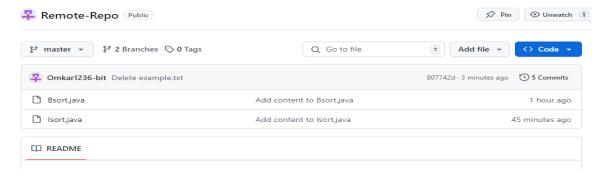
#### **Experiment No. 2**

Title: Implement GitHub Operations using Git.

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#### **Step 1: Cloning a Repository**

Find a Repository to Clone & Copy the Repository URL:



Navigate to the Directory:

Change to the directory where you want to clone the repository:

```
OMKAR@LAPTOP-UU9CTA90 MINGW64 ~

$ cd d:

OMKAR@LAPTOP-UU9CTA90 MINGW64 /d

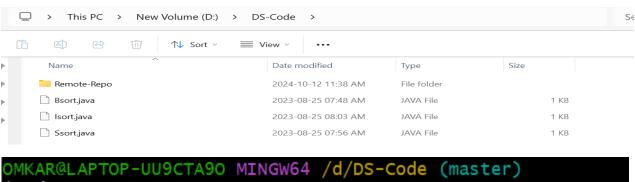
$ cd DS-Code
```

Run the Clone Command:

```
OMKAR@LAPTOP-UU9CTA90 MINGW64 /d/DS-Code (master)
$ git clone https://github.com/omkar1236-bit/Remote-Repo.git
Cloning into 'Remote-Repo'...
remote: Enumerating objects: 17, done.
remote: Counting objects: 100% (17/17), done.
remote: Compressing objects: 100% (12/12), done.
remote: Total 17 (delta 4), reused 8 (delta 1), pack-reused 0 (from 0)
Receiving objects: 100% (17/17), 4.64 KiB | 4.64 MiB/s, done.
Resolving deltas: 100% (4/4), done.
```

## Step 2: Making Changes and Creating a Branch

Navigate into the Cloned Repository:



OMKAR@LAPTOP-UU9CTA9O MINGW64 /d/DS-Code (master)
\$ cd Remote-Repo

#### Create a New Text File:

```
OMKAR@LAPTOP-UU9CTA9O MINGW64 /d/DS-Code/Remote-Repo (master)
$ nano example.txt
```

#### Check the Status of the Repository:

```
OMKAR@LAPTOP-UU9CTA90 MINGW64 /d/DS-Code/Remote-Repo (master)
$ git status
On branch master
Your branch is up to date with 'origin/master'.

Untracked files:
   (use "git add <file>..." to include in what will be committed)
        example.txt

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

#### Stage the Changes for Commit:

```
OMKAR@LAPTOP-UU9CTA9O MINGW64 /d/DS-Code/Remote-Repo (master)
$ git add example.txt
warning: in the working copy of 'example.txt', LF will be replaced by CRLF the n
ext time Git touches it
```

#### Commit the Changes:

```
OMKAR@LAPTOP-UU9CTA90 MINGW64 /d/DS-Code/Remote-Repo (master)
$ git commit -m "add content to example.txt"
[master 18b044a] add content to example.txt
1 file changed, 1 insertion(+)
create mode 100644 example.txt
```

#### Create a New Branch:

```
OMKAR@LAPTOP-UU9CTA9O MINGW64 /d/DS-Code/Remote-Repo (master)
$ git branch feature
```

Switch to the Feature Branch:

```
OMKAR@LAPTOP-UU9CTA9O MINGW64 /d/DS-Code/Remote-Repo (master)
$ git checkout feature
Switched to branch 'feature'
```

#### **Step 3) Pushing Changes to GitHub:**

```
OMKAR@LAPTOP-UU9CTA90 MINGW64 /d/DS-Code/Remote-Repo (feature)
$ git remote add origin https://github.com/Omkar1236-bit/Remote-Repo.git
error: remote origin already exists.
```

This step is usually unnecessary if the repository was cloned, as the origin is already set.

#### Push the Feature Branch:

```
OMKAR@LAPTOP-UU9CTA90 MINGW64 /d/DS-Code/Remote-Repo (feature)

§ git push origin feature

Enumerating objects: 4, done.

Counting objects: 100% (4/4), done.

Delta compression using up to 8 threads

Compressing objects: 100% (2/2), done.

Writing objects: 100% (3/3), 349 bytes | 349.00 KiB/s, done.

Total 3 (delta 0), reused 0 (delta 0), pack-reused 0

remote:

remote: Create a pull request for 'feature' on GitHub by visiting:

remote: https://github.com/Omkar1236-bit/Remote-Repo/pull/new/feature

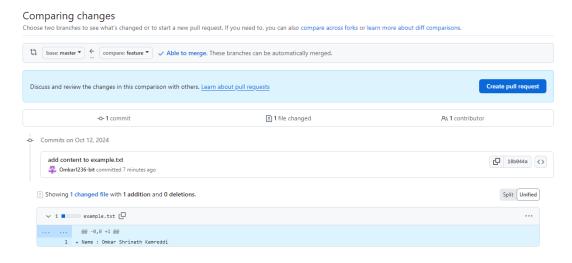
remote:

To https://github.com/Omkar1236-bit/Remote-Repo.git

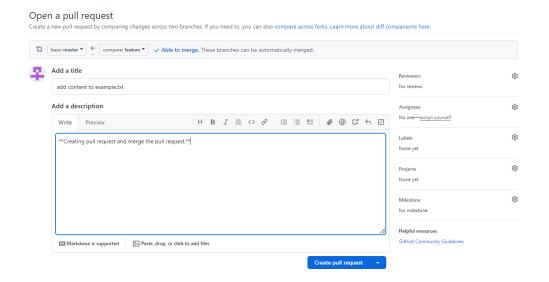
* [new branch] feature -> feature
```

## Step 4 : Collaborating through Pull Requests :

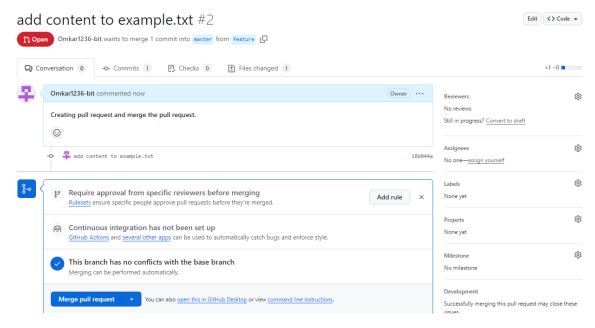
Create a Pull Request & Choose Base and Compare Branches:



#### Create a Pull Request & Add Title and Description:

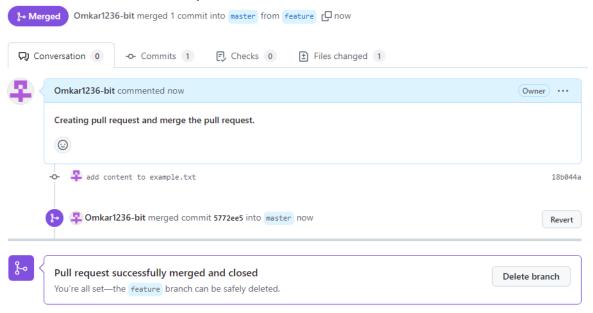


#### Merge the Pull Request:



Successfully Merge the pull request:

# add content to example.txt #2



## Step 5) Syncing Changes:

**Update Your Local Repository:** 

```
OMKAR@LAPTOP-UU9CTA90 MINGW64 /d/DS-Code/Remote-Repo (feature)
$ git checkout master
Switched to branch 'master'
Your branch is ahead of 'origin/master' by 1 commit.
(use "git push" to publish your local commits)
```

#### Pull the Latest Changes:

```
OMKAR@LAPTOP-UU9CTA90 MINGW64 /d/DS-Code/Remote-Repo (master)

$ git pull origin master
remote: Enumerating objects: 1, done.
remote: Counting objects: 100% (1/1), done.
remote: Total 1 (delta 0), reused 0 (delta 0), pack-reused 0 (from 0)
Unpacking objects: 100% (1/1), 906 bytes | 302.00 KiB/s, done.
From https://github.com/Omkar1236-bit/Remote-Repo

* branch master -> FETCH_HEAD
807742d..5772ee5 master -> origin/master
Updating 18b044a..5772ee5
Fast-forward
```

This command updates your local main branch with any changes that were merged into the remote main branch.

