SELF LEARNING BATCH 2025

Version Control using Git

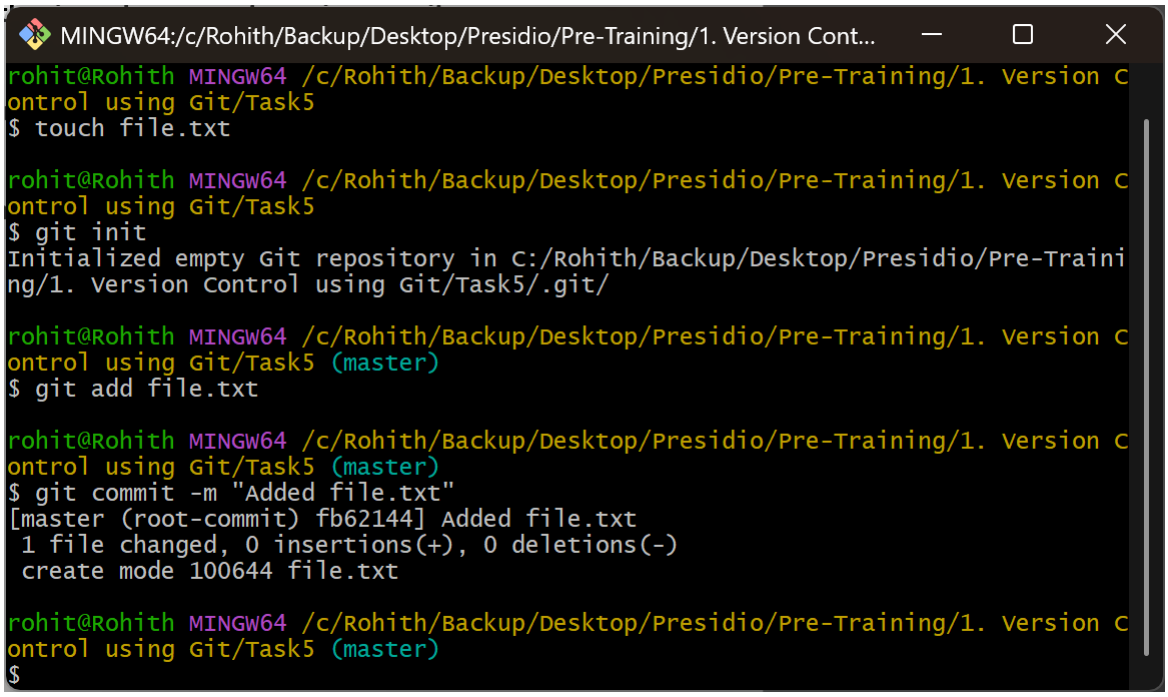
Interactive Rebasing for Clean Commit History

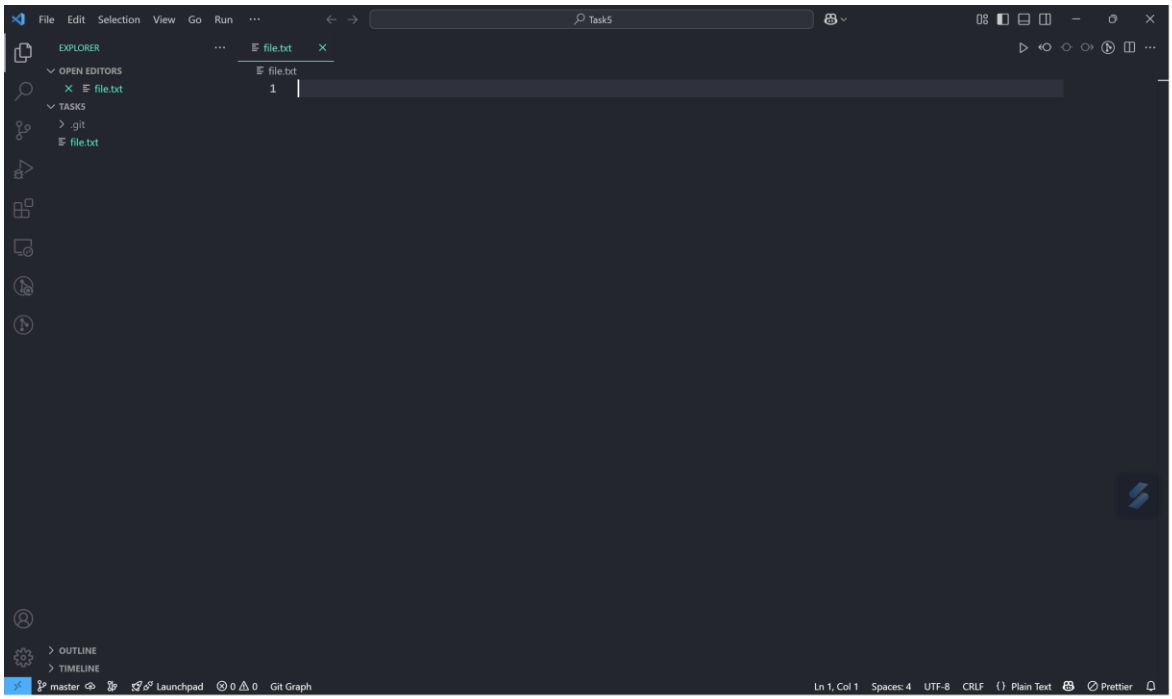
Objective:

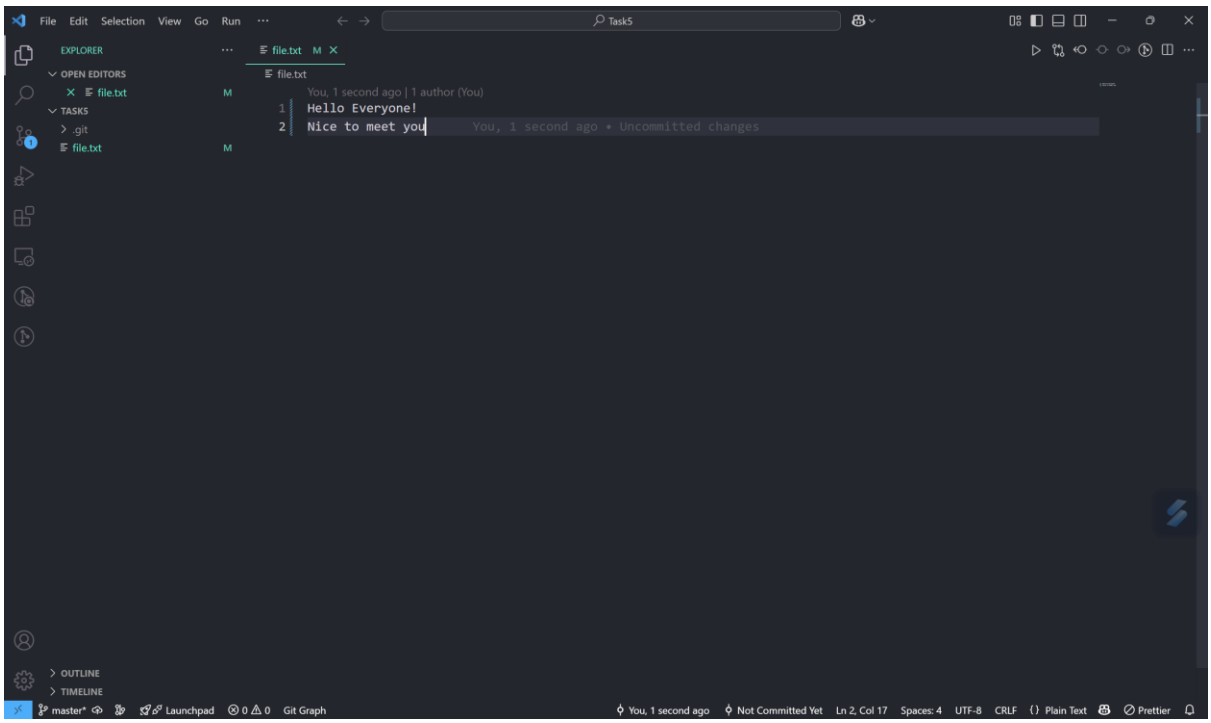
- **Use interactive rebase to tidy up your commit history.**

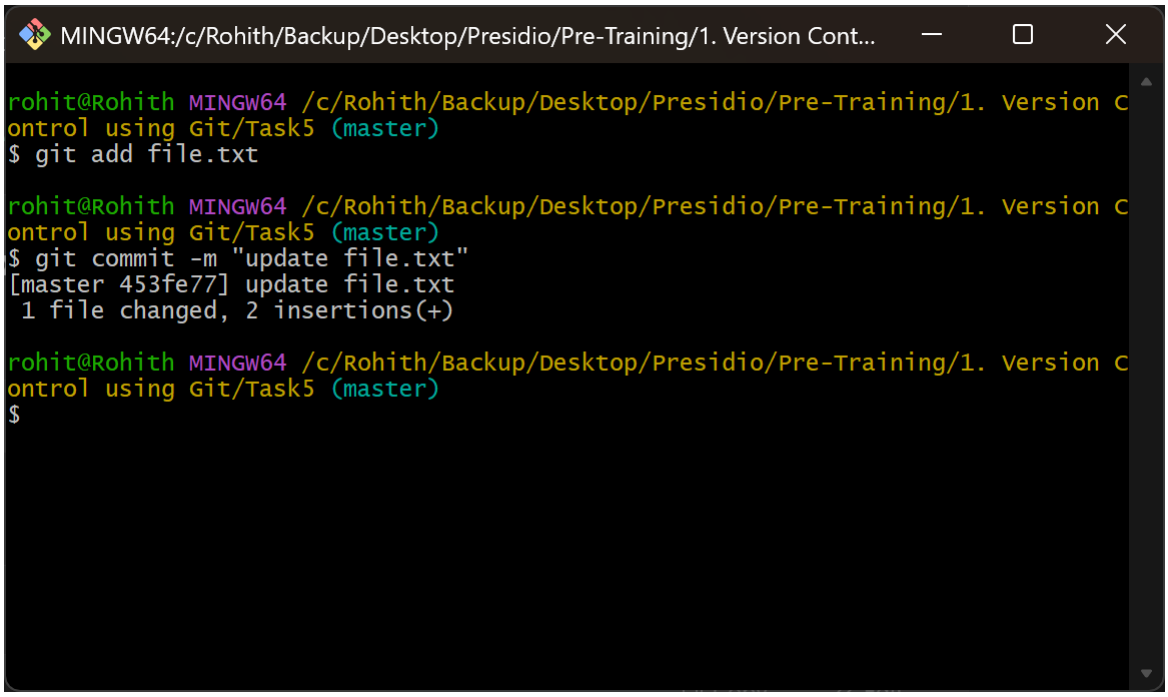
Requirements:

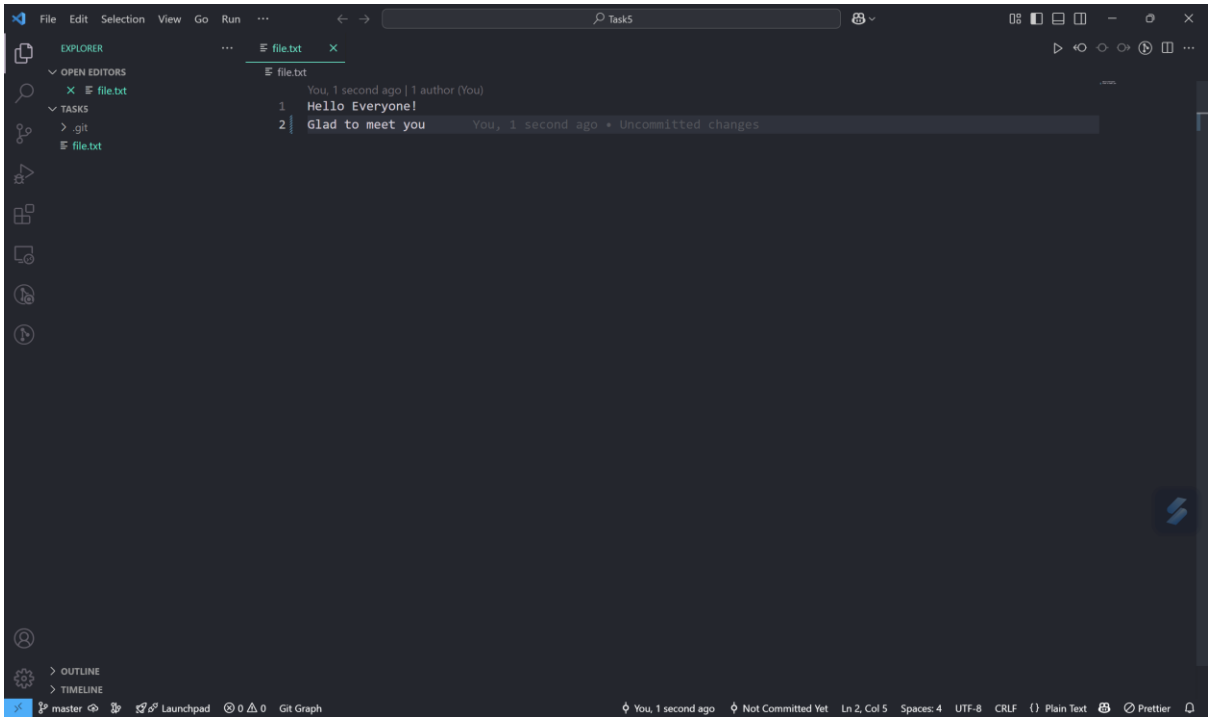
- **Create a series of commits (some with minor changes or typos in commit messages).**
- **Run git rebase -i HEAD~n (with n representing the number of commits) to squash, reorder, and edit commit messages.**
- **Explain how squashing helps in cleaning up commit history before merging into a main branch.**




File Edit Selection View Go Run
Task5
EXPLORER
file.txt
OPEN EDITORS
file.txt
TASKS
.git
file.txt
1
OUTLINE
TIMELINE
master
Launchpad
0 0
Git Graph
Ln 1, Col 1
Spaces: 4
UTF-8
CRLF
Plain Text
Prettier


File Edit Selection View Go Run
Task5
EXPLORER
file.txt M
OPEN EDITORS
file.txt
M
TASKS
.git
file.txt
M
You, 1 second ago | 1 author (You)
1 Hello Everyone!
2 Nice to meet you
You, 1 second ago • Uncommitted changes
OUTLINE
TIMELINE
master*
Launchpad
0 0
Git Graph
You, 1 second ago
Not Committed Yet
Ln 2, Col 17
Spaces: 4
UTF-8
CRLF
Plain Text
Prettier


MINGW64:/c/Rohith/Backup/Desktop/Presidio/Pre-Training/1. Version Cont...
rohit@Rohith MINGW64 /c/Rohith/Backup/Desktop/Presidio/Pre-Training/1. Version C
ontrol using Git/Task5 (master)
$ git add file.txt
rohit@Rohith MINGW64 /c/Rohith/Backup/Desktop/Presidio/Pre-Training/1. Version C
ontrol using Git/Task5 (master)
$ git commit -m "update file.txt"
[master 453fe77] update file.txt
1 file changed, 2 insertions(+)
rohit@Rohith MINGW64 /c/Rohith/Backup/Desktop/Presidio/Pre-Training/1. Version C
ontrol using Git/Task5 (master)
$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Task5
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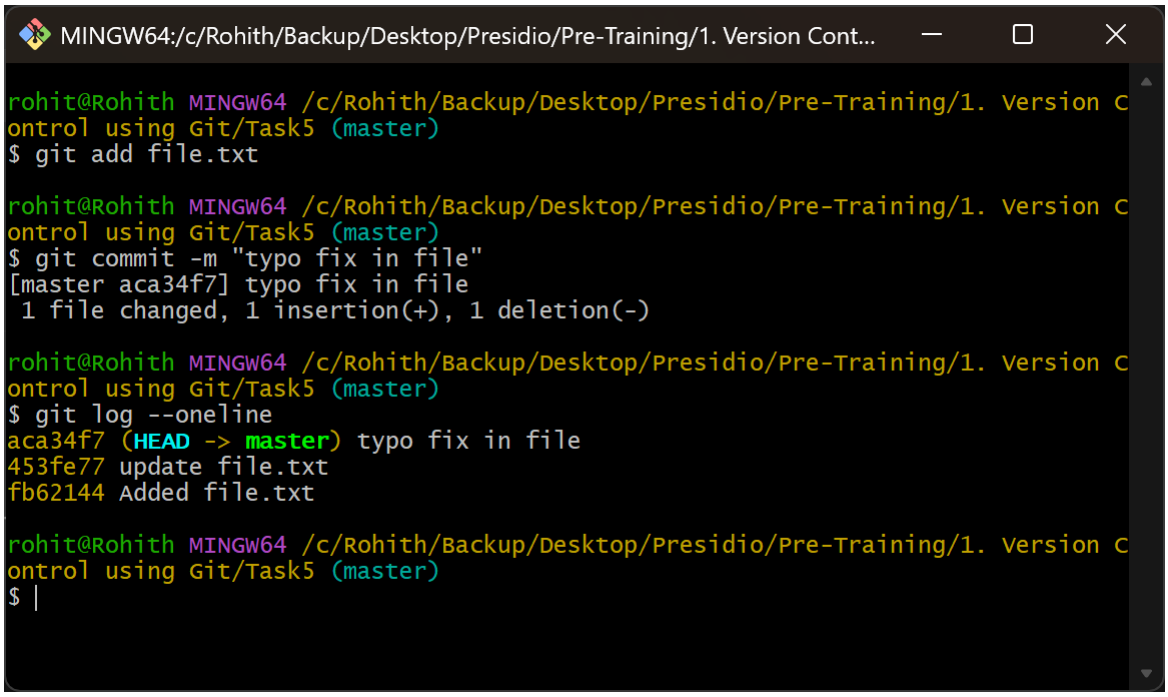
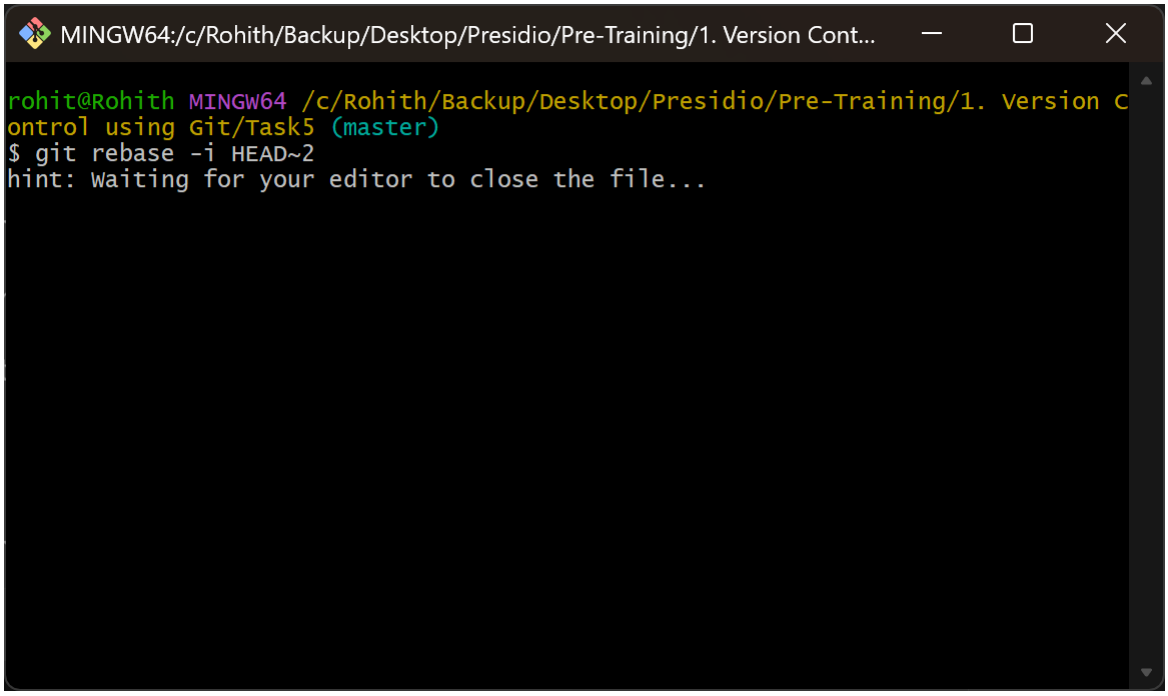
OPEN EDITORS
file.txt
TASK5
.git
file.txt
file.txt
file.txt
You, 1 second ago | 1 author (You)
1 Hello Everyone!
2 Glad to meet you
You, 1 second ago • Uncommitted changes
OUTLINE
TIMELINE
master
Launchpad
Git Graph
You, 1 second ago
Not Committed Yet
Ln 2, Col 5
Spaces: 4
UTF-8
CRLF
Plain Text
Prettier

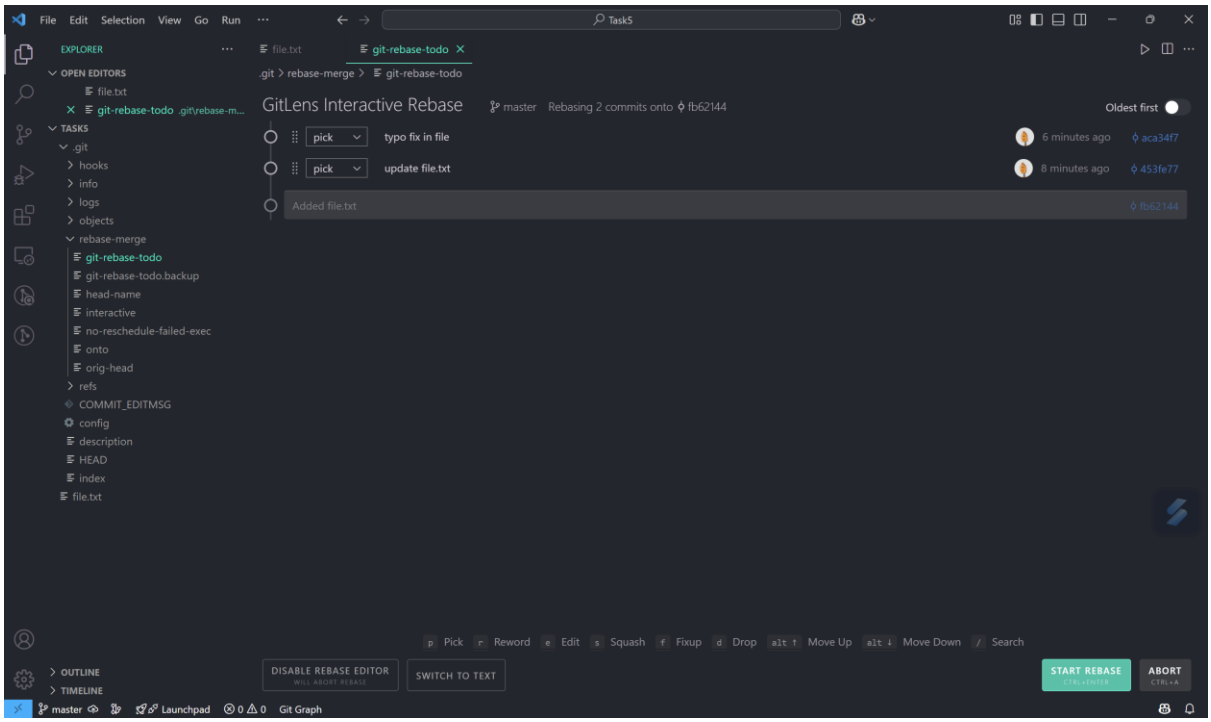


To clean up these commits, run:

git rebase -i HEAD~2

This tells Git that we want to modify the last 2 commits.

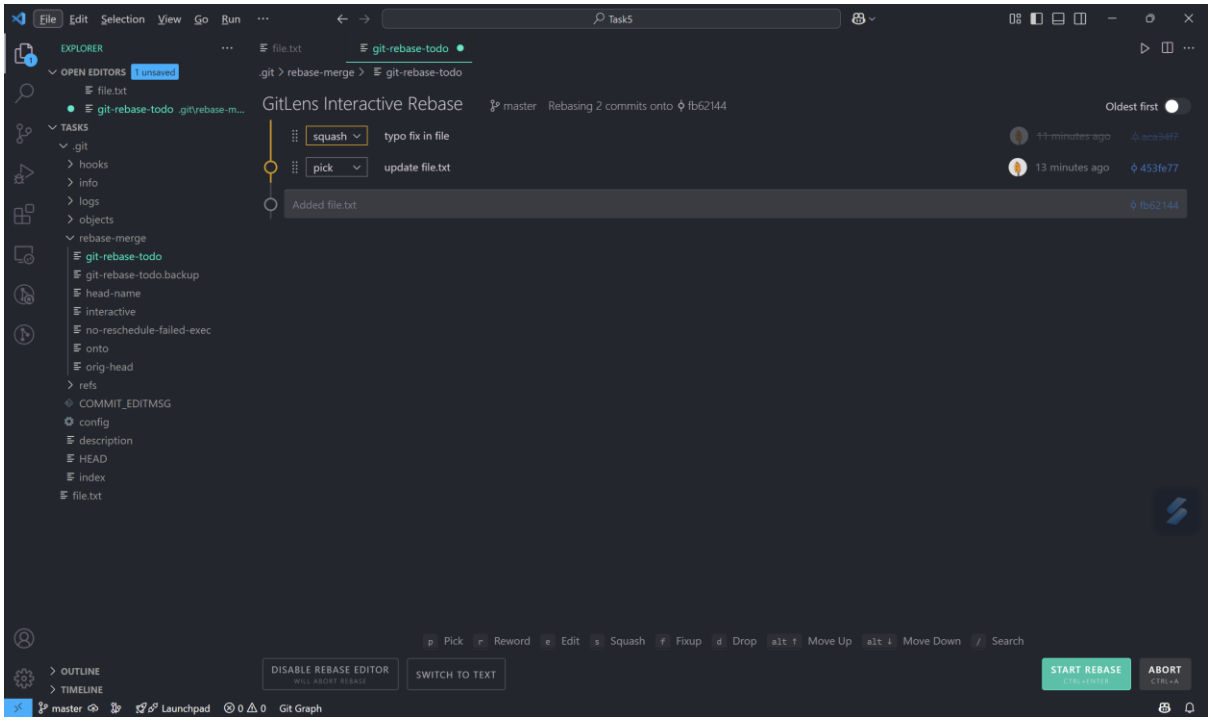




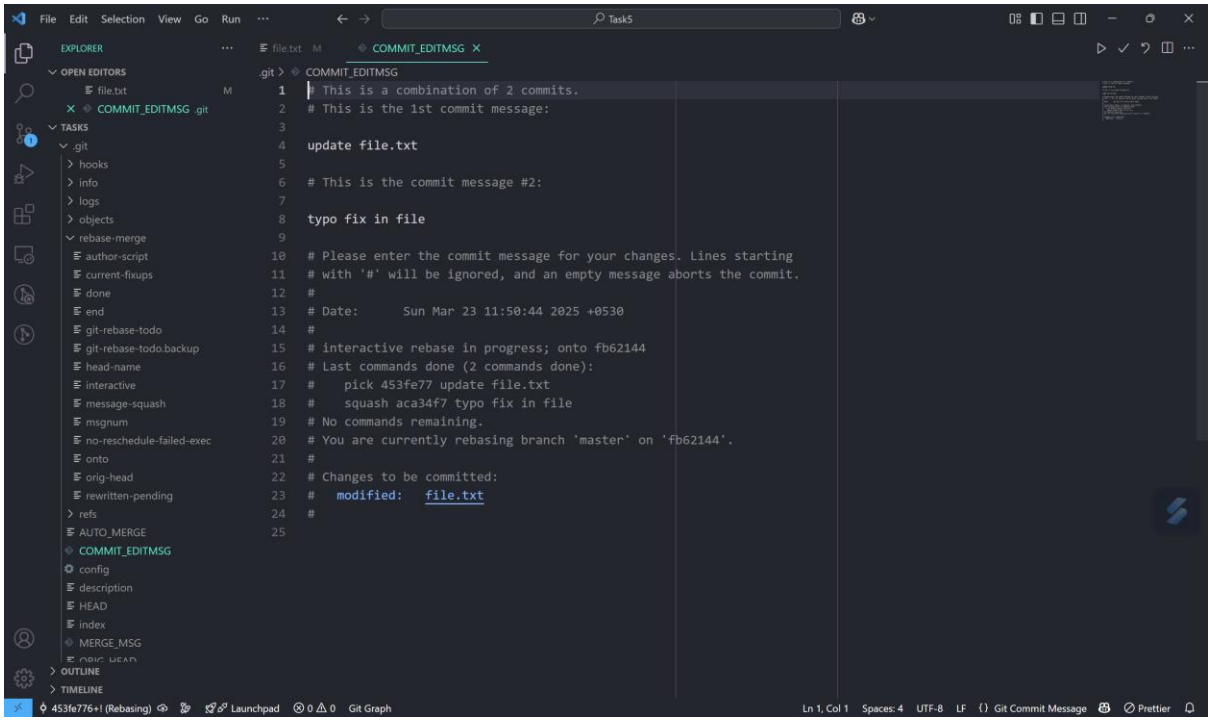
Actions You Can Perform

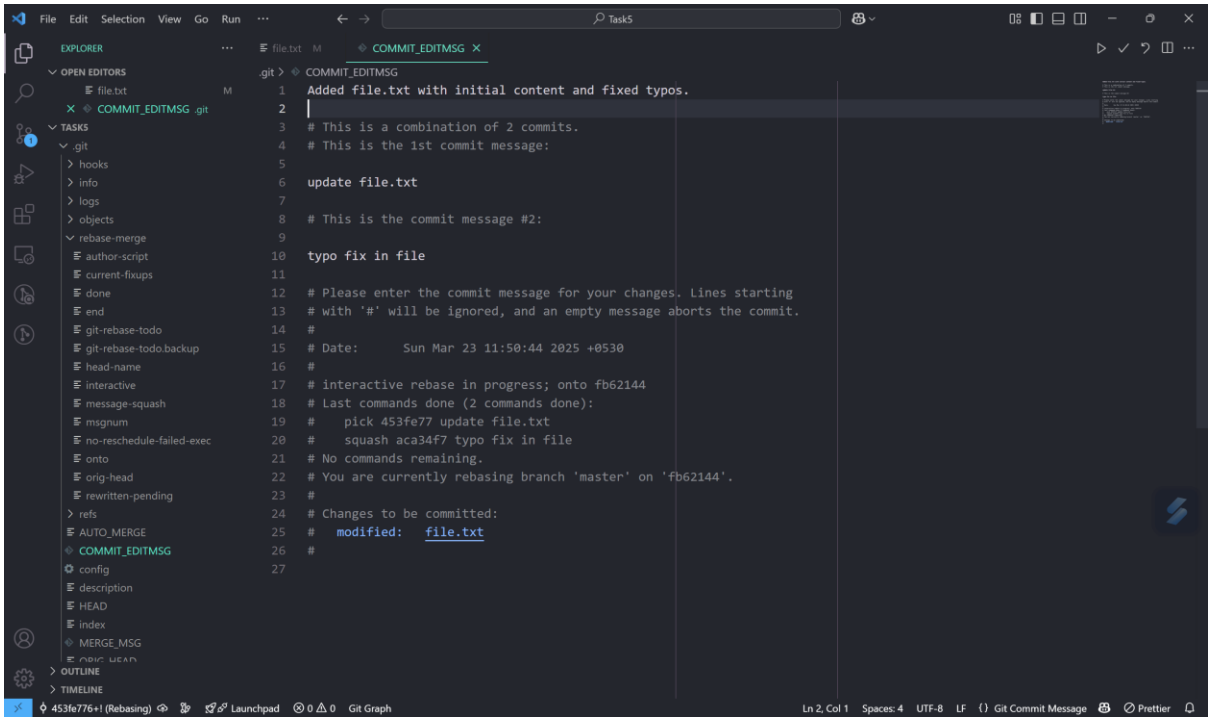
- pick → Keep the commit as is.
- reword → Change the commit message.
- squash (s) → Merge the commit with the previous commit.
- edit → Modify the commit contents.
- drop (d) → Delete the commit.

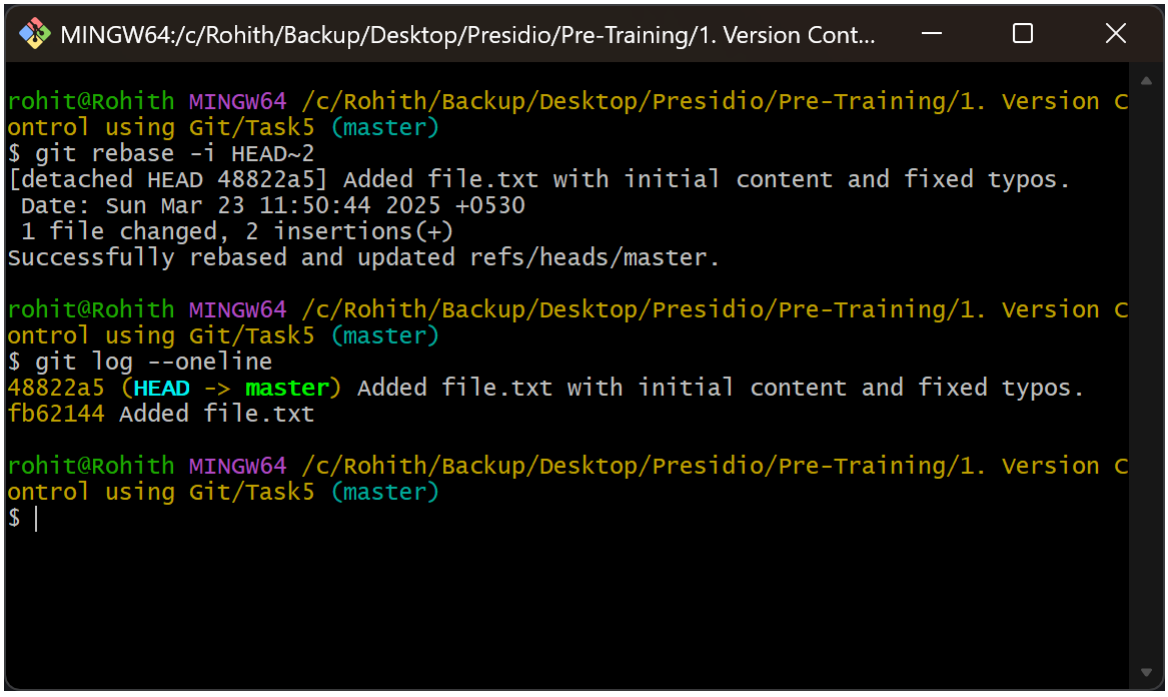
squash the two minor commits (update file.txt and typo fix in file) into the first commit:



After saving, Git asks you to modify the commit message:




File Edit Selection View Go Run
Task5
EXPLORER
OPEN EDITORS
file.txt M
COMMIT_EDITMSG .git
TASK5
.git
hooks
info
logs
objects
rebase-merge
author-script
current-fixups
done
end
git-rebase-todo
git-rebase-todo.backup
head-name
interactive
message-squash
msgnum
no-reschedule-failed-exec
onto
orig-head
rewritten-pending
refs
AUTO_MERGE
COMMIT_EDITMSG
config
description
HEAD
index
MERGE_MSG
OUTLINE
TIMELINE
file.txt M
COMMIT_EDITMSG
.git > COMMIT_EDITMSG
Added file.txt with initial content and fixed typos.
This is a combination of 2 commits.
This is the 1st commit message:
update file.txt
This is the commit message #2:
typo fix in file
Please enter the commit message for your changes. Lines starting
with '#' will be ignored, and an empty message aborts the commit.
Date: Sun Mar 23 11:50:44 2025 +0530
interactive rebase in progress; onto fb62144
Last commands done (2 commands done):
pick 453fe77 update file.txt
squash aca34f7 typo fix in file
No commands remaining.
You are currently rebasing branch 'master' on 'fb62144'.
Changes to be committed:
modified: file.txt
453fe776+| (Rebasing)
Launchpad
Git Graph
Ln 2, Col 1
Spaces: 4
UTF-8
LF
Git Commit Message
Prettier


MINGW64:/c/Rohith/Backup/Desktop/Presidio/Pre-Training/1. Version Cont...
rohit@Rohith MINGW64 /c/Rohith/Backup/Desktop/Presidio/Pre-Training/1. Version Control using Git/Task5 (master)
$ git rebase -i HEAD~2
[detached HEAD 48822a5] Added file.txt with initial content and fixed typos.
Date: Sun Mar 23 11:50:44 2025 +0530
1 file changed, 2 insertions(+)
Successfully rebased and updated refs/heads/master.
rohit@Rohith MINGW64 /c/Rohith/Backup/Desktop/Presidio/Pre-Training/1. Version Control using Git/Task5 (master)
$ git log --oneline
48822a5 (HEAD -> master) Added file.txt with initial content and fixed typos.
fb62144 Added file.txt
rohit@Rohith MINGW64 /c/Rohith/Backup/Desktop/Presidio/Pre-Training/1. Version Control using Git/Task5 (master)
$