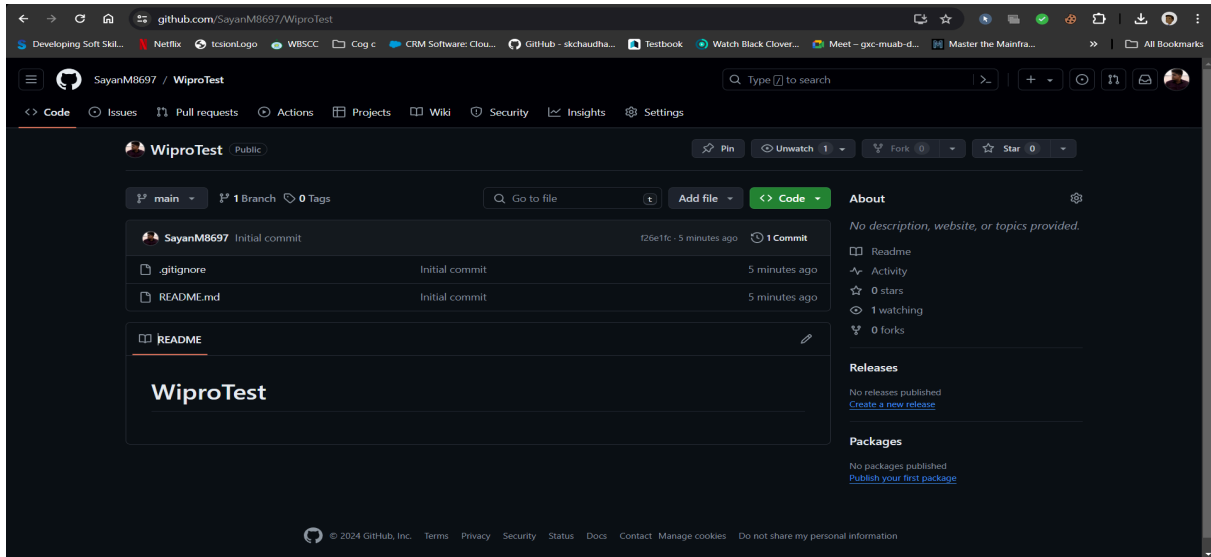# ASS_5

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.

Ans)

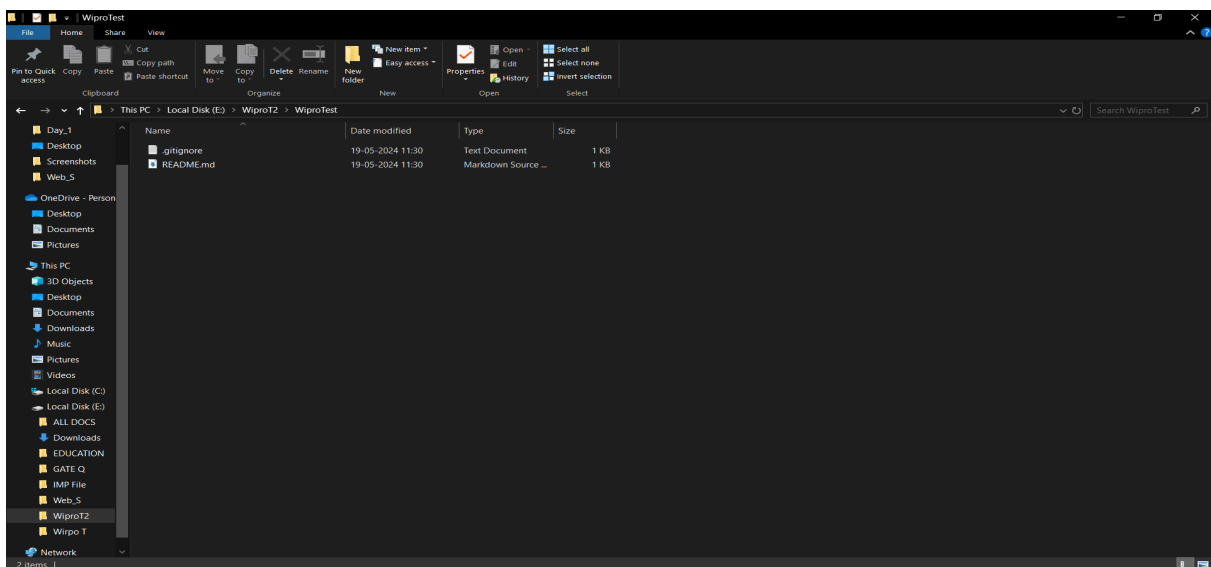**1. Make a 'Git repository' in git web:-**

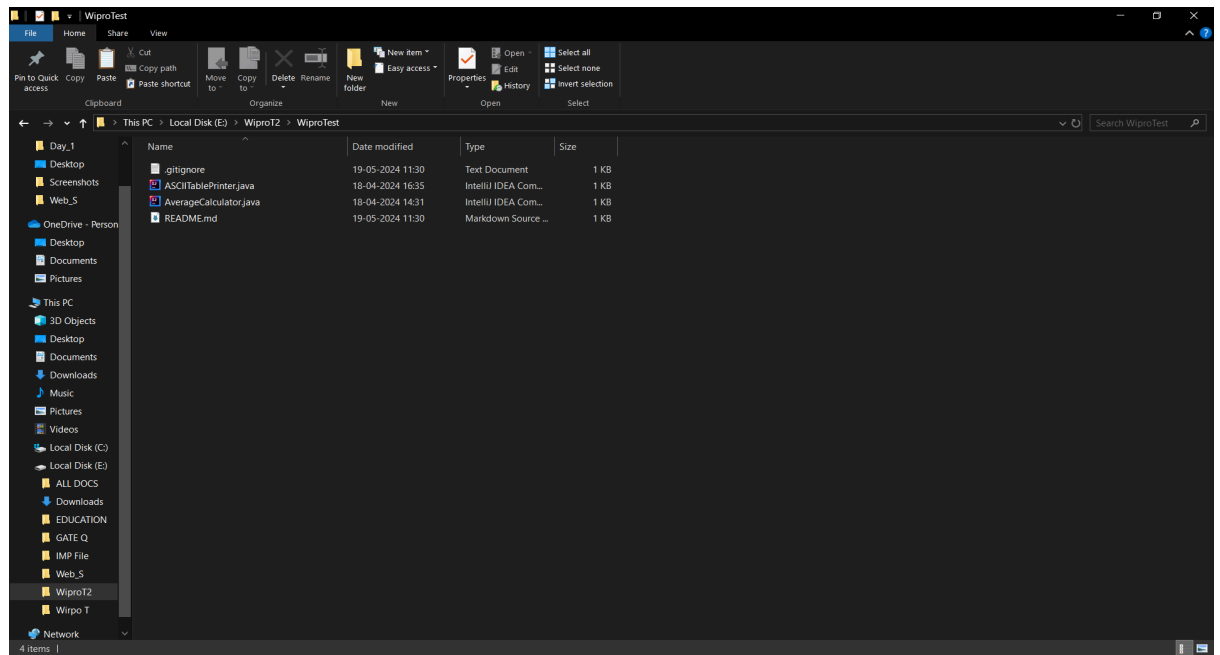## 2. Going to the target file by Git bash in the local machine:

i) And type git "init"

ii) After that type "git clone (repo link)

3) Check whether the file is added or not :

4) Add some files in that folder:

5) Now go to git bash and type "git status":

i. Type 'git status'

ii. Type 'git add .' (to add files to repo)

iii. Type 'git status' again to check file added or not.

Iv. if the tree is clean Type 'git commit -m "First commit:'

V. And then type 'git Push' To push the update in the web git repo.

6) Check git web file is added or not:

Done.

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.
ANS)
1) Open Git bash create a branch:
Git branch feature

2) Check the file list:
Type "ls -l"

3) Commit that:
Type "git add."
Type "Git commit -m"First commit""

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.
ANS)

- Create a branch called hotfix:
- Then go to that branch: "git checkout hotfix"
- See the files list: git ls-files

```
MINGW64:/e/WiproT2/WiproTest

hp@Sayan MINGW64 /e/WiproT2/WiproTest (main)
$ git checkout hotfix
Switched to branch 'hotfix'

hp@Sayan MINGW64 /e/WiproT2/WiproTest (hotfix)
$ git ls-files
.gitignore
ASCIITablePrinter.java
AverageCalculator.java
README.md
```

- Make some changes to that branch: code file name
- Add the changes: git add .
- The commit that: git committ -m"some changes"

```
hp@Sayan MINGW64 /e/WiproT2/WiproTest (hotfix)
$ code AverageCalculator.java

hp@Sayan MINGW64 /e/WiproT2/WiproTest (hotfix)
$ git add .

hp@Sayan MINGW64 /e/WiproT2/WiproTest (hotfix)
$ git commit -m"Adding Some text"
[hotfix c4e1b50] Adding Some text
 1 file changed, 1 insertion(+), 1 deletion(-)

hp@Sayan MINGW64 /e/WiproT2/WiproTest (hotfix)
$ |
```

- See the change on the file.

```
File  Edit  Selection  View  Go  Run  Terminal  Help                                    Search
Restricted Mode is intended for safe code browsing. Trust this window to enable all features.  Manage  Learn More

J AverageCalculator.java X

E: > WiproT2 > WiproTest > J AverageCalculator.java
  1  import java.util.Scanner;
  2
  3  public class AverageCalculator {
  4
  5      public static void main(String[] args) {
  6          Scanner scanner = new Scanner(System.in);
  7          double[] marks = new double[5];
  8          String[] subjects = new String[5];
  9          System.out.println("Enter the names and marks for 5 subjects:");
 10          for (int i = 0; i < 5; i++) {
 11              System.out.print("Subject " + (i + 1) + " name: ");
 12              subjects[i] = scanner.nextLine();
 13              System.out.print("Enter marks for " + subjects[i] + ": ");
 14              marks[i] = scanner.nextDouble();
 15              scanner.nextLine();
 16          }
 17          double total = 0;
 18          for (double mark : marks) {
 19              total += mark;
 20          }
 21          double average = total / marks.length;
 22          System.out.printf("The average of the marks is: %.2f%n", average);
 23          scanner.close();
 24      }
 25  }//ADD ING SOMEFILES//|
 26
```

- Check into main: git check out main

```
hp@Sayan MINGW64 /e/WiproT2/WiproTest (hotfix)
$ git checkout main
Switched to branch 'main'
Your branch is up to date with 'origin/main'.

hp@Sayan MINGW64 /e/WiproT2/WiproTest (main)
$ git diff hotfix
diff --git a/AverageCalculator.java b/AverageCalculator.java
index bedd16d..1451a8d 100644
--- a/AverageCalculator.java
+++ b/AverageCalculator.java
@@ -22,4 +22,4 @@ public class AverageCalculator {
         System.out.printf("The average of the marks is: %.2f%n", average);
         scanner.close();
     }
-}//ADD ING SOMEFILES//
```

- **Merge the main with hotfix:**

```
MINGW64:/e/WiproT2/WiproTest

hp@Sayan MINGW64 /e/WiproT2/WiproTest (main)
$ git merge hotfix
Updating 7886c2b..c4e1b50
Fast-forward
 AverageCalculator.java | 2 +-
 1 file changed, 1 insertion(+), 1 deletion(-)

hp@Sayan MINGW64 /e/WiproT2/WiproTest (main)
$ code AverageCalculator.java
```

- **See the change:**

```java
import java.util.Scanner;

public class AverageCalculator {

    public static void main(String[] args) {
        Scanner scanner = new Scanner(System.in);
        double[] marks = new double[5];
        String[] subjects = new String[5];
        System.out.println("Enter the names and marks for 5 subjects:");
        for (int i = 0; i < 5; i++) {
            System.out.print("Subject " + (i + 1) + " name: ");
            subjects[i] = scanner.nextLine();
            System.out.print("Enter marks for " + subjects[i] + ": ");
            marks[i] = scanner.nextDouble();
            scanner.nextLine();
        }
        double total = 0;
        for (double mark : marks) {
            total += mark;
        }
        double average = total / marks.length;
        System.out.printf("The average of the marks is: %.2f%n", average);
        scanner.close();
    }
}//ADD ING SOMEFILES//
```