1. Initialise a Git Repository and Make Initial Commit

Q1a) Create a new directory named projectrepo.

```
PS C:\Sonali\Study\NUS Full Stack Development with AI\Material\Module 2\Module 2\Mod
```

Q1b) Initialise a Git repository in this directory using the appropriate command.

```
PROBLEMS OUTPUT DEBUG CONSOLE TERMINAL PORTS

PS C:\Sonali\Study\NUS Full Stack Development with AI\Material\Module 2\Module 2\Meek 2 Required Assignment_ Patil\projectrepo> git init

Initialized empty Git repository in C:\Sonali\Study\NUS Full Stack Development with AI\Material\Module 2\Module 2\Meek 2_Required Assignment_ Patil\projectrepo/.git\
PS C:\Sonali\Study\NUS Full Stack Development with AI\Material\Module 2\Module 2_Meek 2_Required Assignment_ Patil\projectrepo>
```

Q1c) Create a README.md file, add some introductory content, and save it.



```
PS C:\Sonali\Study\NUS Full Stack Development with AI\Material\Module 2\Module 2\Meek 2_Required Assignment_ Patil\projectrepo> git status
On branch main

No commits yet

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)
PS C:\Sonali\Study\NUS Full Stack Development with AI\Material\Module 2\Module 2_Week 2_Required Assignment_ Patil\projectrepo>
```

Q1d) Stage and commit the README.md file with an appropriate commit message.

2. Create a New Branch and Implement a Feature

Q2a) Create a new branch named featurex and switch to it.

```
PS C:\Sonali\Study\NUS Full Stack Development with AI\Material\Module 2\Module 2\Meek 2_Required Assignment_ Patil\projectrepo> git branch featurex
PS C:\Sonali\Study\NUS Full Stack Development with AI\Material\Module 2\Module 2_Week 2_Required Assignment_ Patil\projectrepo> git branch featurex

PROBLEMS OUTPUT DEBUG CONSOLE TERMINAL PORTS

PS C:\Sonali\Study\NUS Full Stack Development with AI\Material\Module 2\Module 2_Week 2_Required Assignment_ Patil\projectrepo> git checkout featurex Switched to branch 'featurex'
PS C:\Sonali\Study\NUS Full Stack Development with AI\Material\Module 2\Module 2_Week 2_Required Assignment_ Patil\projectrepo> git branch
* featurex

main
PS C:\Sonali\Study\NUS Full Stack Development with AI\Material\Module 2\Module 2_Week 2_Required Assignment_ Patil\projectrepo> 

PS C:\Sonali\Study\NUS Full Stack Development with AI\Material\Module 2\Module 2_Week 2_Required Assignment_ Patil\projectrepo> 

| PS C:\Sonali\Study\NUS Full Stack Development with AI\Material\Module 2\Module 2_Week 2_Required Assignment_ Patil\projectrepo> | |
```

Q2b) In featurex, add a new file named feature.py and write a simple function (e.g., a function that adds two numbers).

Q2c) Stage and commit feature.py with an appropriate commit message.

```
PROBLEMS OUTPUT DEBUG CONSOLE TERMINAL PORTS

PS C:\Sonali\Study\NMS Full Stack Development with AIVMaterial\Wodule 2\Wodule 2\Wo
```

Q2d) Switch back to the main branch and confirm that feature.py is not in the main branch.



3. Make Changes on the Main Branch to Create a Merge Conflict

Q3a) Initialise a Git repository and create a file & Create a New Branch

```
DOWNERS ... O index.html X

O
```

```
O indexhmi | O ind
```

Q3b) Make Changes on the Main Branch and Feature Branch

```
DEPORTER OF Indexhtml X

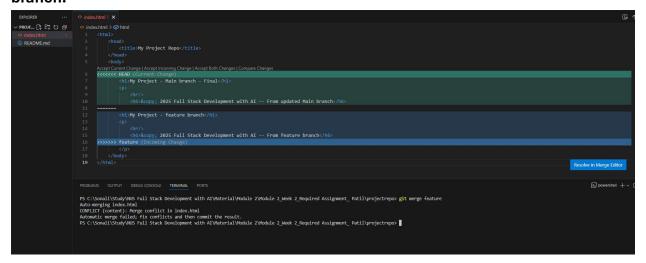
PROPERTOR OF Indexhtml X

PREADMEND

READMEND

READ
```

Q3c) Merge the feature branch into the main branch.



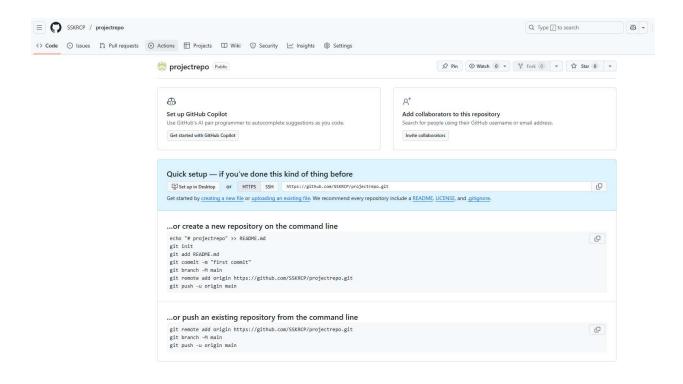
Q3d) Resolve the merge conflict.

```
| Deficition | Property | Deficition |
```

4. Work with a Remote Repository

Q4a) Create a remote repository (e.g., on GitHub) named projectrepo.

Requirea fielas are n	narked with an asterisk (*).
Owner *	Repository name *
∰ SSKRCP ▼	/ projectrepo
	projectrepo is available.
Great repository na	mes are short and memorable. Need inspiration? How about ubiquitous-invention?
Description (optiona	1)
Module 2 Task	
	who can see and commit to this repository. itory with:
Initialize this reposi Add a README This is where you o	itory with:
Initialize this reposi Add a README This is where you o	itory with: file can write a long description for your project. <u>Learn more about READMEs</u> ,
Initialize this reposi Add a README This is where you of Add .gitignore .gitignore template:	itory with: file can write a long description for your project. <u>Learn more about READMEs</u> ,
Initialize this reposi Add a README This is where you of Add .gitignore .gitignore template: Choose which files not	itory with: file can write a long description for your project. Learn more about READMEs. None
Initialize this reposi Add a README This is where you of Add .gitignore .gitignore template:	itory with: file can write a long description for your project. Learn more about READMEs. None



Q4b) Connect your local projectrepo to this remote repository using git remote add.

```
PROBLEMS OUTPUT DEBUG CONSOLE TERMINAL PORTS

P5 C:\Sonali\Study\NU5 Full Stack Development with AIVMaterial\Module 2\Module 2_Meek 2_Required Assignment_ Patil\projectrepo> git status
On branch main
nothing to commit, working tree clean
P5 C:\Sonali\Study\NU5 Full Stack Development with AIVMaterial\Module 2\Module 2_Meek 2_Required Assignment_ Patil\projectrepo> git remote
P5 C:\Sonali\Study\NU5 Full Stack Development with AIVMaterial\Module 2\Module 2_Meek 2_Required Assignment_ Patil\projectrepo> git remote
P5 C:\Sonali\Study\NU5 Full Stack Development with AIVMaterial\Module 2\Module 2_Meek 2_Required Assignment_ Patil\projectrepo> git remote
p5 C:\Sonali\Study\NU5 Full Stack Development with AIVMaterial\Module 2\Module 2_Meek 2_Required Assignment_ Patil\projectrepo> git remote
origin https://github.com/SSKRCP/projectrepo.git (fetch)
origin https://github.com/SSKRCP/projectrepo.git (fetch)
P5 C:\Sonali\Study\NU5 Full Stack Development with AIVMaterial\Module 2\Module 2_Meek 2_Required Assignment_ Patil\projectrepo> git
P5 C:\Sonali\Study\NU5 Full Stack Development with AIVMaterial\Module 2\Module 2_Meek 2_Required Assignment_ Patil\projectrepo> git
P5 C:\Sonali\Study\NU5 Full Stack Development with AIVMaterial\Module 2\Module 2_Meek 2_Required Assignment_ Patil\projectrepo>
```

Q4c) Push the main branch to the remote repository.

```
PROBLEMS OUTPUT DEBUG CONSOLE TERMINAL PORTS

PS C:\Sonali\Study\MUS Full Stack Development with AI\Material\Module 2\Module 2\Meek 2_Required Assignment_ Patil\projectrepo> git push origin main Enumerating objects: 16% (15/15), done.

Counting objects: 186% (15/15), done.

Delta compression using up to 8 threads

Compressing objects: 186% (14/14), done.

Writing objects: 186% (14/14), done.

Writing objects: 186% (15/15), 1.56 KiB | 388.00 KiB/s, done.

Total 15 (delta 3), reused 0 (delta 0), pack-reused 0 (from 0)

remote: Resolving deltas: 186% (3/3), done.

To https://github.com/SSKRCP/projectrepo.git

* [new branch] main -> main

PS C:\Sonali\Study\MUS Full Stack Development with AI\Material\Module 2\Module 2\Meek 2_Required Assignment_ Patil\projectrepo> git remote show origin

* remote origin

* remote origin

* remote origin

* remote with: https://github.com/SSKRCP/projectrepo.git

* Push URL: https://github.com/SSKRCP/projectrepo.git

* Remote branch:

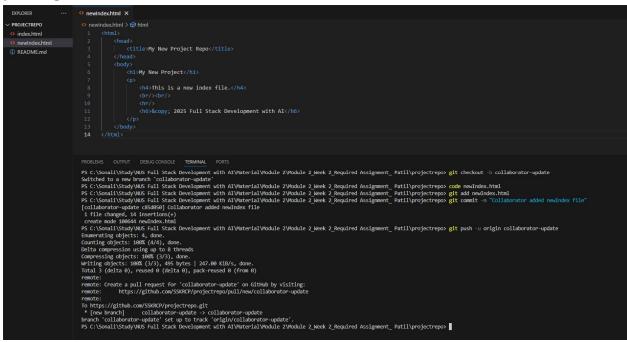
* main tracked

* Local ref configured for 'git push':

* main pushes to main (up to date)

PS C:\Sonali\Study\MUS Full Stack Development with AI\Material\Module 2\Module 2_Meek 2_Required Assignment_ Patil\projectrepo> []
```

Q4d) Create a new branch named collaborator update in the remote repository by pushing a new commit to it.



Q4e) Return to your local repository, pull the latest changes, and merge collaborator update into main. - Remote changes are pulled successfully into the local repository, and branches are merged successfully with no conflicts.

```
O newIndexhtml X

O newIndexhtml X

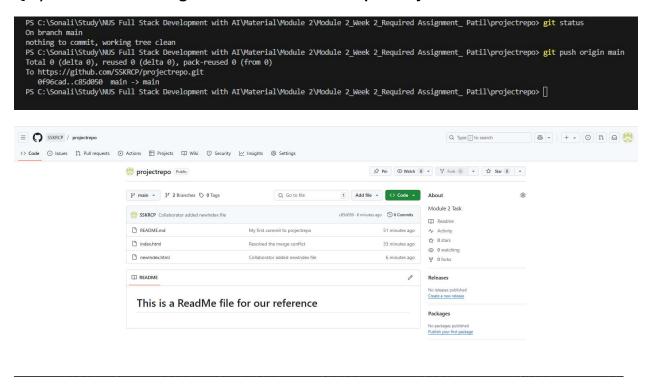
O newIndexhtml > O html

I khtal>
O newIndexhtml

O README.nd

O README.n
```

Q4f) Push the final merged state to the remote repository.



For the future reference, All the code is pushed to remote repository (https://github.com/SSKRCP/projectrepo)

```
PS C:\Sonali\Study\NUS Full Stack Development with AI\Material\Module 2\Module 2\mathrm{Module 2\mathrm{Module
```

