
Counting objects: 100% (13/13), done.
Delta compression using up to 12 threads
Compressing objects: 100% (8/8), done.
Writing objects: 100% (9/9), 1.09 kib | 186.00 kib/s, done.
Total 9 (delta 3), reused 0 (delta 0), pack-reused 0 (from 0)
remote: Resolving deltas: 100% (3/3), completed with 2 local objects.
To https://github.com/Abhishekgyara/seweek4public.git
   a3fc179..35d4bc1  main -> main

```

2. You've been working on a feature branch, and now you need to push it to the remote repository. However, the remote repository already has a main branch. How do you push your feature branch without affecting the main branch?

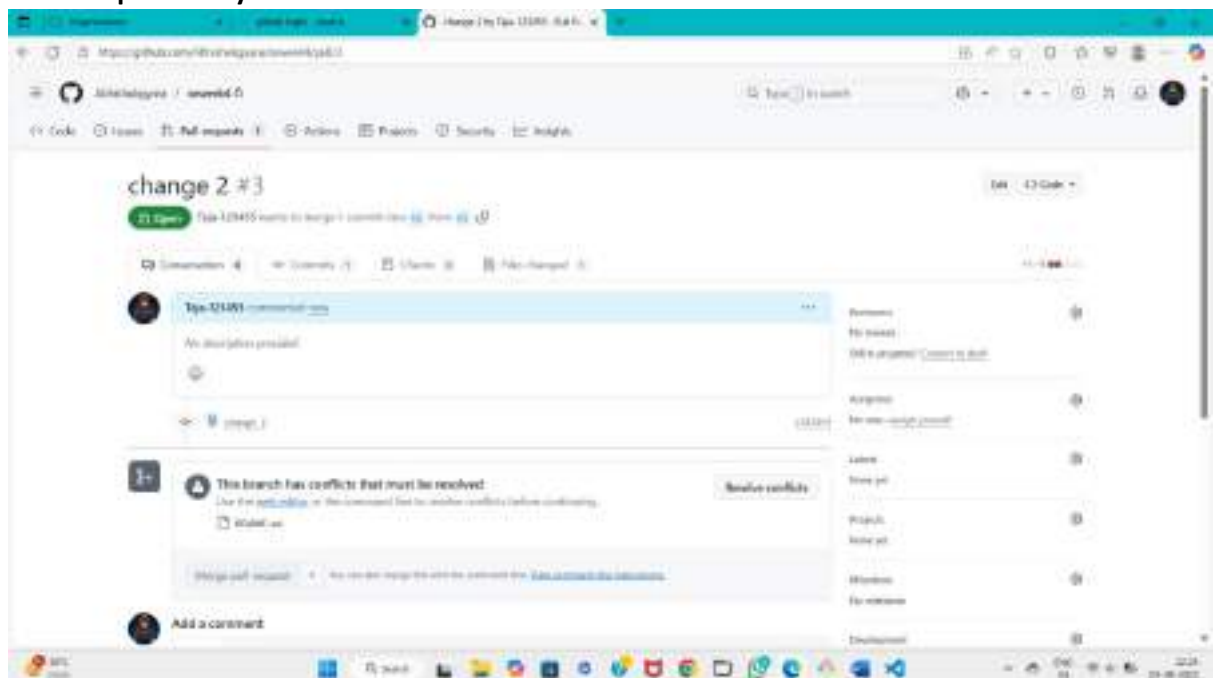
```
Abhishek_Bhan@LAPTOP-31SMVRRN MINGW64 ~/OneDrive/Desktop/colab1/seweek4public (b1|MERGING)
$ git push origin b1
```

3. You cloned a remote repository, but after a while, the repository's structure changed and new branches were added. How would you keep your local repository updated with the latest changes from the remote repository?

```
Abhishek_Bhan@LAPTOP-31SMVRRN MINGW64 ~/OneDrive/Desktop/colab1/seweek4public (b1|MERGING)
$ git fetch -a

Abhishek_Bhan@LAPTOP-31SMVRRN MINGW64 ~/OneDrive/Desktop/colab1/seweek4public (b1|MERGING)
$ git branch -r
origin/HEAD -> origin/main
origin/b1
origin/main
```

4. A colleague has pushed some changes to the main branch, but you have local changes in the same branch. You want to pull their changes, but you want to avoid merge conflicts. What steps would you take?



change 2 #3

Resolving conflicts between `b1` and `b2` and committing changes → `b1`

1 conflicting file	README.ed
README.md	1
README.md	2 # seweek4 change
	3 # seweek4 change1
	4
	5

5. You accidentally pushed a sensitive file (e.g., API keys) to the remote repository. How would you fix this situation?

```
Abhishek_Bhan@LAPTOP-31SMVRRN MINGW64 ~/OneDrive/Desktop/colab1/seweek4public (b1|MERGING)
$ git rm README.md
rm 'README.md'
```

6. You're working on a feature branch, and your manager requests that you integrate the latest changes from main into your feature branch. What steps would you take?

```
Abhishek_Bhan@LAPTOP-31SMVRRN MINGW64 ~/OneDrive/Desktop/colab1/seweek4public (b1|MERGING)
$ git checkout -b feature
Switched to a new branch 'feature'

Abhishek_Bhan@LAPTOP-31SMVRRN MINGW64 ~/OneDrive/Desktop/colab1/seweek4public (feature)
$ git pull origin main
From https://github.com/Abhishekgyara/seweek4public
  = branch      main      -> FETCH_HEAD
Already up to date.

Abhishek_Bhan@LAPTOP-31SMVRRN MINGW64 ~/OneDrive/Desktop/colab1/seweek4public (feature)
$ git merge origin
Already up to date.
```

7. You cloned a remote repository, but later you find that you need to push your changes to a different remote repository. How do you configure your local repository to push to this new remote?

```
Abhishek_Bhan@LAPTOP-31SMVRRN MINGW64 ~/OneDrive/Desktop/colab1/seweek4public (feature)
$ git remote add new-remote-name https://github.com/Abhishekgyara/newr.git

Abhishek_Bhan@LAPTOP-31SMVRRN MINGW64 ~/OneDrive/Desktop/colab1/seweek4public (feature)
$ git remote -v
new-remote-name https://github.com/Abhishekgyara/newr.git (fetch)
new-remote-name https://github.com/Abhishekgyara/newr.git (push)
origin https://github.com/Abhishekgyara/seweek4public.git (fetch)
origin https://github.com/Abhishekgyara/seweek4public.git (push)

Abhishek_Bhan@LAPTOP-31SMVRRN MINGW64 ~/OneDrive/Desktop/colab1/seweek4public (feature)
$ git push -u https://github.com/Abhishekgyara/newr.git
Enumerating objects: 29, done.
Counting objects: 100% (29/29), done.
Delta compression using up to 12 threads.
Compressing objects: 100% (24/24), done.
Writing objects: 100% (29/29), 15.75 KiB | 849.00 KiB/s, done.
Total 29 (delta 7), reused 7 (delta 0), pack-reused 0 (from 0)
```

8. After running git pull, you notice that your local branch is behind the remote branch. How would you proceed to bring your local branch up to date without losing your local changes?

```
Abhishek_Bhan@LAPTOP-31SMVRRN MINGW64 ~/OneDrive/Desktop/colab1/seweek4public (feature)
$ git stash
Saved working directory and index state WIP on feature: 35d4bc1 resolved conflict

Abhishek_Bhan@LAPTOP-31SMVRRN MINGW64 ~/OneDrive/Desktop/colab1/seweek4public (feature)
$ git pull --rebase
error: invalid value for "--rebase": 'rebase'

Abhishek_Bhan@LAPTOP-31SMVRRN MINGW64 ~/OneDrive/Desktop/colab1/seweek4public (feature)
$ git pull --rebase
fatal: unable to access 'https://github.com/Abhishekgyara/newr.git/': Could not resolve host: github.co

Abhishek_Bhan@LAPTOP-31SMVRRN MINGW64 ~/OneDrive/Desktop/colab1/seweek4public (feature)
$ git pull --rebase
From https://github.com/Abhishekgyara/newr
  * branch      feature    -> FETCH_HEAD
Already up to date.
```

9. You're working on a project with multiple collaborators, and you notice that your local changes conflict with changes that have been pushed by others. How would you resolve the conflicts?

change 2 #3

Resolving conflicts between `b1` and `b2` and committing changes → `b1`

The screenshot shows a code editor with a conflict in the file `README.md`. The left sidebar indicates "1 conflicting file" and shows the file name. The main editor area displays the conflicting content with line numbers 1 through 6. Lines 1-3 are from branch `b1` (indicated by <<<<<< b1), lines 4-5 are from branch `b2` (indicated by >>>>>> b2), and line 6 is the merged result. The conflict is highlighted with a yellow background.

change 2 #3

Resolving conflicts between `b1` and `b2` and committing changes → `b1`

The screenshot shows the same code editor after the conflict has been resolved. The left sidebar now shows "1 conflicting file" with a green checkmark icon next to the file name. The main editor area displays the resolved content of `README.md` with line numbers 1 through 5. The conflict has been resolved, and the content is now consistent across both branches.

10. You've pushed a feature branch to a remote repository, but now you need to delete the branch from the remote. How would you do that?

```
Abhishek_Bhan@LAPTOP-3ISMVRRM MINGW64 ~/OneDrive/Desktop/colab1/seweek4public (feature)
$ git branch -d b2
Deleted branch b2 (was 35d4bc1).
```

Scenario:

You are working on a collaborative project hosted on GitHub with a team of four developers. The main branch is `main`, and each developer works on their own feature branches.

You are assigned to implement a new UI component in a branch called `feature/ui-update`. Meanwhile, another team member has made a critical bug fix and pushed it directly to the `main` branch. When you try to push your changes, your push fails due to upstream changes.

Additionally, a teammate has submitted a patch file with a small CSS fix and shared it via email. You need to apply the patch, test it, and merge everything into `main` without breaking any functionality.

11. What command will you use to bring your local main branch up to date with the remote repository before merging it into your feature branch?

```
Abhishek_Bhan@LAPTOP-31SMVRRN MINGW64 ~/OneDrive/Desktop/colab1/seweek4public (feature)
$ git checkout main
Switched to branch 'main'
Your branch is up to date with 'origin/main'.
```

12. How will you update your feature/ui-update branch to reflect the latest changes from main?

```
Abhishek_Bhan@LAPTOP-31SMVRRN MINGW64 ~/OneDrive/Desktop/colab1/seweek4public (main)
$ git checkout feature-ui-update
Switched to branch 'feature-ui-update'

Abhishek_Bhan@LAPTOP-31SMVRRN MINGW64 ~/OneDrive/Desktop/colab1/seweek4public (feature-ui-update)
$ git merge main
Already up to date.
```

13. Which command should you use to attempt pushing your local feature branch again, and what should you do if it fails due to conflicts?

```
Abhishek_Bhan@LAPTOP-31SMVRRN MINGW64 ~/OneDrive/Desktop/colab1/seweek4public (Feature-ui-update)
$ git pull origin main
From https://github.com/Abhishekgyara/seweek4public
 * branch      main      -> FETCH_HEAD
Already up to date.

Abhishek_Bhan@LAPTOP-31SMVRRN MINGW64 ~/OneDrive/Desktop/colab1/seweek4public (feature-ui-update)
$ git push origin feature-ui-update
Everything up-to-date
```

14. How do you apply a .patch file provided by your teammate and include it in your commit history?

```
Abhishek_Bhan@LAPTOP-31SMVRRN MINGW64 ~/OneDrive/Desktop/colab1/seweek4public (main)
$ git apply 0001-2-commit.patch
```

15. After successful testing, describe the steps (with commands) to merge your feature branch into main and push it to GitHub.

```
Abhishek_Bhan@LAPTOP-31SMVRRN MINGW64 ~/OneDrive/Desktop/colab1/seweek4public (main)
$ git pull origin main
From https://github.com/Abhishekgyara/seweek4public
 * branch      main      -> FETCH_HEAD
Already up to date.

Abhishek_Bhan@LAPTOP-31SMVRRN MINGW64 ~/OneDrive/Desktop/colab1/seweek4public (main)
$ git merge feature-ui-update
Already up to date.

Abhishek_Bhan@LAPTOP-31SMVRRN MINGW64 ~/OneDrive/Desktop/colab1/seweek4public (main)
$ git push origin main
Everything up-to-date
```