

Question 5

Step 1: Step 1: Create a feature branch.

```
PS C:\Users\KalaiArasanJ\Desktop\GIT_assign\git_assignment> git branch feature5
PS C:\Users\KalaiArasanJ\Desktop\GIT_assign\git_assignment>
GIT_assign > git_assignment > q3.txt
```

Step 2: Switch to the new branch.

open the file and make some changes to it.

```
Untracked files:
  (use "git add <file>..." to include in what will be committed)
  f5.txt
```

Add and commit the changes to the new branch.

```
PS C:\Users\KalaiArasanJ\Desktop\GIT_assign\git_assignment> git add .
PS C:\Users\KalaiArasanJ\Desktop\GIT_assign\git_assignment> git commit -m "first commit in f5.txt"
[main e5c0d16] first commit in f5.txt
1 file changed, 1 insertion(+)
create mode 100644 f5.txt
PS C:\Users\KalaiArasanJ\Desktop\GIT_assign\git_assignment>
```

open the same file and make some changes to it.

Add and commit the changes to the new branch.

```
PS C:\Users\KalaiArasanJ\Desktop\GIT_assign\git_assignment> git add .
PS C:\Users\KalaiArasanJ\Desktop\GIT_assign\git_assignment> git commit -m "second commit in f5.txt"
[main 94867ec] second commit in f5.txt
1 file changed, 2 insertions(+), 1 deletion(-)
PS C:\Users\KalaiArasanJ\Desktop\GIT_assign\git_assignment>
```

open the same file and make some changes to it.

Add and commit the changes to the new branch.

```
PS C:\Users\KalaiArasanJ\Desktop\GIT_assign\git_assignment> git add .
PS C:\Users\KalaiArasanJ\Desktop\GIT_assign\git_assignment> git commit -m "third commit in f5.txt"
[main 2ba4224] third commit in f5.txt
1 file changed, 2 insertions(+), 1 deletion(-)
```

Step 3: Use the "git log" command to view the commit history and identify the commit to which you want to reset.

```
PS C:\Users\KalaiArasanJ\Desktop\GIT_assign\git_assignment> git log --oneline
2ba4224 (HEAD -> main) third commit in f5.txt
94867ec second commit in f5.txt
e5c0d16 first commit in f5.txt
```

Here, I'm choosing the **second commit (94867ec)** to be reset.

Step 4: Use the "git reset" command followed by the desired reset type and the commit hash

```
PS C:\Users\KalaiArasanJ\Desktop\GIT_assign\git_assignment> git reset 94867ec
Unstaged changes after reset:
M      f5.txt
PS C:\Users\KalaiArasanJ\Desktop\GIT_assign\git_assignment>
```

Step 5: Verify that the reset was successful by using the "git log" command again.

```
PS C:\Users\KalaiArasanJ\Desktop\GIT_assign\git_assignment> git log --oneline
94867ec (HEAD -> main) second commit in f5.txt
e5c0d16 first commit in f5.txt
```

Step 6: Use the "git log" command to view the commit history and identify the commit that you want to reverse.

```
PS C:\Users\KalaiArasanJ\Desktop\GIT_assign\git_assignment> git log --oneline
94867ec (HEAD -> main) second commit in f5.txt
e5c0d16 first commit in f5.txt
```

Step 7: Use the "git revert" command followed by the commit hash or reference to which you want to revert. (Hint: git revert <commit hash>)

I'm reverting back to commit id e5c0d16

```
PS C:\Users\KalaiArasanJ\Desktop\GIT_assign\git_assignment> git revert e5c0d16
CONFLICT (modify/delete): f5.txt deleted in parent of e5c0d16 (first commit in f5.txt) and modified in HEAD.  Version HEAD of f5.txt left in tree.
error: could not revert e5c0d16... first commit in f5.txt
hint: After resolving the conflicts, mark them with
hint: "git add/rm <paths>", then run
hint: "git revert --continue".
hint: You can instead skip this commit with "git revert --skip".
hint: To abort and get back to the state before "git revert",
hint: run "git revert --abort".
```

```
PS C:\Users\KalaiArasanJ\Desktop\GIT_assign\git_assignment> git add .
PS C:\Users\KalaiArasanJ\Desktop\GIT_assign\git_assignment> git revert --continue
[main fef0462] Reverted to first commit
1 file changed, 2 insertions(+), 1 deletion(-)
```

Step 8: Verify that the revert was successful by using the "git log" command again.

```
PS C:\Users\KalaArasanJ\Desktop\GIT_assign\git_assignment> git log --oneline
fef0462 (HEAD -> main) Reverted to first commit
94867ec second commit in f5.txt
e5c0d16 first commit in f5.txt
```

Note: Identify the difference between git log after git reset and git revert.