

Experiment No. 1

Title : Exploring Git Commands through Collaborative Coding.

Navigate to Your Desired Directory :

```
OMKAR@LAPTOP-UU9CTA90 MINGW64 ~  
$ cd D:  
  
OMKAR@LAPTOP-UU9CTA90 MINGW64 /d  
$ cd DS-code  
  
OMKAR@LAPTOP-UU9CTA90 MINGW64 /d/DS-code
```

Initialize a New Git Repository :

```
OMKAR@LAPTOP-UU9CTA90 MINGW64 /d/DS-code  
$ git init  
Initialized empty Git repository in D:/DS-Code/.git/
```

Check the Status :

```
OMKAR@LAPTOP-UU9CTA90 MINGW64 /d/DS-code (master)  
$ git status  
On branch master  
  
No commits yet  
  
Untracked files:  
  (use "git add <file>..." to include in what will be committed)  
    Bsort.java  
    Isort.java  
  
nothing added to commit but untracked files present (use "git add" to track)
```

Stage the Changes :

```
OMKAR@LAPTOP-UU9CTA90 MINGW64 /d/DS-code (master)  
$ git add Bsort.java
```

Commit the Changes :

```
OMKAR@LAPTOP-UU9CTA90 MINGW64 /d/DS-code (master)  
$ git commit -m "Add content to Bsort.java"  
[master (root-commit) 397a812] Add content to Bsort.java  
1 file changed, 28 insertions(+)  
create mode 100644 Bsort.java
```

Check the Status Again :

```
OMKAR@LAPTOP-UU9CTA90 MINGW64 /d/DS-code (master)  
$ git status  
On branch master  
Untracked files:  
  (use "git add <file>..." to include in what will be committed)  
    Isort.java  
  
nothing added to commit but untracked files present (use "git add" to track)
```

View Differences :

```
OMKAR@LAPTOP-UU9CTA90 MINGW64 /d/DS-code (master)
$ git diff
```

View Commit History :

```
OMKAR@LAPTOP-UU9CTA90 MINGW64 /d/DS-code (master)
$ git log
commit 397a8128bc7c44552ccae4d7efb01544e03ed0b6 (HEAD -> master)
Author: Omkar <onkarkamreddi373@gmail.com>
Date: Sat Oct 12 10:05:26 2024 +0530

    Add content to Bsort.java
```

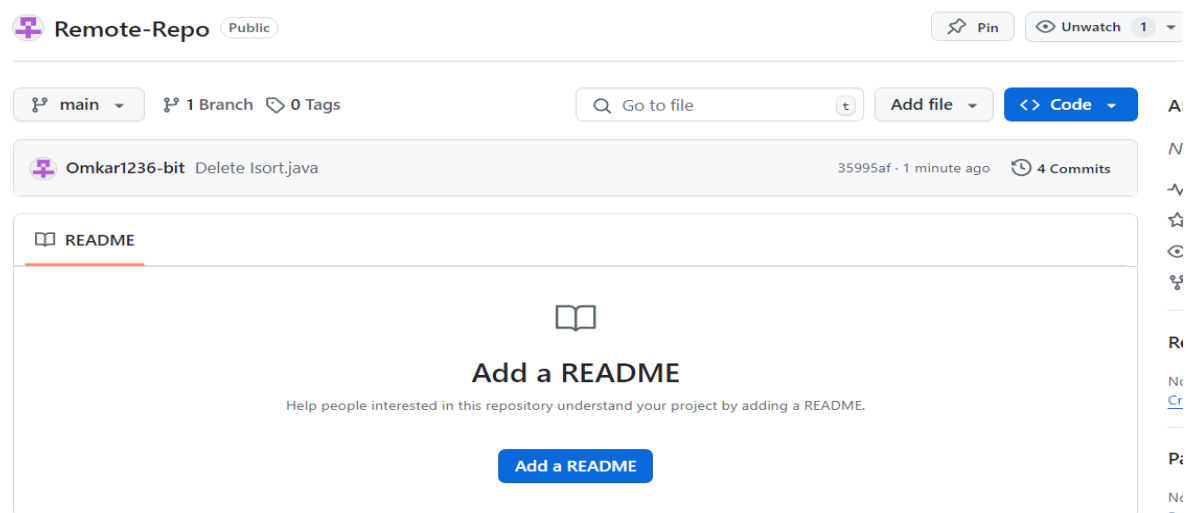
Create and Switch to a New Branch :

```
OMKAR@LAPTOP-UU9CTA90 MINGW64 /d/DS-code (master)
$ git checkout -b feature
Switched to a new branch 'feature'
```

Switch Back to the master Branch :

```
OMKAR@LAPTOP-UU9CTA90 MINGW64 /d/DS-code (feature)
$ git checkout master
Switched to branch 'master'
```

Creating new repository on GitHub :



Link Your Local Repository to the Remote :

```
OMKAR@LAPTOP-UU9CTA90 MINGW64 /d/DS-code (master)
$ git remote add origin https://github.com/Omkar1236-bit/Remote-Repo.git
```

Push Local Commits to Remote :

```
OMKAR@LAPTOP-UU9CTA90 MINGW64 /d/DS-code (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), 499 bytes | 499.00 KiB/s, done.
Total 3 (delta 0), reused 0 (delta 0), pack-reused 0
remote:
remote: Create a pull request for 'master' on GitHub by visiting:
remote:   https://github.com/Omkar1236-bit/Remote-Repo/pull/new/master
remote:
To https://github.com/Omkar1236-bit/Remote-Repo.git
 * [new branch]      master -> master
```

After Push Remote-Repo become :

The screenshot shows the GitHub interface for a repository named 'Remote-Repo' owned by 'Omkar1236-bit'. The repository is public. A yellow banner indicates that the 'main' branch had recent pushes 17 minutes ago, with a 'Compare & pull request' button. Below this, the repository has 2 branches and 0 tags. A search bar and 'Add file' button are visible. The commit history shows a single commit by 'Omkar1236-bit' titled 'Add content to Bsort.java' with hash '397a812', made 10 minutes ago. The file 'Bsort.java' is listed with the same commit message and time.