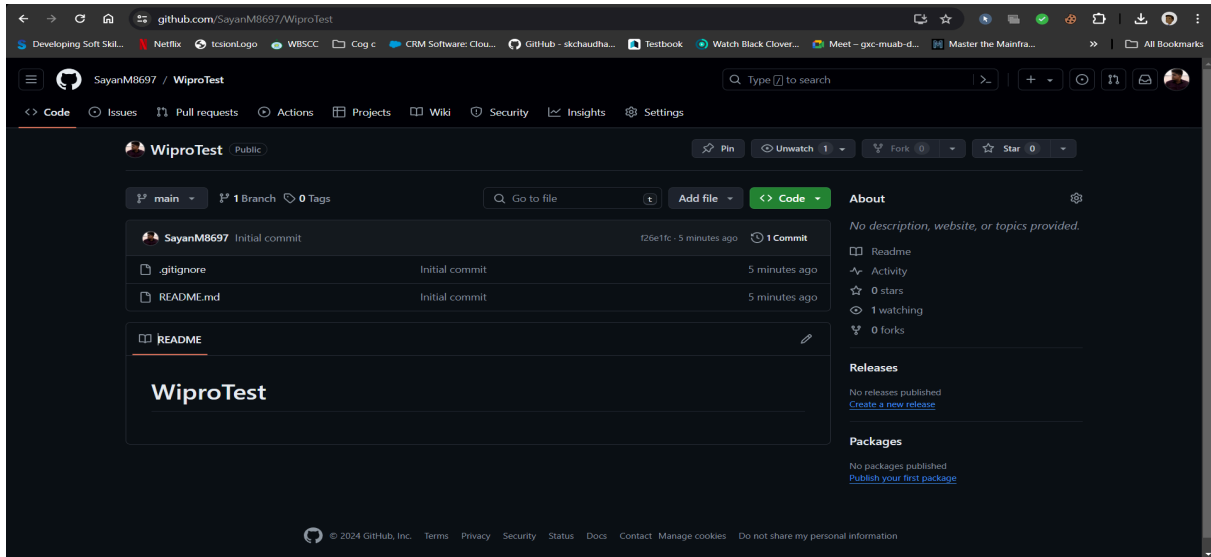


## ASS\_5

**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:-**



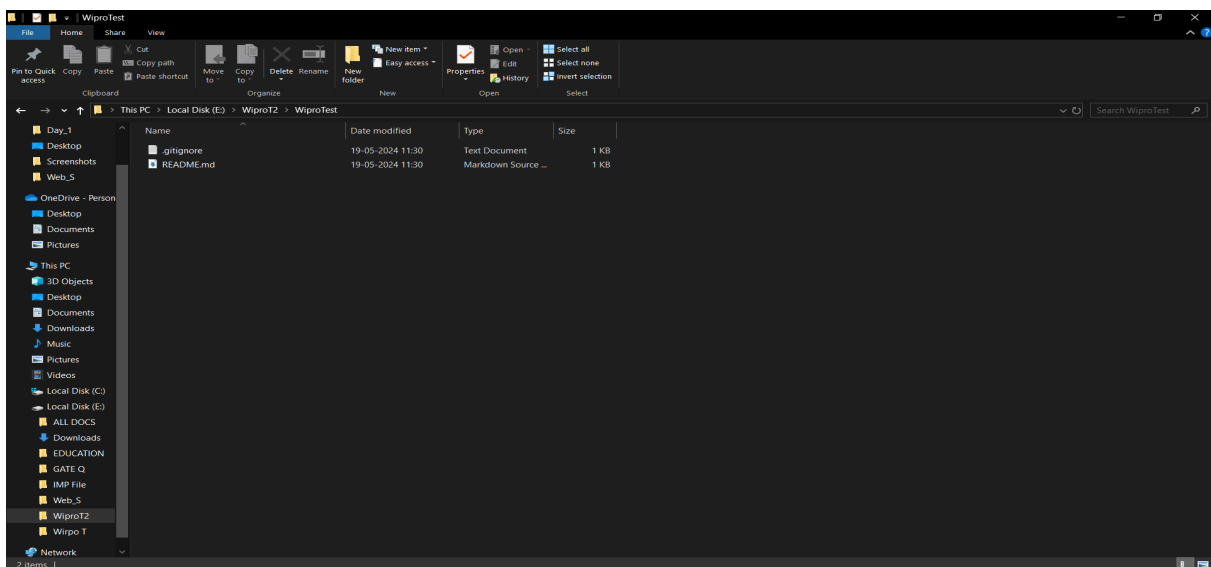
**2. Going to the target file by Git bash in the local machine:**

i) And type git "init"

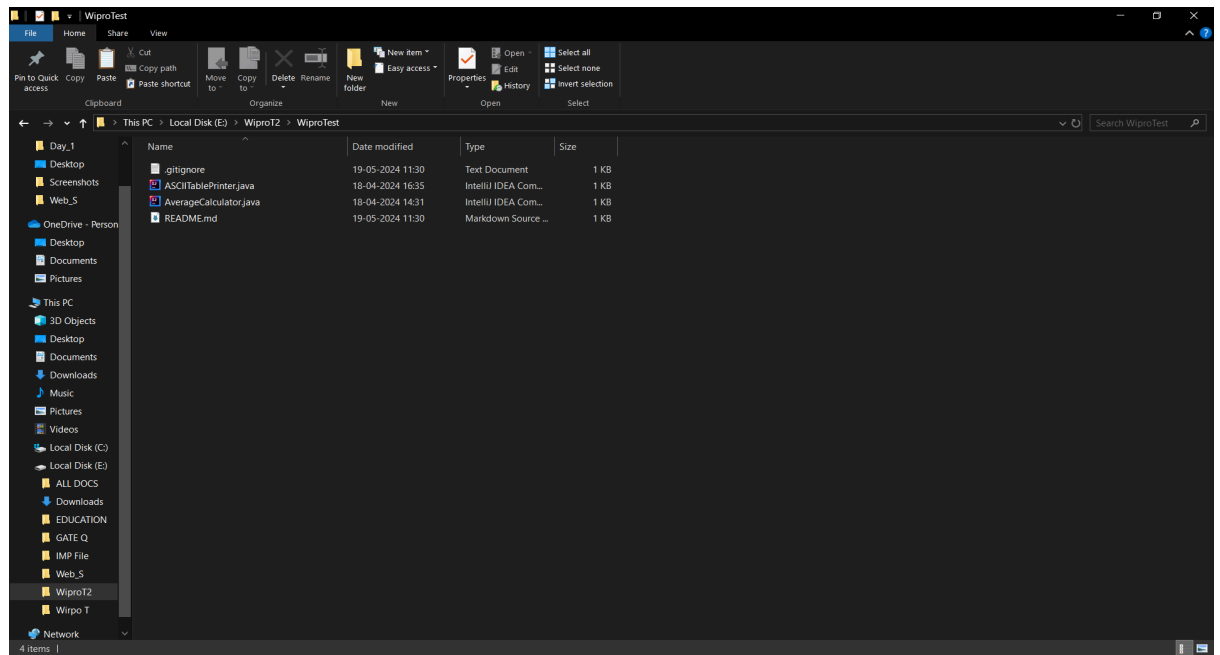
ii) After that type "git clone (repo link )"

```
MINGW64/e/WiproT2/WiproTest
$ cd
ip@Sayan MINGW64 ~
$ cd wiproT2
bash: cd: wiproT2: No such file or directory
ip@Sayan MINGW64 ~
$ E:
bash: E:: command not found
ip@Sayan MINGW64 ~
$ cd E:
ip@Sayan MINGW64 /e
$ cd wiproT2
ip@Sayan MINGW64 /e/wiproT2 (master)
$ git -h
git: 'h' is not a git command. See 'git --help'.
The most similar command is
  init
ip@Sayan MINGW64 /e/wiproT2 (master)
$ git init
Reinitialized existing Git repository in E:/wiproT2/.git/
```

**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”:

- Type 'git status'
- Type 'git add .' (to add files to repo)
- Type 'git status' again to check file added or not.
- if the tree is clean Type 'git commit -m "First commit:"
- And then type 'git Push' To push the update in the web git repo.

```
hp@Sayan MINGW64 /e/WiproT2/WiproTest (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)
        ASCIItablePrinter.java
        AverageCalculator.java

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

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

hp@Sayan MINGW64 /e/WiproT2/WiproTest (main)
$ 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)
        new file:   ASCIItablePrinter.java
        new file:   AverageCalculator.java

hp@Sayan MINGW64 /e/WiproT2/WiproTest (main)
$ git commit -m "First commit"
[main 7886c2b] First commit
 2 files changed, 34 insertions(+)
 create mode 100644 ASCIItablePrinter.java
 create mode 100644 AverageCalculator.java

hp@Sayan MINGW64 /e/WiproT2/WiproTest (main)
$ git status
```

```
MINGW64/e/WiproT2/WiproTest
Your branch is up to date with 'origin/main'.

Changes to be committed:
  (use "git restore --staged <file>..." to unstage)
    new file:   ASCIITablePrinter.java
    new file:   AverageCalculator.java

hp@Sayan MINGW64 /e/WiproT2/WiproTest (main)
$ git commit -m "First commit"
[main 7886c2b] First commit
 2 files changed, 34 insertions(+)
 create mode 100644 ASCIITablePrinter.java
 create mode 100644 AverageCalculator.java

hp@Sayan MINGW64 /e/WiproT2/WiproTest (main)
$ git status
On branch main
Your branch is ahead of 'origin/main' by 1 commit.
  (use "git push" to publish your local commits)

nothing to commit, working tree clean

hp@Sayan MINGW64 /e/WiproT2/WiproTest (main)
$ git push
Enumerating objects: 5, done.
Counting objects: 100% (5/5), done.
Delta compression using up to 8 threads
Compressing objects: 100% (4/4), done.
Writing objects: 100% (4/4), 918 bytes | 918.00 KiB/s, done.
Total 4 (delta 0), reused 0 (delta 0), pack-reused 0 (from 0)
To https://github.com/SayanM8697/WiproTest.git
   f26e1fc..7886c2b  main -> main

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

## 6) Check git web file is added or not:

The screenshot displays the GitHub repository page for **SayanM8697 / WiproTest**. The repository is public and has 1 branch (main) and 0 tags. The commit history shows a single commit (7886c2b) from 8 minutes ago, containing 2 commits. The commit details table lists the following files:

File	Commit	Time
.gitignore	Initial commit	8 minutes ago
ASCIITablePrinter.java	First commit	now
AverageCalculator.java	First commit	now
README.md	Initial commit	8 minutes ago

The README file is selected, showing the title **WiproTest**. The right sidebar contains links for **About**, **README**, **Activity**, **Stars** (0 stars), **Watching** (1 watching), **Forks** (0 forks), **Releases** (No releases published), **Packages** (No packages published), and **Languages** (Java 100.0%).

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

```
MINGW64/e/WiproT2/WiproTest
hp@Sayan MINGW64 /
$ cd E:

hp@Sayan MINGW64 /e
$ cd WiproT2

hp@Sayan MINGW64 /e/WiproT2 (master)
$ cd WiproTest

hp@Sayan MINGW64 /e/WiproT2/WiproTest (main)
$ git branch feature

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

2) Check the file list:

Type "ls -l"

```
hp@Sayan MINGW64 /e/WiproT2/WiproTest (feature)
$ ls -l
total 6
-rw-r--r-- 1 hp 197121 306 Apr 18 16:35 ASCIItablePrinter.java
-rw-r--r-- 1 hp 197121 897 Apr 18 14:31 AverageCalculator.java
-rw-r--r-- 1 hp 197121 11 May 19 11:30 README.md
```

3) Commit that:

Type "git add."

Type "Git commit -m"First commit""

```
hp@Sayan MINGW64 /e/WiproT2/WiproTest (feature)
$ ls -l
total 7
-rw-r--r-- 1 hp 197121 306 Apr 18 16:35 ASCIItablePrinter.java
-rw-r--r-- 1 hp 197121 897 Apr 18 14:31 AverageCalculator.java
-rw-r--r-- 1 hp 197121 11 May 19 11:30 README.md
-rw-r--r-- 1 hp 197121 13 May 19 12:13 myfile.txt

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

hp@Sayan MINGW64 /e/WiproT2/WiproTest (feature)
$ git commit -m"First connit"
On branch feature
nothing to commit, working tree clean
```

### 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 commit -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
Restricted Mode is intended for safe code browsing. Trust this window to enable all features. Manage Learn More

AverageCalculator.java
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:

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

AverageCalculator.java
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 }
```