Experiment -2.1

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Branch: CSE(DevOps) **Section/Group-22BCD-1(B)**
Semester: 4th **Date of Performance:22/02/24**
Subject Name- Git and GitHub **Subject Code:22CSH-293**

1. Aim/Overview of the practical: To Merge Pull Request and Update the local repository on GitHub.

2. Software used: Git bash and GitHub

3. Steps for experiment/practical:

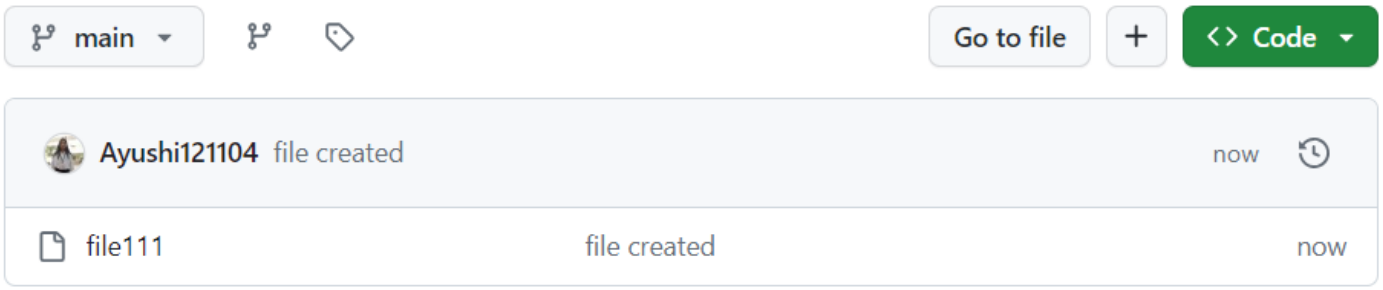
1. First open GitHub, and create a repository 'exper5'.

2. On git bash initiate the git command and use the git remote add origin.

```
ayush@LAPTOP-14JQ3IMU MINGW64 ~/5
$ git init
Initialized empty Git repository in C:/Users/ayush/5/.git/

ayush@LAPTOP-14JQ3IMU MINGW64 ~/5 (master)
$ git branch -M main

ayush@LAPTOP-14JQ3IMU MINGW64 ~/5 (main)
$ git remote add origin https://github.com/Ayushi121104/exper5
.git
```

```
ayush@LAPTOP-14JQ3IMU MINGW64 ~/5 (main)
$ vi file111

ayush@LAPTOP-14JQ3IMU MINGW64 ~/5 (main)
$ git add file111
warning: in the working copy of 'file111', LF will be replaced
 by CRLF the next time Git touches it

ayush@LAPTOP-14JQ3IMU MINGW64 ~/5 (main)
$ git commit -m"file created"
[main (root-commit) 76c3901] file created
 1 file changed, 16 insertions(+)
 create mode 100644 file111

ayush@LAPTOP-14JQ3IMU MINGW64 ~/5 (main)
$ git push origin main
Enumerating objects: 3, done.
Counting objects: 100% (3/3), done.
Delta compression using up to 8 threads
Compressing objects: 100% (2/2), done.
Writing objects: 100% (3/3), 356 bytes | 356.00 KiB/s, done.
Total 3 (delta 0), reused 0 (delta 0), pack-reused 0
To https://github.com/Ayushi121104/exper5.git
 * [new branch]      main -> main

ayush@LAPTOP-14JQ3IMU MINGW64 ~/5 (main)
$ git pull origin main
remote: Enumerating objects: 5, done.
remote: Counting objects: 100% (5/5), done.
remote: Compressing objects: 100% (2/2), done.
remote: Total 3 (delta 1), reused 0 (delta 0), pack-reused 0
Unpacking objects: 100% (3/3), 938 bytes | 62.00 KiB/s, done.
From https://github.com/Ayushi121104/exper5
 * branch            main       -> FETCH_HEAD
   76c3901..e093d94  main       -> origin/main
Updating 76c3901..e093d94
```

3. Now make a new file name file111 add some code into that file add the file and then commit it in the staging area.
4. Now push the file to the remote repository make some changes on the remote repository and then pull the file in the local repository.



```c
#include<stdio.h>
 int main()
{
int n,sum=0,m;
printf("Enter the value of a and b:");
scanf("%d",&n);
while(n>0)
{
m=n%10;
sum=sum+m;
n=n/10;
}
printf("Sum is=%d",sum);
return 0;
}
```

Code Blame

```c
#include<stdio.h>
 int main()
{
int n,sum=0,m;
printf("Enter a number:");
scanf("%d",&n);
while(n>0)
{
m=n%10;
sum=sum+m;
n=n/10;
}
printf("Sum is=%d",sum);
return 0;
}
```

< Local > **<remote>**

5. Now check whether the changes that you have done on the remote repository have been pulled locally or not.
6. Now create a new branch named repo1 open the same file in the new branch and edit it

```
ayush@LAPTOP-14JQ3IMU MINGW64 ~/5 (main)
$ git checkout -b m2
Switched to a new branch 'm2'

ayush@LAPTOP-14JQ3IMU MINGW64 ~/5 (m2)
$ vi file111

ayush@LAPTOP-14JQ3IMU MINGW64 ~/5 (m2)
$ git add file111

ayush@LAPTOP-14JQ3IMU MINGW64 ~/5 (m2)
$ git commit -m"statement is  updated"
[m2 cb1c3f1] statement is  updated
 1 file changed, 7 insertions(+), 7 deletions(-)

ayush@LAPTOP-14JQ3IMU MINGW64 ~/5 (m2)
$ git checkout  main
Switched to branch 'main'
```

```
ayush@LAPTOP-14JQ3IMU MINGW64 ~/5 (main)
$ git diff m2
diff --git a/file111 b/file111
index 01b387d..1769620 100644
--- a/file111
+++ b/file111
@@ -1,16 +1,16 @@
 #include<stdio.h>
  int main()
 {
-int a,c=0,b;
+int n,sum=0,m;
 printf("Enter the value of a and b:");
-scanf("%d",&a);
-while(a>0)
+scanf("%d",&n);
+while(n>0)
 {
-b=a%10;
-c=c+b;
-a=a/10;
+m=n%10;
+sum=sum+m;
+n=n/10;
 }
-printf("Sum is=%d",c);
+printf("Sum is=%d",sum);
 return 0;
 }
```

7. Now add the file commit it in the staging area and check the differences between the previous changes that we have made.

8. Now merge the main with the branch and push the main and m2 branches on the remote repository.

9. Changes can be seen easily.

10. Now create the pull request merge the pull request and then confirm the merch pull request.

```
ayush@LAPTOP-14JQ3IMU MINGW64 ~/5 (main)
$ git merge m2
Updating e093d94..cb1c3f1
Fast-forward
 file111 | 14 +++++++-------
 1 file changed, 7 insertions(+), 7 deletions(-)
```

```
ayush@LAPTOP-14JQ3IMU MINGW64 ~/5 (main)
$ git push origin main
Enumerating objects: 5, done.
Counting objects: 100% (5/5), done.
Delta compression using up to 8 threads
Compressing objects: 100% (2/2), done.
Writing objects: 100% (3/3), 398 bytes | 398.00 KiB/s, done.
Total 3 (delta 0), reused 0 (delta 0), pack-reused 0
To https://github.com/Ayushi121104/exper5.git
   e093d94..cb1c3f1  main -> main

ayush@LAPTOP-14JQ3IMU MINGW64 ~/5 (main)
$ git push origin m2
Total 0 (delta 0), reused 0 (delta 0), pack-reused 0
remote:
remote: Create a pull request for 'm2' on GitHub by visiting:
remote:      https://github.com/Ayushi121104/exper5/pull/new/m
2
remote:
To https://github.com/Ayushi121104/exper5.git
 * [new branch]      m2 -> m2
```

m2 had recent pushes on Feb 29 — Compare & pull request

Merge pull request #1 from Ayushi121104/m2

Update file111

This commit will be authored by 135798277+Ayushi121104@users.noreply.github.com

Confirm merge | Cancel

Pull request successfully merged and closed

You're all set—the `m2` branch can be safely deleted.

Delete branch

9. Result/Output/Writing Summary:

In this experiment, we will edit a file, commit changes on GitHub, observe the differences in the local machine, and push and pull from the local to the remote repository.

Learning outcomes (What I have learnt):

1. Learn about repositories without cloning.
2. Learn about Editing a file locally and repository.
3. Learn How to push from local to remote and vice versa.
4. Learn how to check the differences in the local machine.
5. Learn how to match the branch with the main branch.

Evaluation Grid (To be created as per the SOP and Assessment guidelines by the faculty):

Sr. No.	Parameters	Marks Obtained	Maximum Marks
1.			
2.			
3.			