

## Experiment -2.1

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**Branch: CSE(DevOps)**

**Semester: 4th**

**Subject Name- Git and GitHub**

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**Section/Group-22BCD-1(B)**

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**Subject Code:22CSH-293**

**1. Aim/Overview of the practical:** Editing a file and committing changes on GitHub.

**2. Software used:** Git bash and GitHub

**3. Task to be done:** Create a branch in a repository make changes merge the file into the main branch then submit the pull request.

**4. Steps for experiment/practical:**


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

### Create a new repository

A repository contains all project files, including the revision history. Already have a project repository elsewhere?  
[Import a repository.](#)

Required fields are marked with an asterisk (\*).

Owner \* / Repository name \*

 Ayushi121104 /

✓ edit is available.

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

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

ayush@LAPTOP-14JQ3IMU MINGW64 ~ (master)
$ git remote add origin https://github.com/Ayushi121104/edit.git

ayush@LAPTOP-14JQ3IMU MINGW64 ~ (master)
$ vi e1

ayush@LAPTOP-14JQ3IMU MINGW64 ~ (master)
$ git add e1
warning: in the working copy of 'e1', LF will be replaced by CRLF
the next time Git touches it

ayush@LAPTOP-14JQ3IMU MINGW64 ~ (master)
$ git commit -m "e1 file is added"
[master (root-commit) b3ef53b] e1 file is added
1 file changed, 16 insertions(+)
create mode 100644 e1

ayush@LAPTOP-14JQ3IMU MINGW64 ~ (master)
$ git push origin master
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), 354 bytes | 354.00 KiB/s, done.
Total 3 (delta 0), reused 0 (delta 0), pack-reused 0
To https://github.com/Ayushi121104/edit.git
 * [new branch]      master -> master
```

3. Now make a new file name newrepo1 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 in the file on the remote repository and then pull the file in the local repository.

```
#include <stdio.h>

int main() {
int number;

printf("Enter a number: ");
scanf("%d", &number);

    if (number % 2 == 0) {
printf("%d is an even number.\n", number);
    } else {
printf("%d is an odd number.\n", number);
    }

    return 0;
}
```

< Local >

```
Code Blame

1  #include <stdio.h>
2
3  int main() {
4  int number;
5
6  printf("Enter a number: ");
7  scanf("%d", &number);
8
9      if (number % 2 == 0) {
10 printf("%d is an even number.\n", number);
11     } else {
12 printf("%d is an odd number.\n", number);
13     }
14
15     return 0;
16 }
```

<remote>

```
1  #include <stdio.h>
2
3  int main() {
4  int x;
5
6  printf("Enter a num: ");
7  scanf("%d", &x);
8
9      if (x % 2 == 0) {
10 printf("%d is an even number.\n", x);
11     } else {
12 printf("%d is an odd number.\n", x);
13     }
14
15     return 0;
16 }
17
```

5. Now check whether the changes that you have done on the remote repository have been pulled locally or not.

```
ayush@LAPTOP-14JQ3IMU MINGW64 ~ (master)
$ git push origin master
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), 354 bytes | 354.00 KiB/s, done.
Total 3 (delta 0), reused 0 (delta 0), pack-reused 0
To https://github.com/Ayushi121104/edit.git
 * [new branch]      master -> master

ayush@LAPTOP-14JQ3IMU MINGW64 ~ (master)
$ git pull origin master
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), 959 bytes | 191.00 KiB/s, done.
From https://github.com/Ayushi121104/edit
 * branch            master       -> FETCH_HEAD
  b3ef53b..13c1593   master       -> origin/master
Updating b3ef53b..13c1593
Fast-forward
 e1 | 12 ++++++-----
 1 file changed, 6 insertions(+), 6 deletions(-)
```

```
#include <stdio.h>

int main() {
    int x;

    printf("Enter a num: ");
    scanf("%d", &x);

    if (x % 2 == 0) {
        printf("%d is an even number.\n", x);
    } else {
        printf("%d is an odd number.\n", x);
    }

    return 0;
}
```

6. Now create a new branch named repo1 open the same file in the new branch and edit it

```
#include <stdio.h>

int main() {
    int y;

    printf("Enter a number: ");
    scanf("%d", &y);

    if (y % 2 == 0) {
        printf("%d is an even number.\n", y);
    } else {
        printf("%d is an odd number.\n", y);
    }

    return 0;
}
```

```
ayush@LAPTOP-14JQ3IMU MINGW64 ~ (repo1)
$ vi newrepo1

ayush@LAPTOP-14JQ3IMU MINGW64 ~ (repo1)
$ git add newrepo1

ayush@LAPTOP-14JQ3IMU MINGW64 ~ (repo1)
$ git commit -m "y changed to x"
[repo1 ee62695] y changed to x
1 file changed, 7 insertions(+), 6 deletions(-)
```



```
ayush@LAPTOP-14JQ3IMU MINGW64 ~ (master)
$ git checkout repo1
Switched to branch 'repo1'

ayush@LAPTOP-14JQ3IMU MINGW64 ~ (repo1)
$ git push origin repo1
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), 304 bytes | 304.00 KiB/s, done.
Total 3 (delta 1), reused 0 (delta 0), pack-reused 0
remote: Resolving deltas: 100% (1/1), completed with 1 local object.
remote:
remote: Create a pull request for 'repo1' on GitHub by visiting:
remote:   https://github.com/Ayushi121104/newrepo/pull/new/repo1
remote:
To https://github.com/Ayushi121104/newrepo.git
 * [new branch]      repo1 -> repo1
```

## 9. Changes can be seen easily.

Merge pull request #1 from Ayushi121104/repo1
Browse files

y changed to x

master (#1)

Ayushi121104 committed 11 hours ago Verified
2 parents b1eb5b1 + ee62695 commit be10178

Showing 1 changed file with 7 additions and 6 deletions.

Whitespace
Ignore whitespace
Split
Unified

13
newrepo1

```

... @@ -1,16 +1,17 @@
1  #include <stdio.h>
2
3  int main() {
4 - int y;
5
6   printf("Enter a number: ");
7 - scanf("%d", &y);
8
9 - if (y % 2 == 0) {
10 - printf("%d is an even number.\n", y);
11   } else {
12 - printf("%d is an odd number.\n", y);
13   }
14
15   return 0;
16 - }

```

```

1  #include <stdio.h>
2
3  int main() {
4 + int x;
5
6   printf("Enter a number: ");
7 + scanf("%d", &x);
8
9 + if (x % 2 == 0) {
10 + printf("%d is an even number.\n", x);
11   } else {
12 + printf("%d is an odd number.\n", x);
13   }
14
15   return 0;
16 + }
17 +

```

## 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 about 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.			