

## Git Practical Exam

Create one repository for practical and provide the link of it for review.

Work on below points:

### 1. Pull and Merge difference

- Make example of pull request and two branch merge event.

### 2. Rebase

- Try to rebase feature branch with master branch

### 3. Change commit message

- Commit push on commit in feature branch and then change commit message

### 4. cherry pick

- Pick some commits from feature branch to master branch

### 5. Drop commit

- Remove some commit from feature branch.

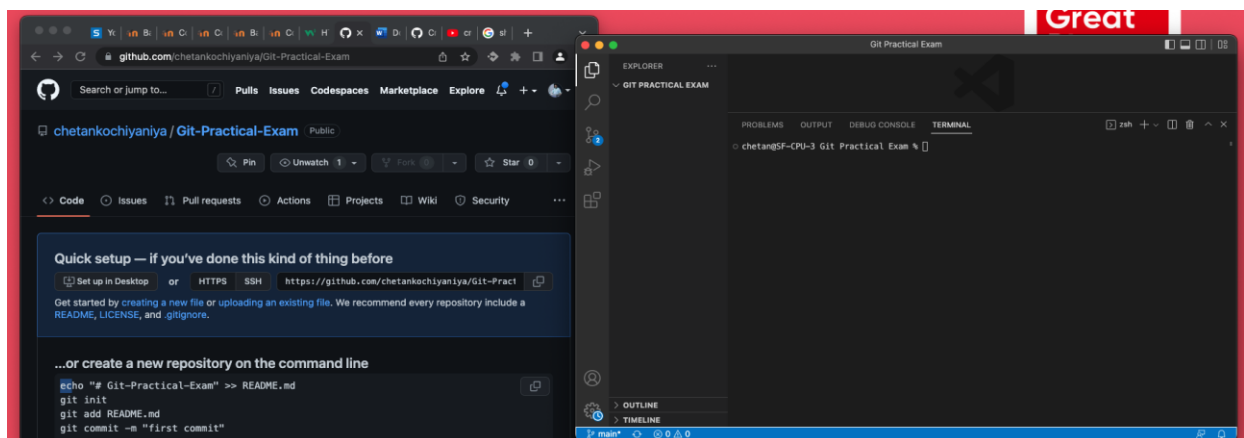
=====

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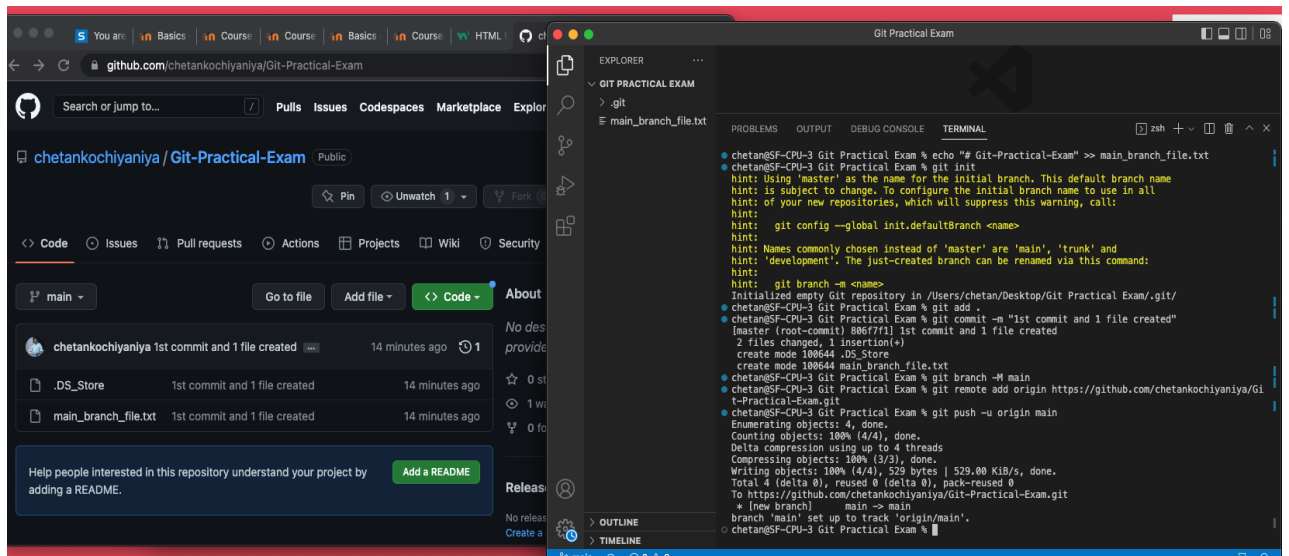
## Git config:

```
Last login: Tue Jan 10 11:40:22 on ttys000
chetan@SF-CPU-3 Git Practical Exam % git init
hint: Using 'master' as the name for the initial branch. This default branch name
hint: is subject to change. To configure the initial branch name to use in all
hint: of your new repositories, which will suppress this warning, call:
hint:
hint:   git config --global init.defaultBranch <name>
hint:
hint: Names commonly chosen instead of 'master' are 'main', 'trunk' and
hint: 'development'. The just-created branch can be renamed via this command:
hint:
hint:   git branch -m <name>
Initialized empty Git repository in /Users/chetan/Desktop/Git Practical Exam/.git/
chetan@SF-CPU-3 Git Practical Exam % git config --global user.name "chetankochiyaniya"
chetan@SF-CPU-3 Git Practical Exam % git config --global user.email "ckochiyaniya950@rku.ac.in"
chetan@SF-CPU-3 Git Practical Exam % git config --global color.ui true
chetan@SF-CPU-3 Git Practical Exam % git config --list
credential.helper=osxkeychain
user.name=chetankochiyaniya
user.email=ckochiyaniya950@rku.ac.in
color.ui=true
core.repositoryformatversion=0
core.filemode=true
core.bare=false
core.logallrefupdates=true
core.ignorecase=true
core.precomposeunicode=true
chetan@SF-CPU-3 Git Practical Exam %
```

## Starting:



Create new repo and done 1<sup>st</sup> commit :

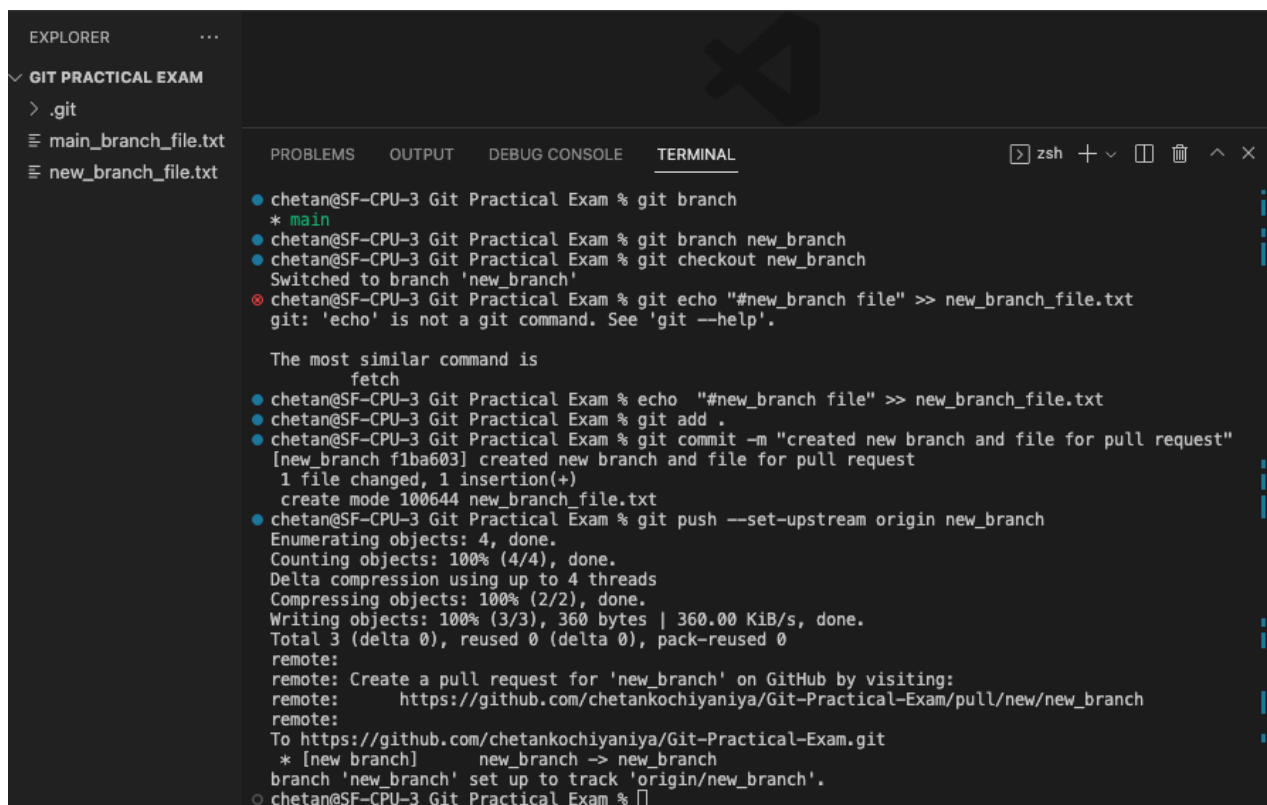


## 1 Pull and Merge difference

- Make example of pull request and two branch merge event.

Pull request :

- Create new branch and new file and make pull request:



```
EXPLORER
...
GIT PRACTICAL EXAM
> .git
  main_branch_file.txt
  new_branch_file.txt

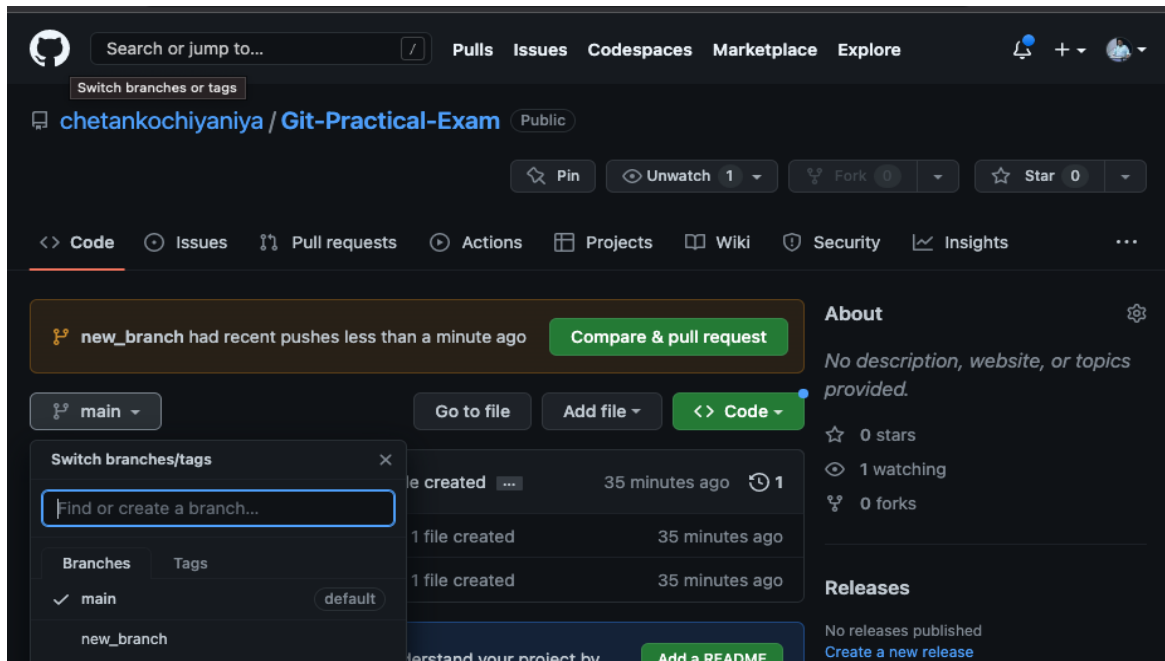
PROBLEMS OUTPUT DEBUG CONSOLE TERMINAL
zsh + v [ ] [ ] ^ x

● chetan@SF-CPU-3 Git Practical Exam % git branch
* main
● chetan@SF-CPU-3 Git Practical Exam % git branch new_branch
● chetan@SF-CPU-3 Git Practical Exam % git checkout new_branch
Switched to branch 'new_branch'
● chetan@SF-CPU-3 Git Practical Exam % git echo "#new_branch file" >> new_branch_file.txt
git: 'echo' is not a git command. See 'git --help'.

The most similar command is
  fetch
● chetan@SF-CPU-3 Git Practical Exam % echo "#new_branch file" >> new_branch_file.txt
● chetan@SF-CPU-3 Git Practical Exam % git add .
● chetan@SF-CPU-3 Git Practical Exam % git commit -m "created new branch and file for pull request"
[new_branch flba603] created new branch and file for pull request
 1 file changed, 1 insertion(+)
 create mode 100644 new_branch_file.txt
● chetan@SF-CPU-3 Git Practical Exam % git push --set-upstream origin new_branch
Enumerating objects: 4, done.
Counting objects: 100% (4/4), done.
Delta compression using up to 4 threads
Compressing objects: 100% (2/2), done.
Writing objects: 100% (3/3), 360 bytes | 360.00 KiB/s, done.
Total 3 (delta 0), reused 0 (delta 0), pack-reused 0
remote:
remote: Create a pull request for 'new_branch' on GitHub by visiting:
remote:   https://github.com/chetankochiyaniya/Git-Practical-Exam/pull/new/new_branch
remote:
To https://github.com/chetankochiyaniya/Git-Practical-Exam.git
 * [new branch]      new_branch -> new_branch
branch 'new_branch' set up to track 'origin/new_branch'.
○ chetan@SF-CPU-3 Git Practical Exam %
```

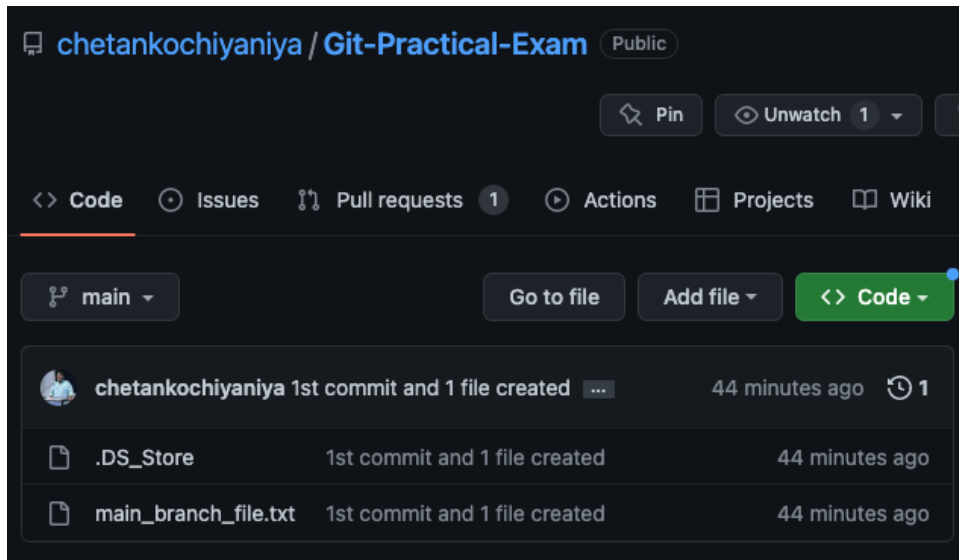
Output:

Chetan Kochiyaniya

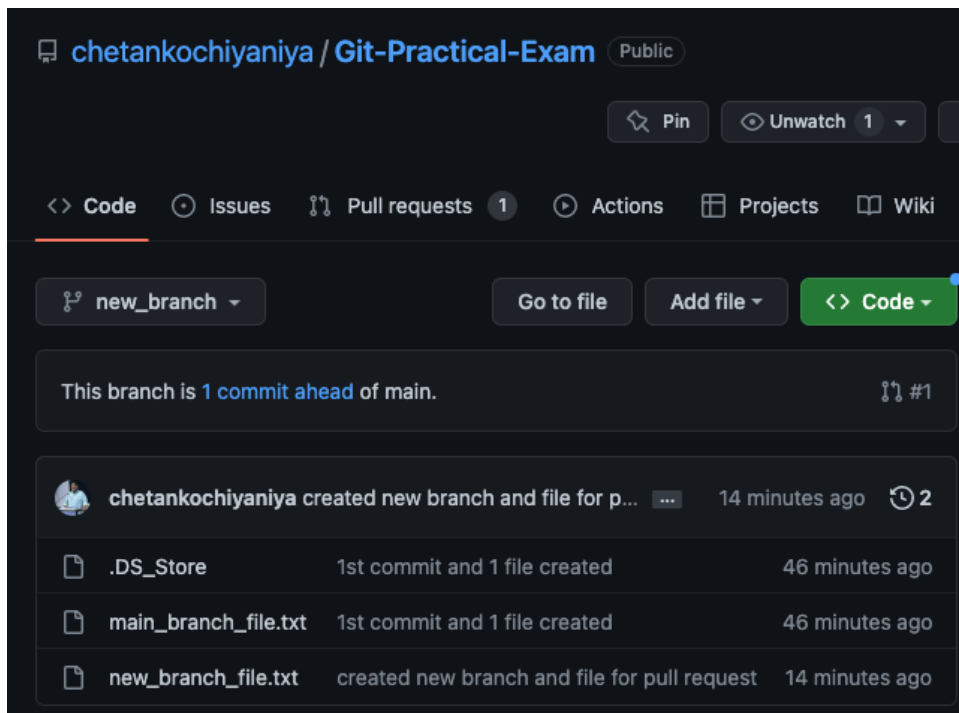


Merge two branch:

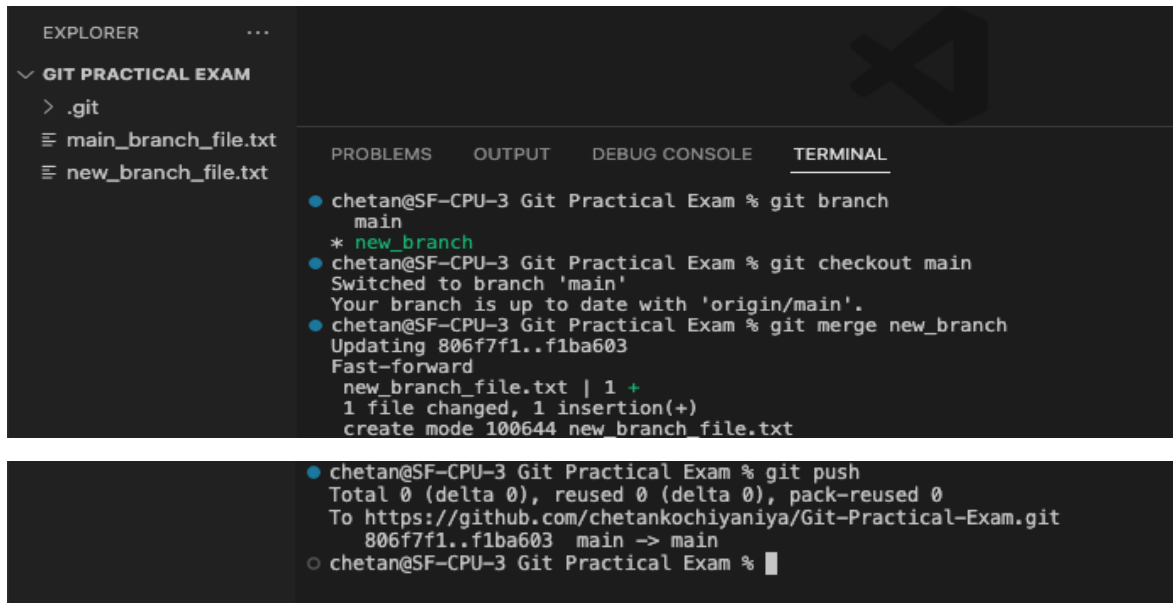
Before merge main branch:



Before merge new\_branch



merge new\_branch in main branch

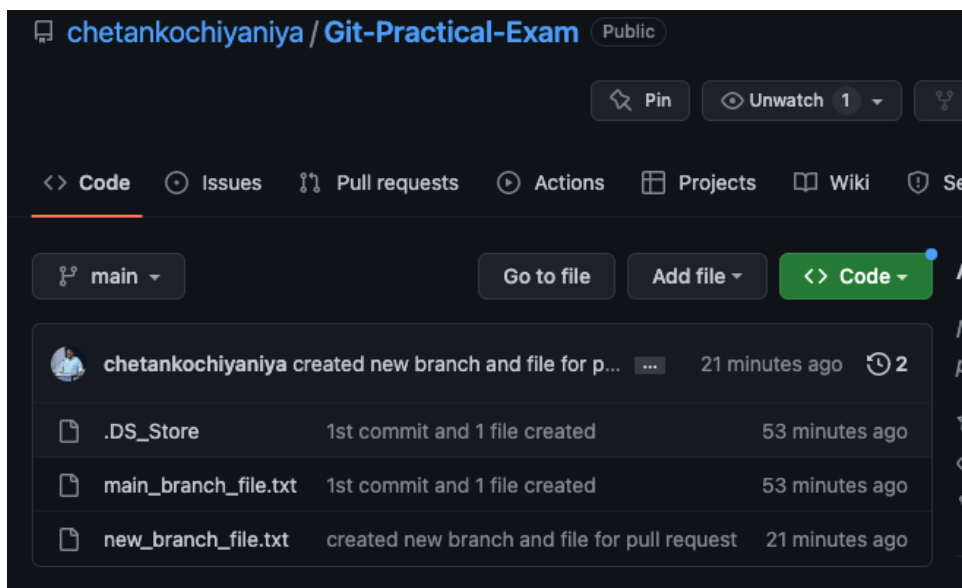


The image shows a VS Code interface with the Explorer sidebar on the left and the Terminal on the right. The Explorer sidebar shows a project named 'GIT PRACTICAL EXAM' with a '.git' folder and two files: 'main\_branch\_file.txt' and 'new\_branch\_file.txt'. The Terminal shows the following commands and output:

```
chetan@SF-CPU-3 Git Practical Exam % git branch
main
* new_branch
chetan@SF-CPU-3 Git Practical Exam % git checkout main
Switched to branch 'main'
Your branch is up to date with 'origin/main'.
chetan@SF-CPU-3 Git Practical Exam % git merge new_branch
Updating 806f7f1..f1ba603
Fast-forward
 new_branch_file.txt | 1 +
 1 file changed, 1 insertion(+)
 create mode 100644 new_branch_file.txt

chetan@SF-CPU-3 Git Practical Exam % git push
Total 0 (delta 0), reused 0 (delta 0), pack-reused 0
To https://github.com/chetankochiyaniya/Git-Practical-Exam.git
 806f7f1..f1ba603  main -> main
chetan@SF-CPU-3 Git Practical Exam %
```

After merge the output of MAIN branch :



## 2. Rebase

Before rebase commode perform:

Create new file in main branch :

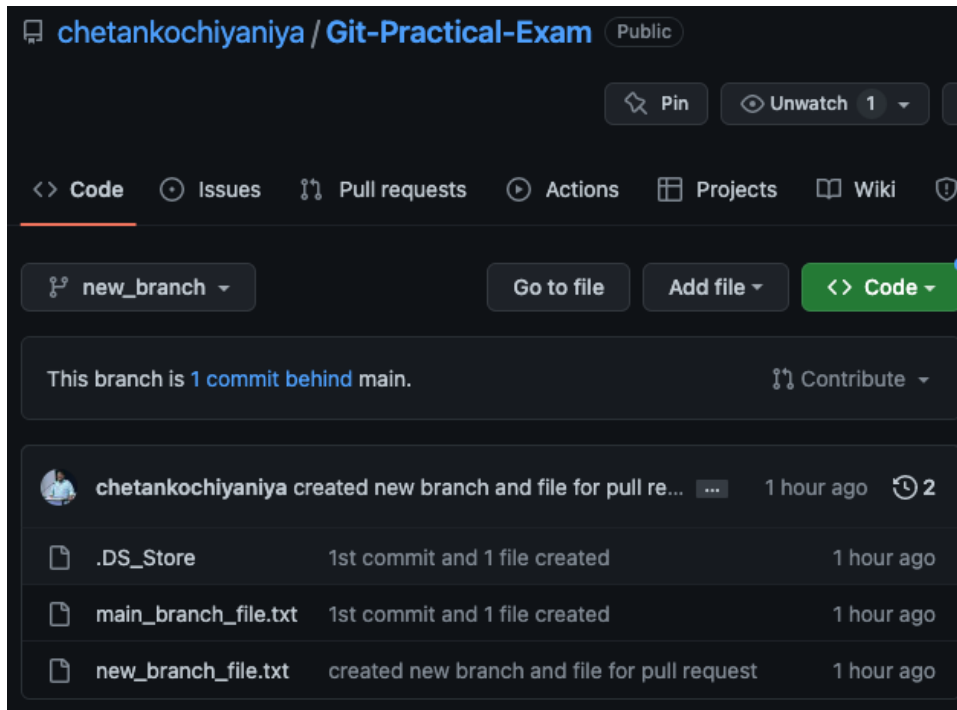
```
chetan@SF-CPU-3 Git Practical Exam % git branch
* main
  new_branch
chetan@SF-CPU-3 Git Practical Exam % echo "create new file for rebase practical" >> rebase.txt
chetan@SF-CPU-3 Git Practical Exam % git add .
chetan@SF-CPU-3 Git Practical Exam % git commit -m "create new file for rebase practical"
[main df15f0f] create new file for rebase practical
1 file changed, 1 insertion(+)
 create mode 100644 rebase.txt
chetan@SF-CPU-3 Git Practical Exam % git push
Enumerating objects: 4, done.
Counting objects: 100% (4/4), done.
Delta compression using up to 4 threads
Compressing objects: 100% (2/2), done.
Writing objects: 100% (3/3), 327 bytes | 327.00 KiB/s, done.
Total 3 (delta 1), reused 0 (delta 0), pack-reused 0
remote: Resolving deltas: 100% (1/1), completed with 1 local object.
To https://github.com/chetankochiyaniya/Git-Practical-Exam.git
 f1ba603..df15f0f  main -> main
```

The screenshot shows the GitHub interface for the repository 'chetankochiyaniya / Git-Practical-Exam'. The repository is public. The main branch is selected. The file list shows four files: .DS\_Store, main\_branch\_file.txt, new\_branch\_file.txt, and rebase.txt. The rebase.txt file was created 5 minutes ago with the commit message 'create new file for rebase practical'.

File	Commit Message	Time
.DS_Store	1st commit and 1 file created	1 hour ago
main_branch_file.txt	1st commit and 1 file created	1 hour ago
new_branch_file.txt	created new branch and file for pull request	54 minutes ago
rebase.txt	create new file for rebase practical	5 minutes ago

New\_branch



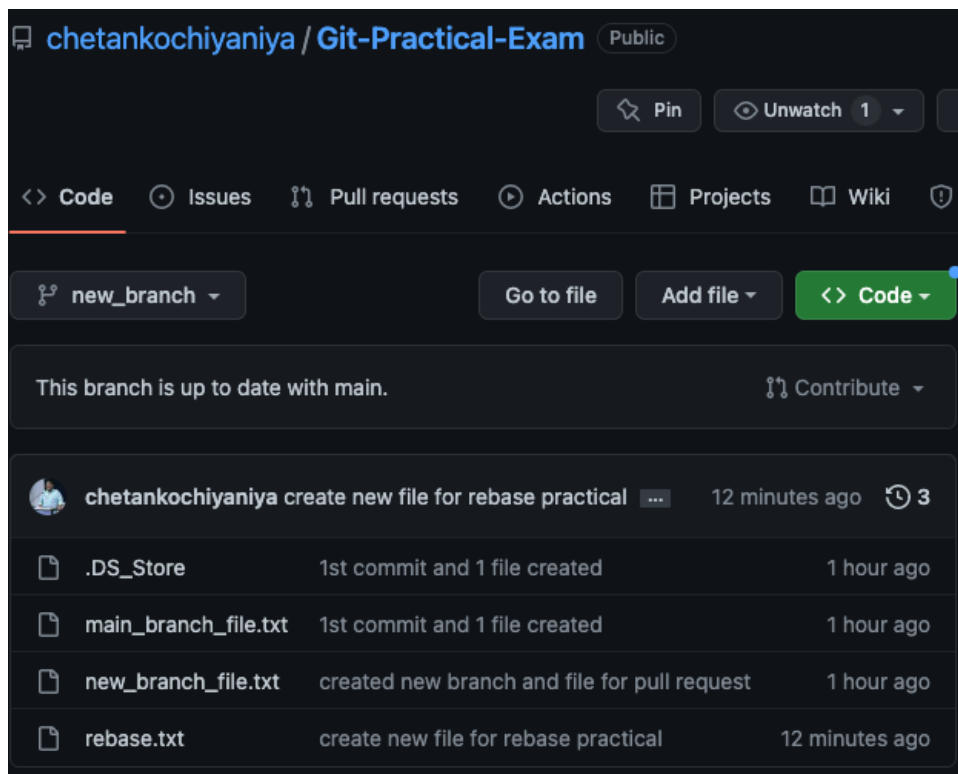


Rebase command :

```
● chetan@SF-CPU-3 Git Practical Exam % git rebase main new_branch
Successfully rebased and updated refs/heads/new_branch.
● chetan@SF-CPU-3 Git Practical Exam % git pull
Already up to date.
● chetan@SF-CPU-3 Git Practical Exam % git push
Total 0 (delta 0), reused 0 (delta 0), pack-reused 0
To https://github.com/chetakochiyaniya/Git-Practical-Exam.git
f1ba603..df15f0f new_branch -> new_branch
○ chetan@SF-CPU-3 Git Practical Exam %
```

Output:

Preform rebase branch -> main branch to new\_branch

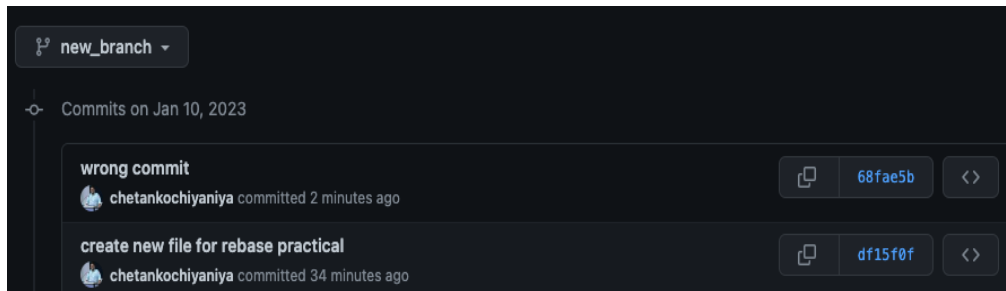


### 3. Change commit message

- Initial commit :

```
chetan@SF-CPU-3 Git Practical Exam % git branch
main
* new_branch
chetan@SF-CPU-3 Git Practical Exam % echo "add new file for commit chnage task" >> commit_chnage.txt
chetan@SF-CPU-3 Git Practical Exam % git add .
chetan@SF-CPU-3 Git Practical Exam % git commit -m "wrong commit"
[new_branch 68fae5b] wrong commit
1 file changed, 1 insertion(+)
create mode 100644 commit_chnage.txt
chetan@SF-CPU-3 Git Practical Exam % git push
Enumerating objects: 4, done.
Counting objects: 100% (4/4), done.
Delta compression using up to 4 threads
Compressing objects: 100% (2/2), done.
Writing objects: 100% (3/3), 314 bytes | 314.00 KiB/s, done.
Total 3 (delta 1), reused 0 (delta 0), pack-reused 0
remote: Resolving deltas: 100% (1/1), completed with 1 local object.
To https://github.com/chetankochiyaniya/Git-Practical-Exam.git
df15f0f..68fae5b new_branch -> new_branch
chetan@SF-CPU-3 Git Practical Exam %
```

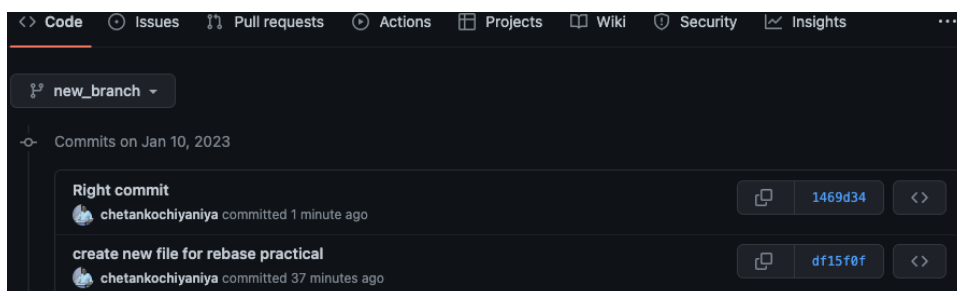
## Wrong commit :



## Commit message change:

```
● chetan@SF-CPU-3 Git Practical Exam % git commit --amend
[new_branch 1469d34] Right commit
Date: Tue Jan 10 16:46:00 2023 +0530
1 file changed, 1 insertion(+)
create mode 100644 commit_chnage.txt
● chetan@SF-CPU-3 Git Practical Exam % git push -f
Enumerating objects: 4, done.
Counting objects: 100% (4/4), done.
Delta compression using up to 4 threads
Compressing objects: 100% (2/2), done.
Writing objects: 100% (3/3), 319 bytes | 319.00 KiB/s, done.
Total 3 (delta 1), reused 0 (delta 0), pack-reused 0
remote: Resolving deltas: 100% (1/1), completed with 1 local object.
To https://github.com/chetankochiyaniya/Git-Practical-Exam.git
+ 68fae5b...1469d34 new_branch -> new_branch (forced update)
○ chetan@SF-CPU-3 Git Practical Exam %
```

## Output:

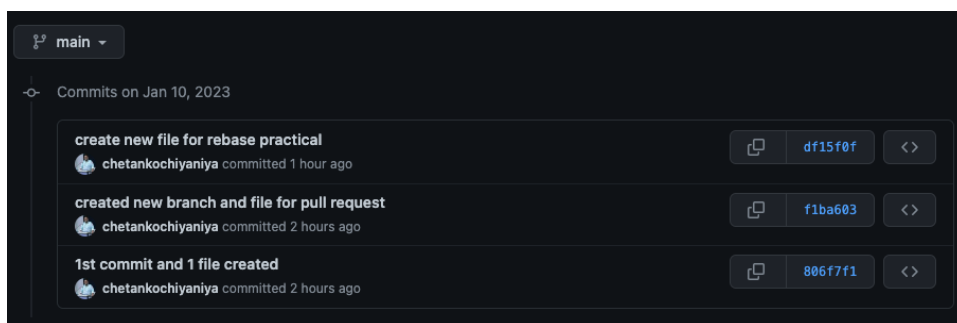


#### 4. cherry pick

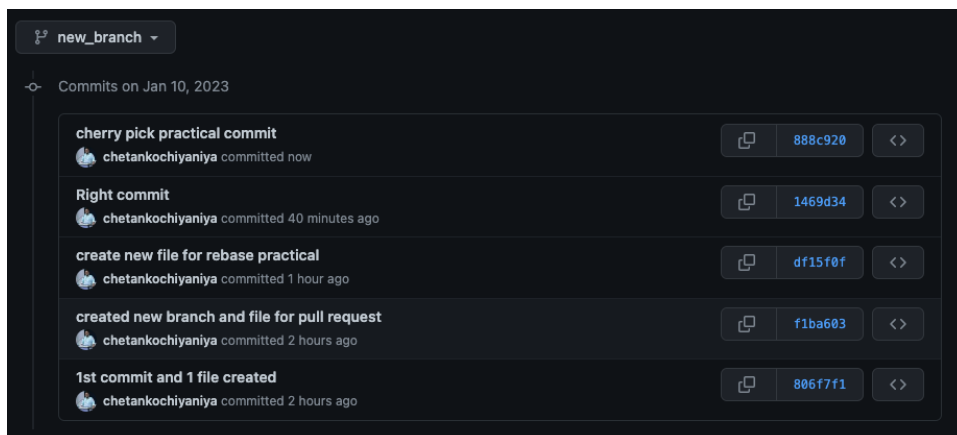
Before cherry pick in new\_branch to main branch

Before cherry pick :

Main branch commit :



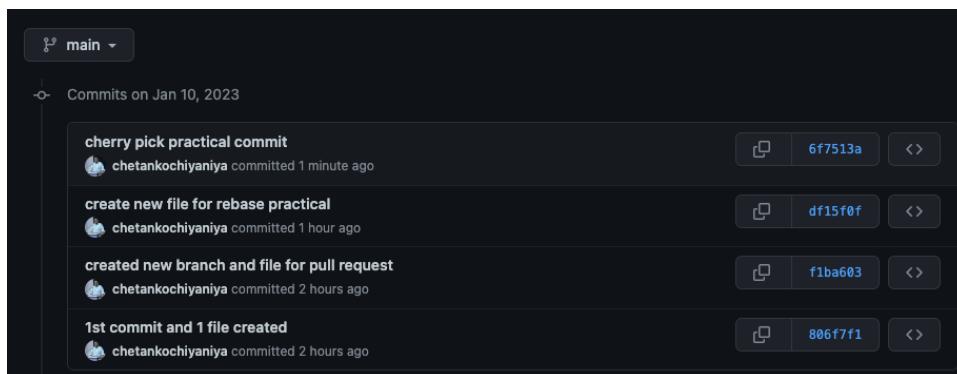
New\_branch commits:



Cherry-pick:

```
● chetan@SF-CPU-3 Git Practical Exam % git branch
* main
  new_branch
● chetan@SF-CPU-3 Git Practical Exam % git cherry-pick 888c9207c3346d73d21d7cea3ea7a47fc2b88fa0
[main 6f7513a] cherry pick practical commit
Date: Tue Jan 10 17:29:05 2023 +0530
1 file changed, 1 insertion(+)
create mode 100644 cherrypick.txt
● chetan@SF-CPU-3 Git Practical Exam % git push
Enumerating objects: 4, done.
Counting objects: 100% (4/4), done.
Delta compression using up to 4 threads
Compressing objects: 100% (2/2), done.
Writing objects: 100% (3/3), 301 bytes | 301.00 KiB/s, done.
Total 3 (delta 1), reused 0 (delta 0), pack-reused 0
remote: Resolving deltas: 100% (1/1), completed with 1 local object.
To https://github.com/chetankochiyaniya/Git-Practical-Exam.git
df15f0f..6f7513a main -> main
○ chetan@SF-CPU-3 Git Practical Exam %
```

output:

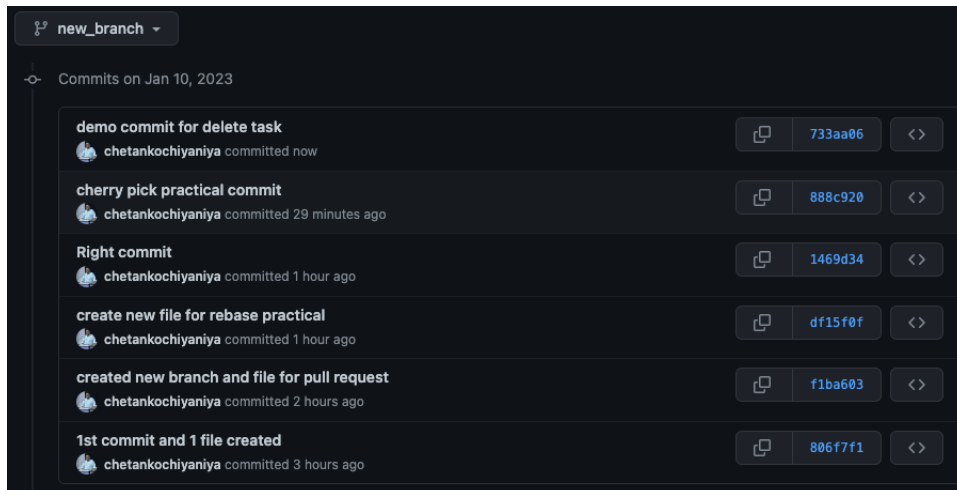


The screenshot shows the GitHub interface for the 'main' branch. It displays a list of commits on Jan 10, 2023. The commits are listed in reverse chronological order, showing the most recent commit at the top. Each commit entry includes a description, the author's name (chetankochiyaniya), the time since the commit was made, a copy icon, the commit hash, and a compare icon.

Commit Description	Author	Time	Hash
cherry pick practical commit	chetankochiyaniya	committed 1 minute ago	6f7513a
create new file for rebase practical	chetankochiyaniya	committed 1 hour ago	df15f0f
created new branch and file for pull request	chetankochiyaniya	committed 2 hours ago	f1ba603
1st commit and 1 file created	chetankochiyaniya	committed 2 hours ago	806f7f1

## 5 Drop commit

- Before Drop the commit :



Drop commit :


```
● chetan@SF-CPU-3 Git Practical Exam % git branch
  main
  * new_branch
● chetan@SF-CPU-3 Git Practical Exam % git reset --soft HEAD~1
● chetan@SF-CPU-3 Git Practical Exam % git push --force
Total 0 (delta 0), reused 0 (delta 0), pack-reused 0
To https://github.com/chetankochiyaniya/Git-Practical-Exam.git
+ 733aa06...888c920 new_branch -> new_branch (forced update)
○ chetan@SF-CPU-3 Git Practical Exam %
```



Output:

new\_branch


Commits on Jan 10, 2023



cherry pick practical commit

 chetankochiyaniya committed 33 minutes ago


 888c920 



Right commit

 chetankochiyaniya committed 1 hour ago


 1469d34 



create new file for rebase practical

 chetankochiyaniya committed 1 hour ago


 df15f0f 


created new branch and file for pull request

 chetankochiyaniya committed 2 hours ago

 f1ba603 

1st commit and 1 file created

 chetankochiyaniya committed 3 hours ago

 806f7f1 