

Experiment -3.2

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Branch: CSE(DEVOPS)

Semester: 4TH

Subject Name: GIT AND GITHUB

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Section/Group: 22BCD-1/A

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Subject Code: 22CSH-293

1. Aim/Overview of the practical: Understanding the various reset modes in GitHub.

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 Exp9 name and copy the http link.
3. Now open the file “abc.c” using “vi filename” and edit the file.

MINGW64: c:/Users/sneha/OneDrive/Desktop/exp9/exp9

```
sneha@LAPTOP-2GFSQH9Q MINGW64 ~/OneDrive/Desktop/exp9 (master)
$ git clone https://github.com/Sneha2003m/exp9.git
Cloning into 'exp9'...
warning: You appear to have cloned an empty repository.

sneha@LAPTOP-2GFSQH9Q MINGW64 ~/OneDrive/Desktop/exp9 (master)
$ cd exp9

sneha@LAPTOP-2GFSQH9Q MINGW64 ~/OneDrive/Desktop/exp9/exp9 (main)
$ git status
on branch main

No commits yet
sneha@LAPTOP-2GFSQH9Q MINGW64 ~/OneDrive/Desktop/exp9/exp9 (main)
$ vi abc.txt
```

4. Now add and commit the file using “git add .” and “git commit -m”message””.

```
sneha@LAPTOP-2GFSQH9Q MINGW64 ~/OneDrive/Deskto
op/exp9/exp9 (main)
$ vi abc.txt

sneha@LAPTOP-2GFSQH9Q MINGW64 ~/OneDrive/Desktop/exp9/exp9 (main)
$ git add .

sneha@LAPTOP-2GFSQH9Q MINGW64 ~/OneDrive/Desktop/exp9/exp9 (main)
$ git commit -m"first commit"
[main (root-commit) 99d3ad2] first commit
1 file changed, 1 insertion(+)
create mode 100644 abc.txt
```

5. Repeat step 3 and 4 for multiple time to have multiple commits.

```
MINGW64:/c:/Users/sneha/OneDrive/Desktop/exp9/exp9

sneha@LAPTOP-2GFSQH9Q MINGW64 ~/OneDrive/Desktop/exp9/exp9 (main)
$ vi abc.txt

sneha@LAPTOP-2GFSQH9Q MINGW64 ~/OneDrive/Desktop/exp9/exp9 (main)
$ git add .

sneha@LAPTOP-2GFSQH9Q MINGW64 ~/OneDrive/Desktop/exp9/exp9 (main)
$ git commit -m"second commit"
[main 6f88ddd] second commit
1 file changed, 1 insertion(+), 1 deletion(-)

sneha@LAPTOP-2GFSQH9Q MINGW64 ~/OneDrive/Desktop/exp9/exp9 (main)
$ vi abc.txt

sneha@LAPTOP-2GFSQH9Q MINGW64 ~/OneDrive/Desktop/exp9/exp9 (main)
$ git add .

sneha@LAPTOP-2GFSQH9Q MINGW64 ~/OneDrive/Desktop/exp9/exp9 (main)
$ git commit -m"third commit"
[main d96c2cf] third commit
1 file changed, 2 insertions(+), 1 deletion(-)
```

```

MINGW64/c/Users/sneha/OneDrive/Desktop/exp9/exp9
On branch main
Your branch is based on 'origin/main', but the upstream is gone.
(use "git branch --unset-upstream" to fixup)

nothing to commit, working tree clean

sneha@LAPTOP-2GFSQH9Q MINGW64 ~/OneDrive/Desktop/exp9/exp9 (main)
$ git log
commit d96c2cf367e7b07536def2c6155fa73f1f1453a8 (HEAD -> main)
Author: sneha <sneha.mehrotra1111@gmail.com>
Date: Mon Apr 8 22:03:50 2024 +0530

    third commit

commit 6f88ddd429181d615260f99be7c4401c1fb60245
Author: sneha <sneha.mehrotra1111@gmail.com>
Date: Mon Apr 8 22:02:57 2024 +0530

    second commit

commit 99d3ad25fbee9b63fc29f040f0fd17f8c8b95515
Author: sneha <sneha.mehrotra1111@gmail.com>
Date: Mon Apr 8 22:00:50 2024 +0530

    first commit
  
```

6. Now perform soft reset by “git reset –soft HEAD~1” which will bring head to previous commit and bring the commit to staging area.

```

MINGW64/c/Users/sneha/OneDrive/Desktop/exp9/exp9

sneha@LAPTOP-2GFSQH9Q MINGW64 ~/OneDrive/Desktop/exp9/exp9 (main)
$ git reset --soft HEAD~1

sneha@LAPTOP-2GFSQH9Q MINGW64 ~/OneDrive/Desktop/exp9/exp9 (main)
$ vi abc.txt

sneha@LAPTOP-2GFSQH9Q MINGW64 ~/OneDrive/Desktop/exp9/exp9 (main)
$ git status
On branch main
Your branch is based on 'origin/main', but the upstream is gone.
(use "git branch --unset-upstream" to fixup)

Changes to be committed:
  (use "git restore --staged <file>..." to unstage)
    modified:   abc.txt
  
```

MINGW64/c:/Users/sneha/OneDrive/Desktop/exp9/exp9

```
Changes to be committed:
  (use "git restore --staged <file>..." to unstage)
        modified:   abc.txt

sneha@LAPTOP-2GFSQH9Q MINGW64 ~/OneDrive/Desktop/exp9/exp9 (main)
$ git log
commit 6f88ddd429181d615260f99be7c4401c1fb60245 (HEAD -> main)
Author: sneha <sneha.mehrotra1111@gmail.com>
Date:   Mon Apr 8 22:02:57 2024 +0530

    second commit

commit 99d3ad25fbee9b63fc29f040f0fd17f8c8b95515
Author: sneha <sneha.mehrotra1111@gmail.com>
Date:   Mon Apr 8 22:00:50 2024 +0530

    first commit
```

7. Now perform soft reset by “git reset --mixed HEAD~1” which will bring head to previous commit and unstage the file which be result in untrack file.

MINGW64/c:/Users/sneha/OneDrive/Desktop/exp9/exp9

```
sneha@LAPTOP-2GFSQH9Q MINGW64 ~/OneDrive/Desktop/exp9/exp9 (main)
$ git reset --mixed HEAD~1
Unstaged changes after reset:
M      abc.txt

sneha@LAPTOP-2GFSQH9Q MINGW64 ~/OneDrive/Desktop/exp9/exp9 (main)
$ git status
On branch main
Your branch is based on 'origin/main', but the upstream is gone.
  (use "git branch --unset-upstream" to fixup)

Changes not staged for commit:
  (use "git add <file>..." to update what will be committed)
  (use "git restore <file>..." to discard changes in working directory)
        modified:   abc.txt

no changes added to commit (use "git add" and/or "git commit -a")
```

8. Now perform soft reset by “git reset --hard HEAD~1” which will bring head to previous commit and without affecting the file format and remove all changes done in commit.

```
MINGW64/c/Users/sneha/OneDrive/Desktop/exp9/exp9
sneha@LAPTOP-2GFSQH9Q MINGW64 ~/OneDrive/Desktop/exp9/exp9 (main)
$ git add .

sneha@LAPTOP-2GFSQH9Q MINGW64 ~/OneDrive/Desktop/exp9/exp9 (main)
$ git commit -m"commit"
[main e00050f] commit
1 file changed, 2 insertions(+), 1 deletion(-)

sneha@LAPTOP-2GFSQH9Q MINGW64 ~/OneDrive/Desktop/exp9/exp9 (main)
$ git reset --hard HEAD~1
HEAD is now at 99d3ad2 first commit

sneha@LAPTOP-2GFSQH9Q MINGW64 ~/OneDrive/Desktop/exp9/exp9 (main)
$ git status
On branch main
Your branch is based on 'origin/main', but the upstream is gone.
(use "git branch --unset-upstream" to fixup)

nothing to commit, working tree clean

sneha@LAPTOP-2GFSQH9Q MINGW64 ~/OneDrive/Desktop/exp9/exp9 (main)
$ ls
abc.txt
```

5. Result/Output/Writing Summary:

In this experiment we have learn about reset and types of reset.

Learning outcomes (What I have learnt):

1. Learnt the difference between reset and revert.
2. Learnt how to make the reset
3. Learnt about type of reset.
4. Learnt about soft reset.
5. Also learnt about mixed and hard reset.

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.			