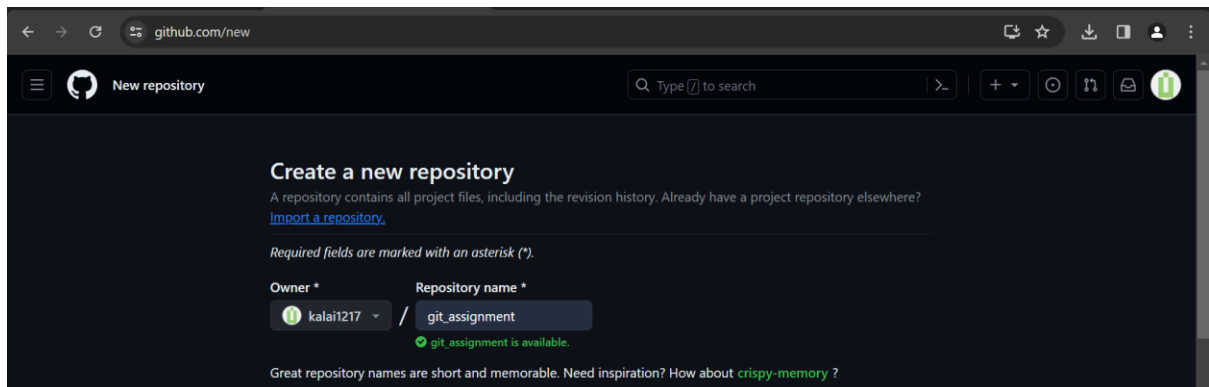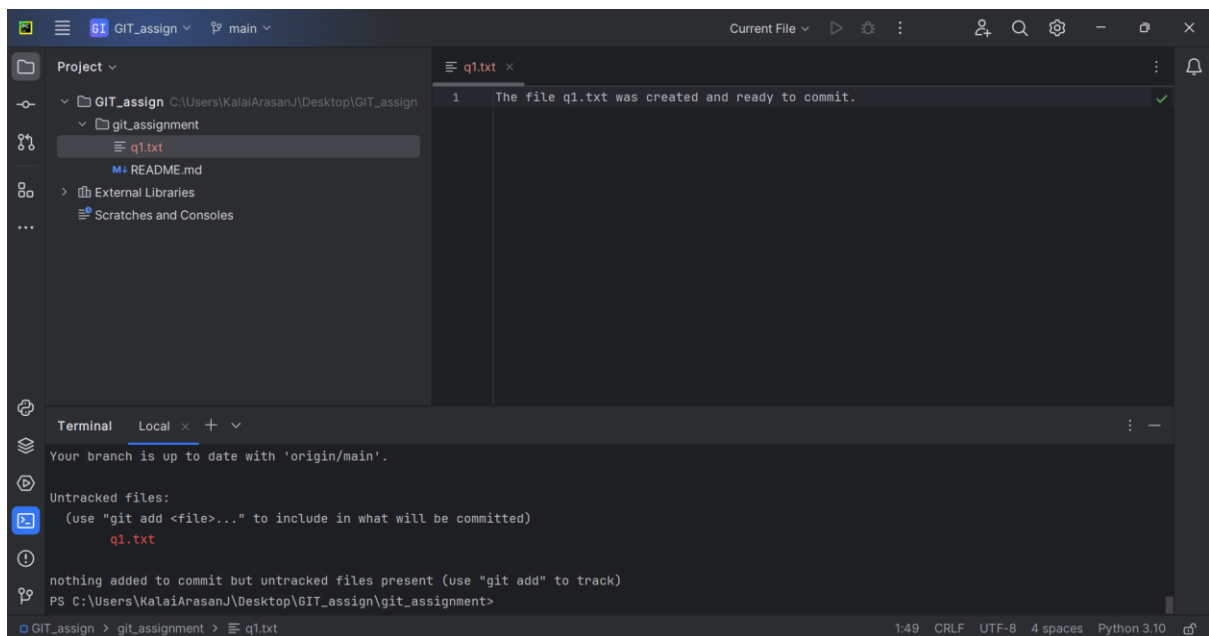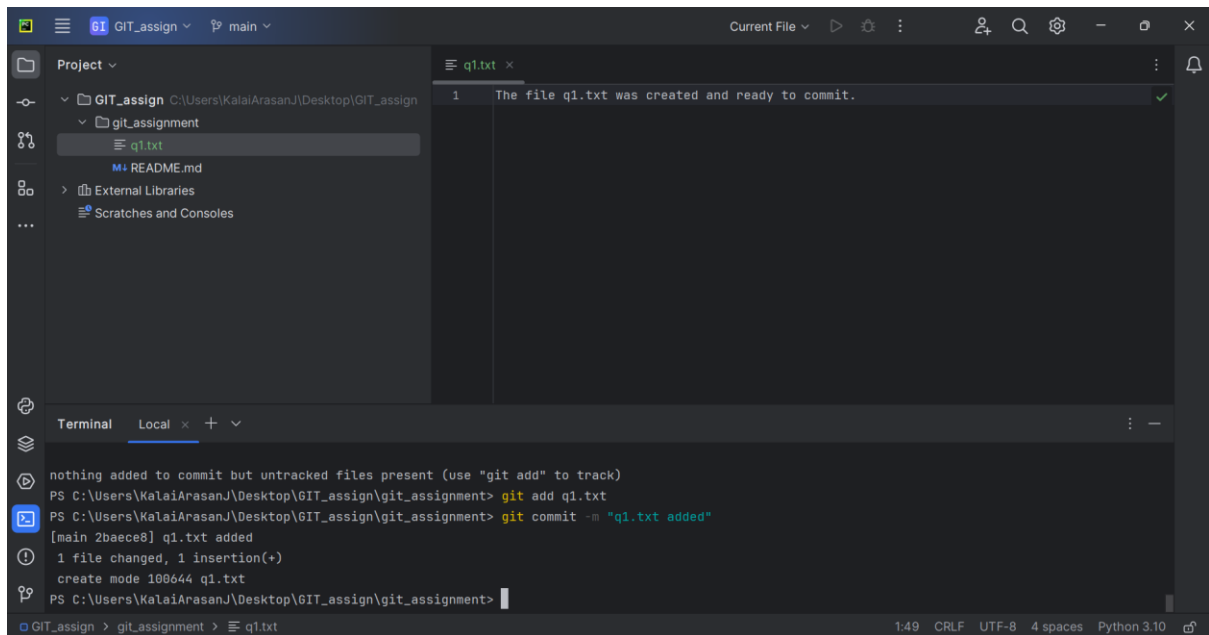# Question 1

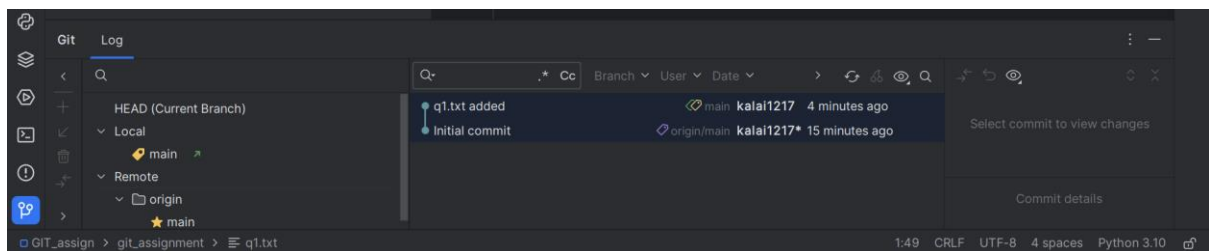Step 1: Create a new Git repository.

Step 2: Create a file and commit changes.

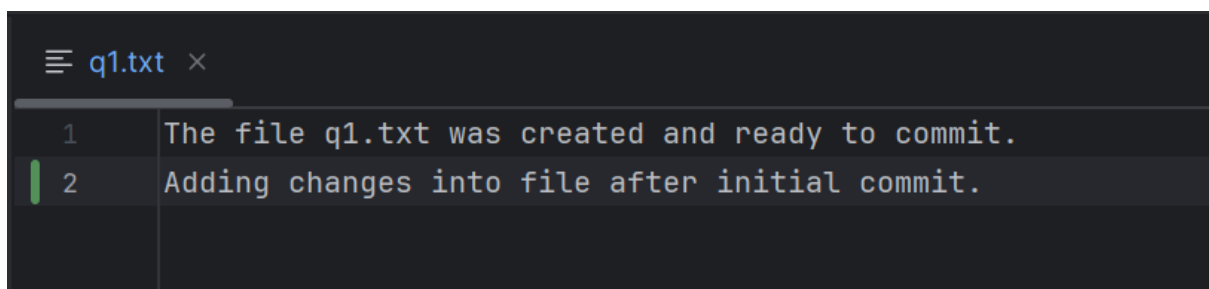Step 3: View the commit history of your repository.

Using GUI:

Using command-line:

Step 4: Open the file you created earlier and make some changes to it.

Step 5: Check the file you modified is now marked as "modified" and unstaged.

```
PS C:\Users\KalaiArasanJ\Desktop\GIT_assign\git_assignment> 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:   q1.txt

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

Step 6: Stage the changes you made to the file and commit the changes to the repository.

```
Terminal    Local  x  +  v
PS C:\Users\KalaiArasanJ\Desktop\GIT_assign\git_assignment> git add q1.txt
PS C:\Users\KalaiArasanJ\Desktop\GIT_assign\git_assignment> git status
On branch main
Your branch is up to date with 'origin/main'.

Changes to be committed:
  (use "git restore --staged <file>..." to unstage)
        modified:   q1.txt

PS C:\Users\KalaiArasanJ\Desktop\GIT_assign\git_assignment> git commit -m "q1.txt Modified"
[main d6ef443] q1.txt Modified
 1 file changed, 2 insertions(+), 1 deletion(-)
PS C:\Users\KalaiArasanJ\Desktop\GIT_assign\git_assignment> git push origin main
Enumerating objects: 5, done.
Counting objects: 100% (5/5), done.
Delta compression using up to 8 threads
Compressing objects: 100% (3/3), done.
Writing objects: 100% (3/3), 360 bytes | 360.00 KiB/s, done.
Total 3 (delta 0), reused 0 (delta 0), pack-reused 0 (from 0)
To https://github.com/kalai1217/git_assignment.git
   2baece8..d6ef443  main -> main
PS C:\Users\KalaiArasanJ\Desktop\GIT_assign\git_assignment>
GIT_assign > git_assignment > ≡ q1.txt
```
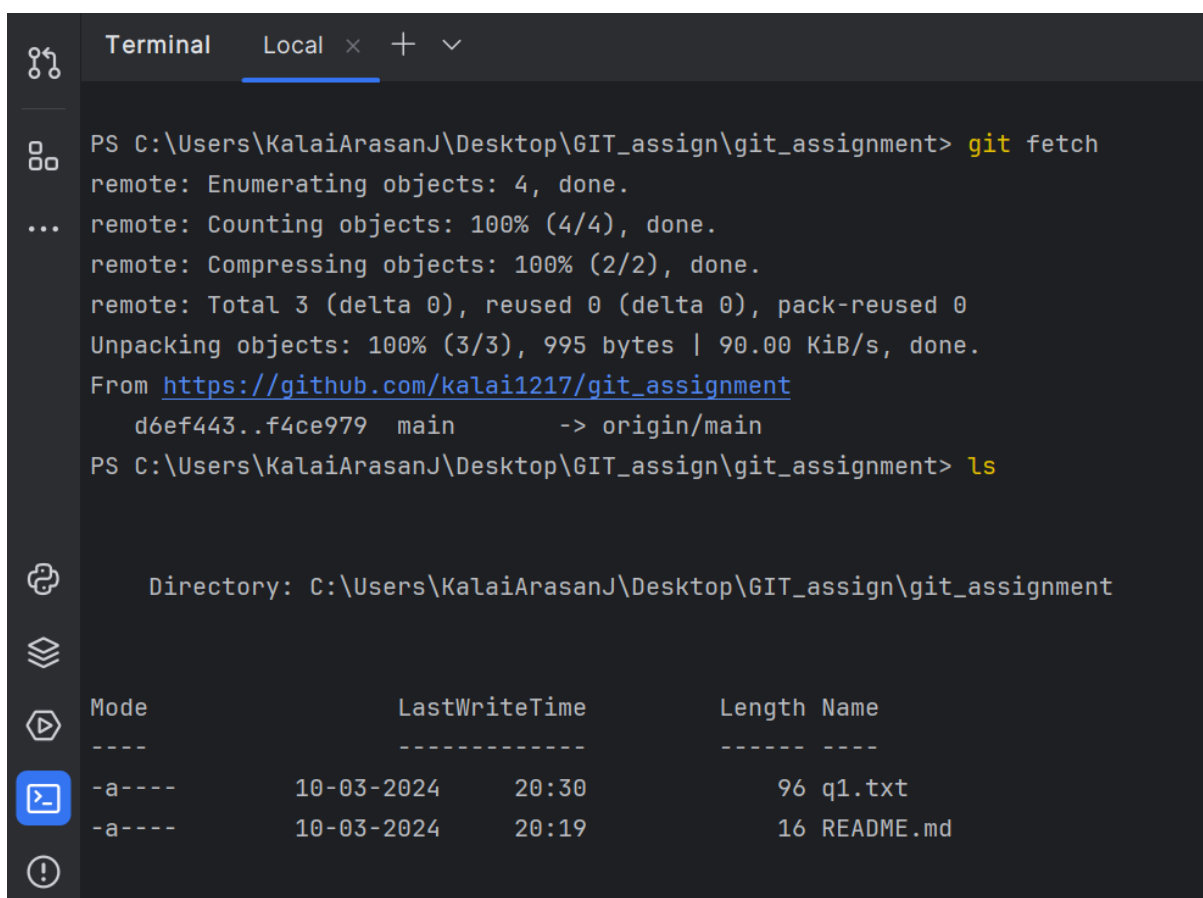
Step 7: Clone the repository you have created in GitHub.

```
PS C:\Users\KalaiArasanJ\Desktop\GIT_assign\git_assignment> git clone https://github.com/kalai1217/git_assignment.git
Cloning into 'git_assignment'...
remote: Enumerating objects: 9, done.
remote: Counting objects: 100% (9/9), done.
remote: Compressing objects: 100% (6/6), done.
remote: Total 9 (delta 0), reused 6 (delta 0), pack-reused 0
Receiving objects: 100% (9/9), done.
PS C:\Users\KalaiArasanJ\Desktop\GIT_assign\git_assignment>
```

Step 8: Fetch the changes, navigate into the cloned repository using the command line, and use the command git fetch to fetch any changes that have been made to the original repository since you cloned it.

```
Terminal    Local  ×  + ∨

PS C:\Users\KalaiArasanJ\Desktop\GIT_assign\git_assignment> git fetch
remote: Enumerating objects: 4, done.
remote: Counting objects: 100% (4/4), done.
remote: Compressing objects: 100% (2/2), done.
remote: Total 3 (delta 0), reused 0 (delta 0), pack-reused 0
Unpacking objects: 100% (3/3), 995 bytes | 90.00 KiB/s, done.
From https://github.com/kalai1217/git_assignment
   d6ef443..f4ce979  main        -> origin/main
PS C:\Users\KalaiArasanJ\Desktop\GIT_assign\git_assignment> ls


    Directory: C:\Users\KalaiArasanJ\Desktop\GIT_assign\git_assignment


Mode                 LastWriteTime         Length Name
----                 -------------         ------ ----
-a----         10-03-2024     20:30             96 q1.txt
-a----         10-03-2024     20:19             16 README.md
```

```
Terminal     Local  ×  +  ∨
PS C:\Users\KalaiArasanJ\Desktop\GIT_assign\git_assignment> git merge
Updating d6ef443..f4ce979
Fast-forward
 q2.txt | 1 +
 1 file changed, 1 insertion(+)
 create mode 100644 q2.txt
PS C:\Users\KalaiArasanJ\Desktop\GIT_assign\git_assignment> git status
On branch main
Your branch is up to date with 'origin/main'.

nothing to commit, working tree clean
PS C:\Users\KalaiArasanJ\Desktop\GIT_assign\git_assignment> ls


    Directory: C:\Users\KalaiArasanJ\Desktop\GIT_assign\git_assignment


Mode                 LastWriteTime         Length Name
----                 -------------         ------ ----
-a----        10-03-2024     20:30             96 q1.txt
-a----        10-03-2024     20:38             50 q2.txt
-a----        10-03-2024     20:19             16 README.md
```

Step 9: Pull changes, merge the changes you just fetched into your local copy of the repository, and use the command git pull.

```
PS C:\Users\KalaiArasanJ\Desktop\GIT_assign\git_assignment> git pull
remote: Enumerating objects: 4, done.
remote: Counting objects: 100% (4/4), done.
remote: Compressing objects: 100% (3/3), done.
remote: Total 3 (delta 1), reused 0 (delta 0), pack-reused 0
Unpacking objects: 100% (3/3), 966 bytes | 48.00 KiB/s, done.
From https://github.com/kalai1217/git_assignment
   f4ce979..e38fd45  main         -> origin/main
Updating f4ce979..e38fd45
Fast-forward
 q3.txt | 1 +
 1 file changed, 1 insertion(+)
 create mode 100644 q3.txt
PS C:\Users\KalaiArasanJ\Desktop\GIT_assign\git_assignment>
```