



# **Experiment -3.1**

Student Name: Sneha Mehrotra UID: 22BDO10048

Branch: CSE(DEVOPS) Section/Group:22BCD-1/A

Semester: 4TH Date of Performance: 06/03/2024

Subject Name: GIT AND GITHUB Subject Code: 22CSH-293

1. Aim/Overview of the practical:. Compare the changes in the Git Repository.

2. Software used: Git Bash and Github.

3. Hardware Used: Computer system.

#### 4. Steps for experiment:

- 1. Create a file on local device and open that folder with Git Bash.
- 2. Create a repository on Github with Exp8 name and copy the http link.
- 3. Now open the file "file.txt" using "vi filename" and edit the file.

```
sneha@LAPTOP-2GFSQH9Q MINGW64 ~/OneDrive/Desktop/exp8 (main)
$ git clone https://github.com/Sneha2003m/exp8.git
Cloning into 'exp8'...
remote: Enumerating objects: 3, done.
remote: Counting objects: 100% (3/3), done.
remote: Total 3 (delta 0), reused 0 (delta 0), pack-reused 0
Receiving objects: 100% (3/3), done.

sneha@LAPTOP-2GFSQH9Q MINGW64 ~/OneDrive/Desktop/exp8 (main)
$ vi file.txt

sneha@LAPTOP-2GFSQH9Q MINGW64 ~/OneDrive/Desktop/exp8 (main)
$ git add .
warning: adding embedded git repository: OneDrive/Desktop/exp8/exp8
```

4. Now add and commit the file using "git add ." and "git commit -m"messaage"".







```
Sneha@LAPTOP-2GFSQH9Q MINGW64 ~/OneDrive/Desktop/exp8 (main)

$ git commit -m"1stfile"
[main 022044f] 1stfile

2 files changed, 2 insertions(+)
create mode 160000 OneDrive/Desktop/exp8/exp8
create mode 100644 OneDrive/Desktop/exp8/file.txt
```

5. Now open the file "file2.txt" using "vi filename" and edit the file.

```
Sneha@LAPTOP-2GFSQH9Q MINGW64 ~/OneDrive/Desktop/exp8 (main)
$ git commit -m"1stfile"
[main 022044f] 1stfile
2 files changed, 2 insertions(+)
create mode 160000 OneDrive/Desktop/exp8/exp8
create mode 100644 OneDrive/Desktop/exp8/file.txt

sneha@LAPTOP-2GFSQH9Q MINGW64 ~/OneDrive/Desktop/exp8 (main)
$ vi file2.txt

sneha@LAPTOP-2GFSQH9Q MINGW64 ~/OneDrive/Desktop/exp8 (main)
$ git add .

$ MINGW64/c/Users/sneha/OneDrive/Desktop/exp8
sneha mehrotra
22bdo10048
this is exp 8

~

sneha@LAPTOP-2GFSQH9Q MINGW64 ~/OneDrive/Desktop/exp8 (main)
$ git add .
```

**6.** Now add and commit this file.

```
sneha@LAPTOP-2GFSQH9Q MINGW64 ~/OneDrive/Desktop/exp8 (main)
$ git add .
sneha@LAPTOP-2GFSQH9Q MINGW64 ~/OneDrive/Desktop/exp8 (main)
$ git commit -m"2ndfile"
[main cb73d3d] 2ndfile
1 file changed, 3 insertions(+)
create mode 100644 OneDrive/Desktop/exp8/file2.txt
```







6. Now show the git log and draw git diff using "git diff hash1 hash2"

```
Sneha@LAPTOP-2GFSQH9Q MINGW64 ~/OneDrive/Desktop/exp8 (main)
$ git log
commit cb73d3dd3fdd425f66dc7d389c65ce593eefa9cf (HEAD -> main)
Author: sneha <sneha.mehrotra1111@gmail.com>
Date: Tue Apr 2 22:06:56 2024 +0530

2ndfile

commit 022044ffa2562f1c7a1744dbabbdd3da158e3753
Author: sneha <sneha.mehrotra1111@gmail.com>
Date: Tue Apr 2 22:05:34 2024 +0530

1stfile
```

```
sneha@LAPTOP-2GFSQH9Q MINGW64 ~/OneDrive/Desktop/exp8 (main)
$ git diff cb73d3d 022044f
diff --git a/OneDrive/Desktop/exp8/file2.txt b/OneDrive/Desktop/exp8/file2.txt
deleted file mode 100644
index 7fc082f..0000000
--- a/OneDrive/Desktop/exp8/file2.txt
+++ /dev/null
@@ -1,3 +0,0 @@
-sneha mehrotra
-22bdo10048
-this is exp 8
```

7. Now edit the file and don't add this file to staging area and use git diff.







```
sneha@LAPTOP-2GFSQH9Q MINGW64 ~/OneDrive/Desktop/exp8 (main)
sneha@LAPTOP-2GFSQH9Q MINGW64 ~/OneDrive/Desktop/exp8 (main)
git diff file.txt file2.txt
liff --git a/OneDrive/Desktop/exp8/file.txt b/OneDrive/Desktop/exp8/file.txt
index 9526ef7..cfc3c62 100644
--- a/OneDrive/Desktop/exp8/file.txt
++ b/OneDrive/Desktop/exp8/file.txt
l@ -1 +1,2 @@
this is exp 8
-sneha Mehrotra
```

- 8. Now create a branch using "git branch nope" or "git checkout -b nope".
- **9.** Now edit file and add it to stagging area and commit this file ising "git add ." and "git commit -m"message".

```
Sneha@LAPTOP-2GFSQH9Q MINGW64 ~/OneDrive/Desktop/exp8 (main)
$ git checkout -b nope
fatal: a branch named 'nope' already exists

sneha@LAPTOP-2GFSQH9Q MINGW64 ~/OneDrive/Desktop/exp8 (main)
$ vi file.txt

sneha@LAPTOP-2GFSQH9Q MINGW64 ~/OneDrive/Desktop/exp8 (main)
$ git add .

sneha@LAPTOP-2GFSQH9Q MINGW64 ~/OneDrive/Desktop/exp8 (main)
$ git add .

sneha@LAPTOP-2GFSQH9Q MINGW64 ~/OneDrive/Desktop/exp8 (main)
$ git commit -m"branch commit"
[main 811f587] branch commit
1 file changed, 2 insertions(+)
```







9. Now Move to main branch by "git checkout main" and run the git diff command.

```
sneha@LAPTOP-2GFSQH9Q MINGW64 ~/OneDrive/Desktop/exp8 (main)

$ git checkout main
Already on 'main'

O          OneDrive/Desktop/exp6/DAA_Prac

O          OneDrive/Desktop/exp6/abc.txt

Your branch is ahead of 're2/main' by 11 commits.
          (use "git push" to publish your local commits)
```







```
**MINGWG4/Q/User/sneha/OneDrive/Desktop/exp8
-this is exp 8
-sneha Mehrotra
-22bcd1
diff --git a/OneDrive/Desktop/exp8/file2.txt b/OneDrive/Desktop/exp8/file2.txt
deleted file mode 100644
index 7fc082f. 0000000
--- a/OneDrive/Desktop/exp8/file2.txt
+++ /dev/null
@ -1,3 +0,0 @@
-sneha mehrotra
-22bcd10048
-this is exp 8
:...skipping...
diff --git a/OneDrive/Desktop/exp8/exp8 b/OneDrive/Desktop/exp8/exp8
deleted file mode 160000
index 6b9465. 0000000
--- a/OneDrive/Desktop/exp8/exp8
+++ /dev/null
@ -1 +0,0 @@
-subproject commit 6bb946569e40834786e192b7ed429b26773b3b3a
diff --git a/OneDrive/Desktop/exp8/file.txt b/OneDrive/Desktop/exp8/file.txt
deleted file mode 100644
index b20d947. 0000000
--- a/OneDrive/Desktop/exp8/file.txt
+++ /dev/null
@ -1,3 +0,0 @@
-this is exp 8
-sneha Mehrotra
-22bcd1
diff --git a/OneDrive/Desktop/exp8/file2.txt b/OneDrive/Desktop/exp8/file2.txt
deleted file mode 100644
index 7fc082f. 0000000
--- a/OneDrive/Desktop/exp8/file2.txt
deleted file mode 1000604
--- a/OneDrive/Desktop/exp8/file2.txt
deleted file mode 1000604
--- a/OneDrive/Desktop/exp8/file2.txt
+++ /dev/null
@ -1,3 +0,0 @@
-sneha mehrotra
-22bcd10048
-this is exp 8
```







## **5. Result/Output/Writing Summary:**

In this experiment we have learn about diff and associated commands with git diff.

### **Learning outcomes (What I have learnt):**

- 1. Learnt the difference between git merge and pull request.
- 2. Learnt how to make the merge
- 3. Learnt about type of merging.
- 4. Learnt about merge conflict.
- 5. Also learnt about ort merging.

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

Parameters	Marks Obtained	Maximum Marks
	Parameters	Parameters Marks Obtained

