

SELF LEARNING BATCH 2025

Version Control using Git

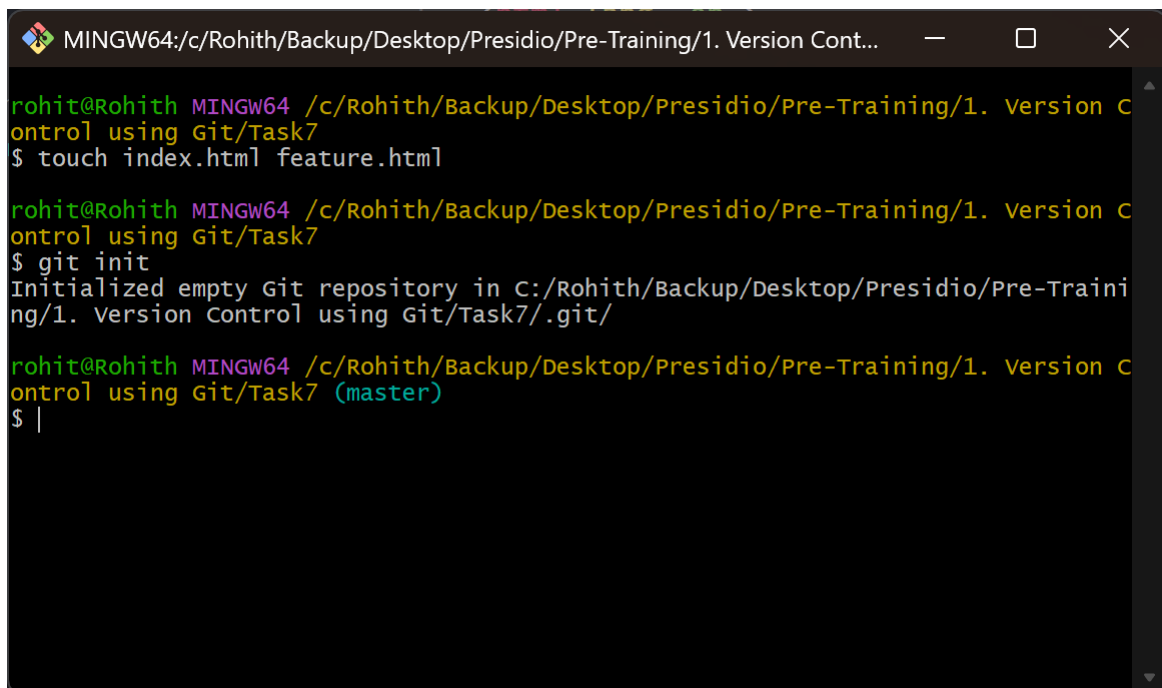
Cherry-Picking Commits Between Branches

Objective:

- Selectively apply a commit from one branch to another using cherry-pick.

Requirements:

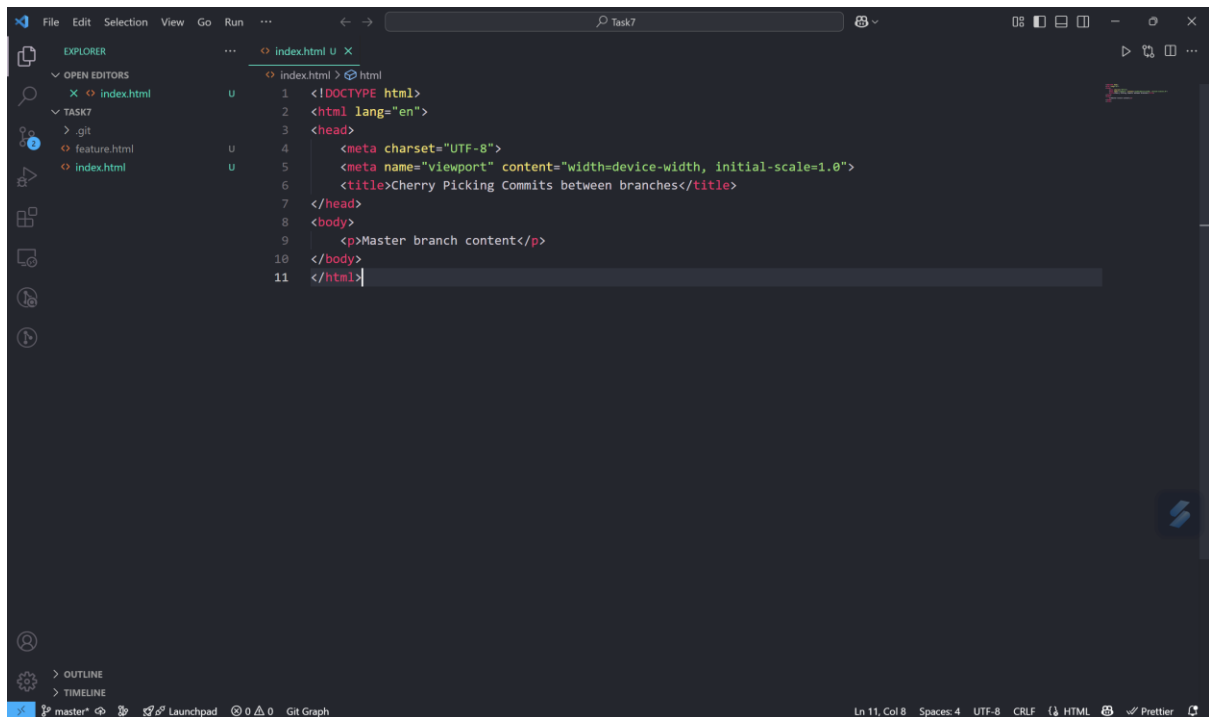
- Create two branches with distinct commits.
- Identify a commit on one branch that you want to apply to the other.
- Use `git cherry-pick <commit-hash>` to apply the commit and handle any conflicts if they arise.
- Verify the commit history to ensure the cherry-picked commit is present.



```
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/Task7
$ touch index.html feature.html

rohit@Rohith MINGW64 /c/Rohith/Backup/Desktop/Presidio/Pre-Training/1. Version C
ontrol using Git/Task7
$ git init
Initialized empty Git repository in C:/Rohith/Backup/Desktop/Presidio/Pre-Traini
ng/1. Version Control using Git/Task7/.git/

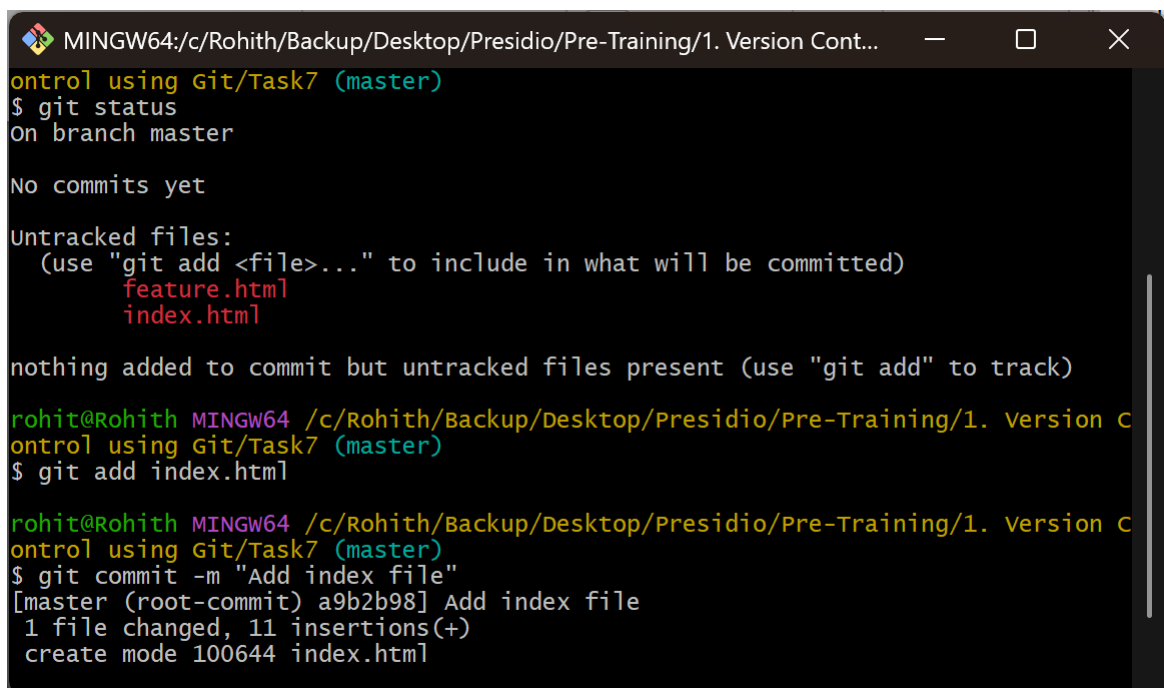
rohit@Rohith MINGW64 /c/Rohith/Backup/Desktop/Presidio/Pre-Training/1. Version C
ontrol using Git/Task7 (master)
$ |
```



The image shows a Visual Studio Code editor window with a dark theme. The Explorer sidebar on the left shows a project structure with 'TASK7' containing 'feature.html' and 'index.html'. The main editor area displays the content of 'index.html'. The code is as follows:

```
1 <!DOCTYPE html>
2 <html lang="en">
3 <head>
4   <meta charset="UTF-8">
5   <meta name="viewport" content="width=device-width, initial-scale=1.0">
6   <title>Cherry Picking Commits between branches</title>
7 </head>
8 <body>
9   <p>Master branch content</p>
10 </body>
11 </html>
```

The status bar at the bottom indicates 'Ln 11, Col 8', 'Spaces: 4', 'UTF-8', 'CRLF', and 'HTML'.



The image shows a terminal window with the title 'MINGW64:/c/Rohith/Backup/Desktop/Presidio/Pre-Training/1. Version Cont...'. The terminal output is as follows:

```
rohit@Rohith MINGW64 /c/Rohith/Backup/Desktop/Presidio/Pre-Training/1. Version Cont...
$ git status
On branch master

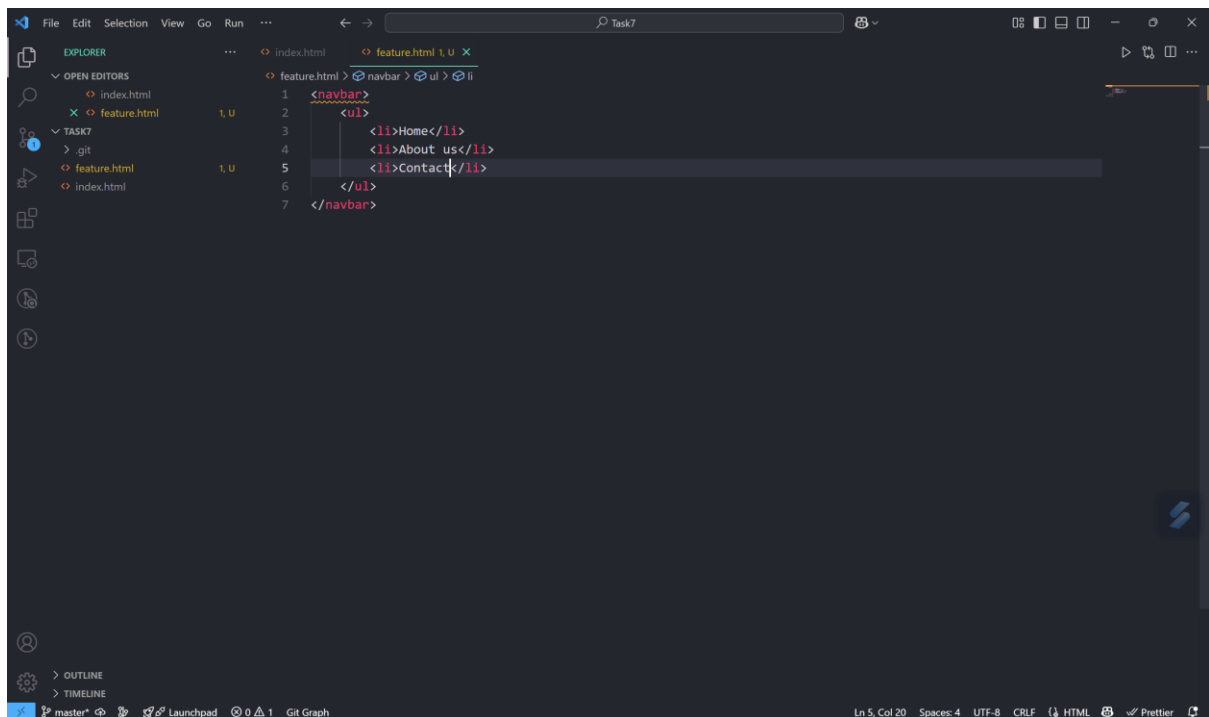
No commits yet

Untracked files:
  (use "git add <file>..." to include in what will be committed)
    feature.html
    index.html

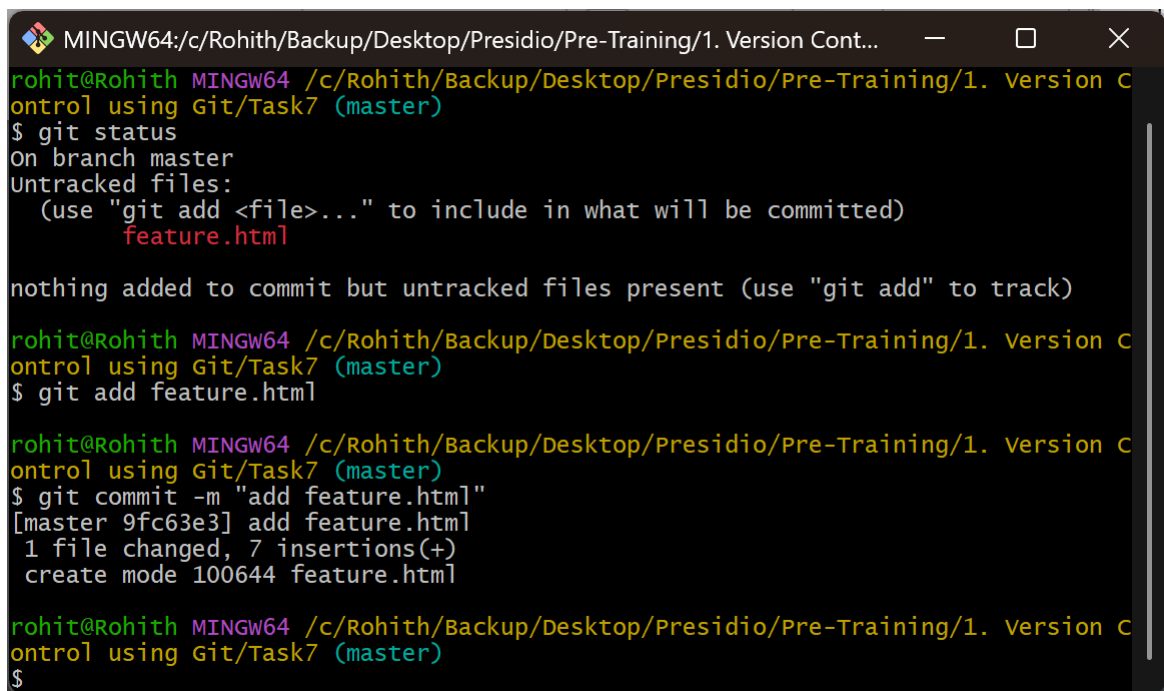
nothing added to commit but untracked files present (use "git add" to track)

rohit@Rohith MINGW64 /c/Rohith/Backup/Desktop/Presidio/Pre-Training/1. Version Cont...
$ git add index.html

rohit@Rohith MINGW64 /c/Rohith/Backup/Desktop/Presidio/Pre-Training/1. Version Cont...
$ git commit -m "Add index file"
[master (root-commit) a9b2b98] Add index file
1 file changed, 11 insertions(+)
create mode 100644 index.html
```



```
1 <nav>
2 <ul>
3   <li>Home</li>
4   <li>About us</li>
5   <li>Contact</li>
6 </ul>
7 </nav>
```



```
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/Task7 (master)
$ git status
On branch master
Untracked files:
  (use "git add <file>..." to include in what will be committed)
    feature.html

nothing added to commit but untracked files present (use "git add" to track)

rohit@Rohith MINGW64 /c/Rohith/Backup/Desktop/Presidio/Pre-Training/1. Version C
ontrol using Git/Task7 (master)
$ git add feature.html

rohit@Rohith MINGW64 /c/Rohith/Backup/Desktop/Presidio/Pre-Training/1. Version C
ontrol using Git/Task7 (master)
$ git commit -m "add feature.html"
[master 9fc63e3] add feature.html
1 file changed, 7 insertions(+)
create mode 100644 feature.html

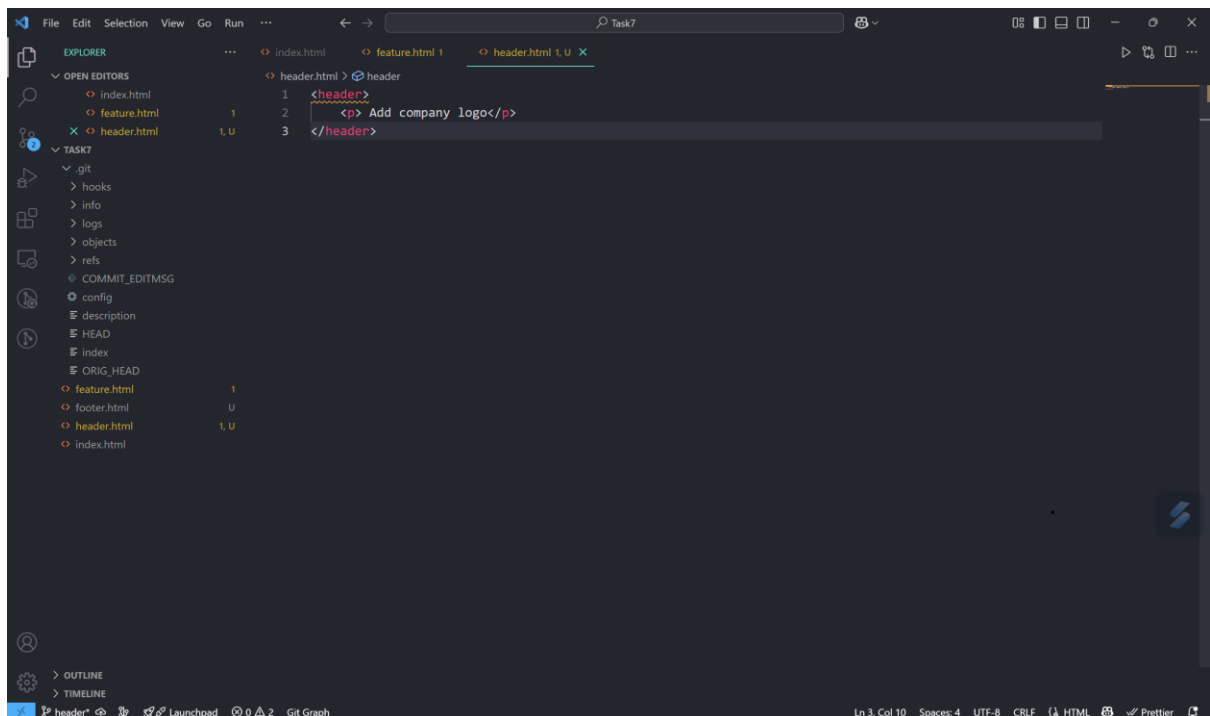
rohit@Rohith MINGW64 /c/Rohith/Backup/Desktop/Presidio/Pre-Training/1. Version C
ontrol using Git/Task7 (master)
$
```

```
MINGW64:/c/Rohith/Backup/Desktop/Presidio/Pre-Training/1. Version Cont...
rohit@Rohith MINGW64 /c/Rohith/Backup/Desktop/Presidio/Pre-Training/1. Version Cont...
$ git checkout master
Switched to branch 'master'
$ git branch header
fatal: a branch named 'header' already exists

rohit@Rohith MINGW64 /c/Rohith/Backup/Desktop/Presidio/Pre-Training/1. Version Cont...
$ git checkout header
Switched to branch 'header'

rohit@Rohith MINGW64 /c/Rohith/Backup/Desktop/Presidio/Pre-Training/1. Version Cont...
$ touch header.html footer.html

rohit@Rohith MINGW64 /c/Rohith/Backup/Desktop/Presidio/Pre-Training/1. Version Cont...
$ |
```



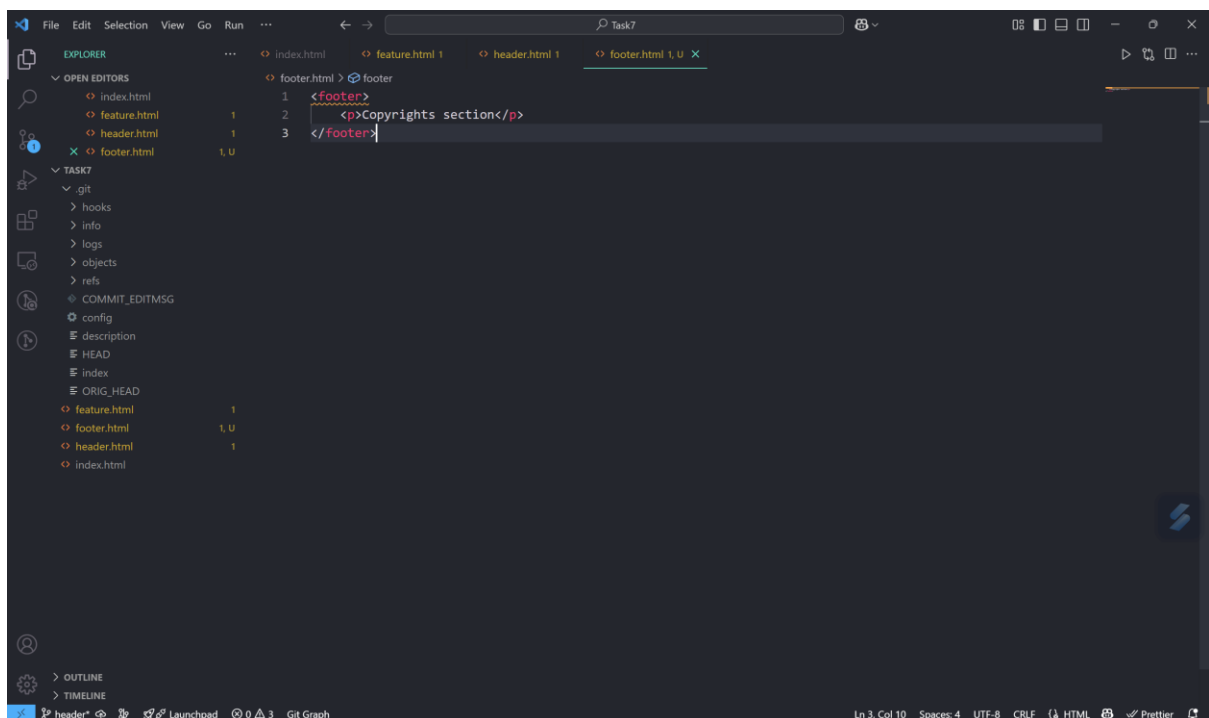
```
MINGW64:/c/Rohith/Backup/Desktop/Presidio/Pre-Training/1. Version Cont...
ontrol using Git/Task7 (header)
$ git status
On branch header
Untracked files:
  (use "git add <file>..." to include in what will be committed)
        footer.html
        header.html

nothing added to commit but untracked files present (use "git add" to track)

rohit@Rohith MINGW64 /c/Rohith/Backup/Desktop/Presidio/Pre-Training/1. Version C
ontrol using Git/Task7 (header)
$ git add header.html

rohit@Rohith MINGW64 /c/Rohith/Backup/Desktop/Presidio/Pre-Training/1. Version C
ontrol using Git/Task7 (header)
$ git commit -m "add header.html"
[header dc6cb93] add header.html
1 file changed, 3 insertions(+)
create mode 100644 header.html

rohit@Rohith MINGW64 /c/Rohith/Backup/Desktop/Presidio/Pre-Training/1. Version C
ontrol using Git/Task7 (header)
$ |
```

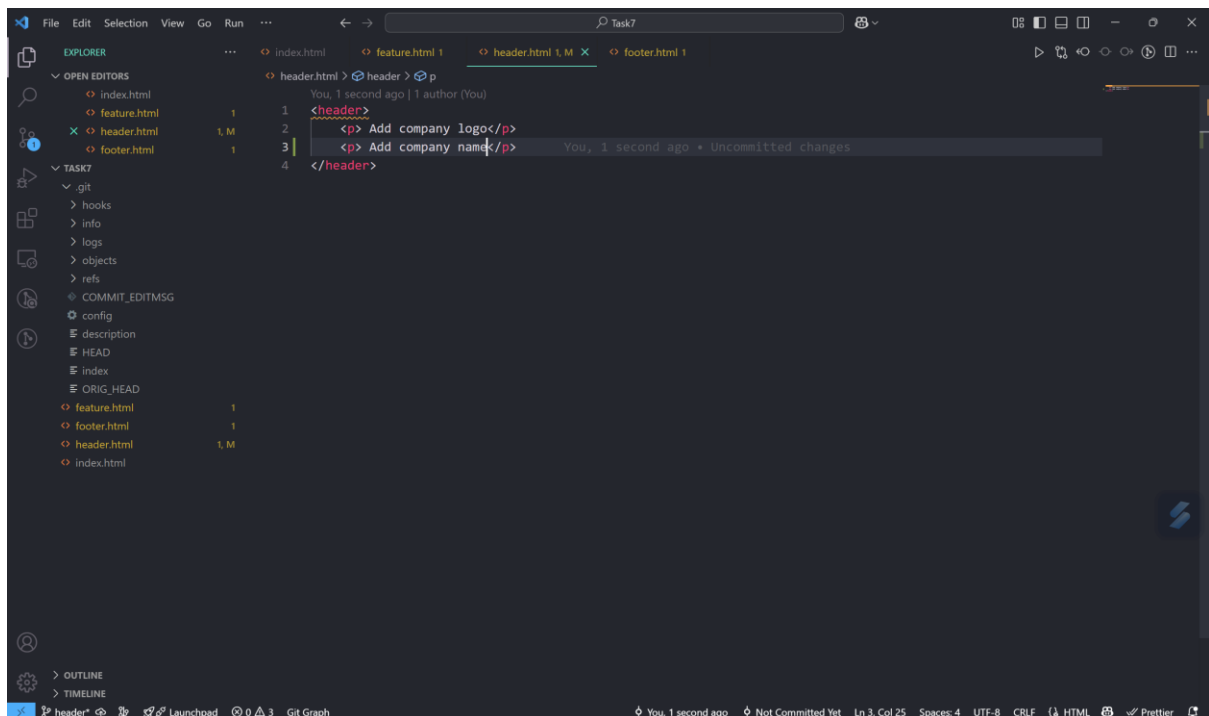


```
MINGW64:/c/Rohith/Backup/Desktop/Presidio/Pre-Training/1. Version Cont...
rohit@Rohith MINGW64 /c/Rohith/Backup/Desktop/Presidio/Pre-Training/1. Version C
ontrol using Git/Task7 (header)
$ git add footer.html

rohit@Rohith MINGW64 /c/Rohith/Backup/Desktop/Presidio/Pre-Training/1. Version C
ontrol using Git/Task7 (header)
$ git commit -m "add footer.html"
[header 79a7911] add footer.html
1 file changed, 3 insertions(+)
create mode 100644 footer.html

rohit@Rohith MINGW64 /c/Rohith/Backup/Desktop/Presidio/Pre-Training/1. Version C
ontrol using Git/Task7 (header)
$ git branch
* header
  master

rohit@Rohith MINGW64 /c/Rohith/Backup/Desktop/Presidio/Pre-Training/1. Version C
ontrol using Git/Task7 (header)
$ git status
On branch header
nothing to commit, working tree clean
```



```
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/Task7 (header)
$ git add header.html

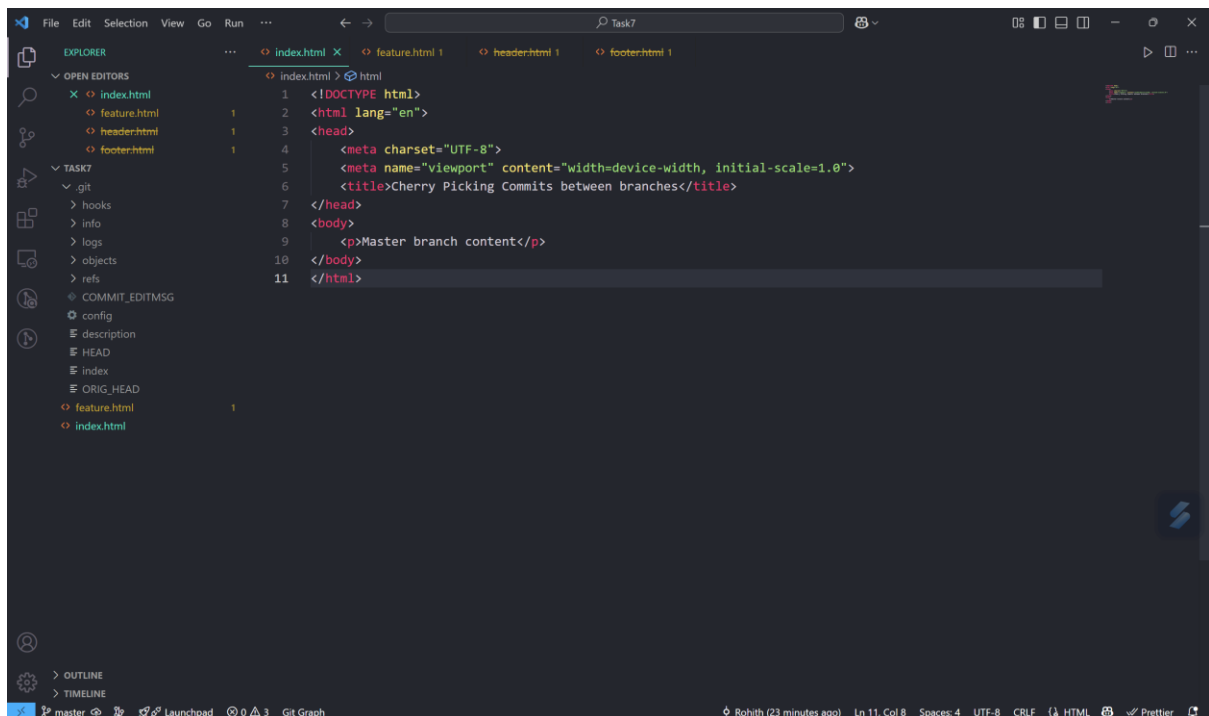
rohit@Rohith MINGW64 /c/Rohith/Backup/Desktop/Presidio/Pre-Training/1. Version C
ontrol using Git/Task7 (header)
$ git commit -m "update header.html"
>
[header 80be875] update header.html
1 file changed, 1 insertion(+)

rohit@Rohith MINGW64 /c/Rohith/Backup/Desktop/Presidio/Pre-Training/1. Version C
ontrol using Git/Task7 (header)
$ git branch
* header
  master

rohit@Rohith MINGW64 /c/Rohith/Backup/Desktop/Presidio/Pre-Training/1. Version C
ontrol using Git/Task7 (header)
$ git checkout master
Switched to branch 'master'

rohit@Rohith MINGW64 /c/Rohith/Backup/Desktop/Presidio/Pre-Training/1. Version C
```

Master branch



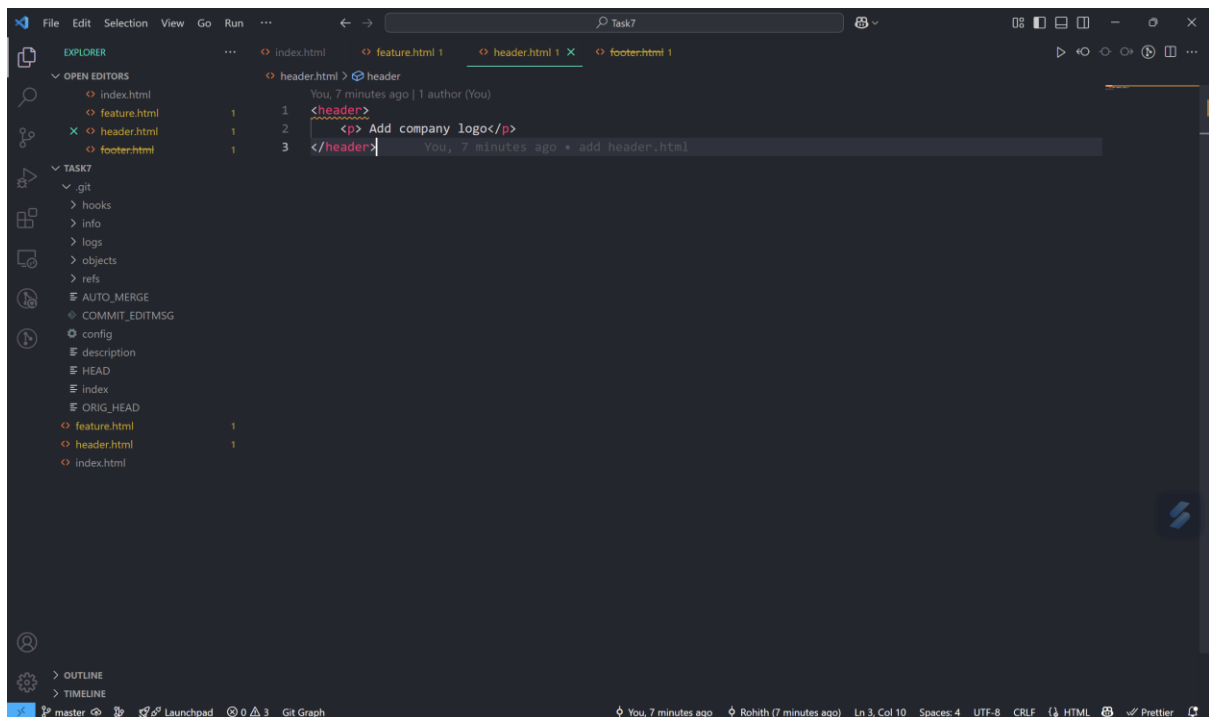
The screenshot shows the Visual Studio Code interface. The Explorer sidebar on the left displays the file structure of a project. Under the 'TASK7' folder, there is a '.git' directory and several files: 'index.html', 'feature.html', 'header.html', and 'footer.html'. The 'index.html' file is selected and its content is visible in the main editor area. The content of 'index.html' is an HTML document with a DOCTYPE declaration, a lang attribute set to 'en', a head section with a charset of 'UTF-8' and a viewport meta tag, and a body section containing the text 'Master branch content'.

```
1 <!DOCTYPE html>
2 <html lang="en">
3 <head>
4   <meta charset="UTF-8">
5   <meta name="viewport" content="width=device-width, initial-scale=1.0">
6   <title>Cherry Picking Commits between branches</title>
7 </head>
8 <body>
9   <p>Master branch content</p>
10 </body>
11 </html>
```

```
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/Task7 (master)
$ git log header --oneline
80be875 (header) update header.html
79a7911 add footer.html
dc6cb93 add header.html
9fc63e3 (HEAD -> master) add feature.html
a9b2b98 Add index file

rohit@Rohith MINGW64 /c/Rohith/Backup/Desktop/Presidio/Pre-Training/1. Version C
ontrol using Git/Task7 (master)
$ git cherry-pick dc6cb93
[master a5f44c2] add header.html
Date: Sun Mar 23 16:26:30 2025 +0530
1 file changed, 3 insertions(+)
create mode 100644 header.html

rohit@Rohith MINGW64 /c/Rohith/Backup/Desktop/Presidio/Pre-Training/1. Version C
ontrol using Git/Task7 (master)
$ git log --oneline
a5f44c2 (HEAD -> master) add header.html
9fc63e3 add feature.html
a9b2b98 Add index file
```

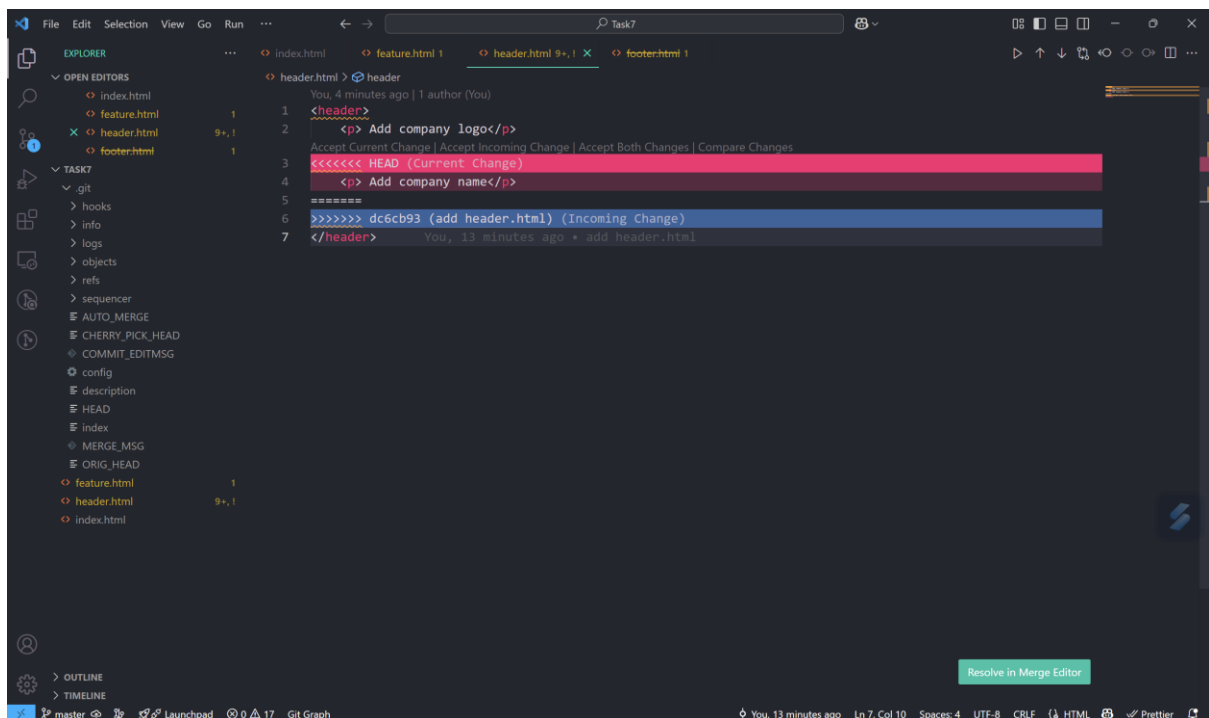


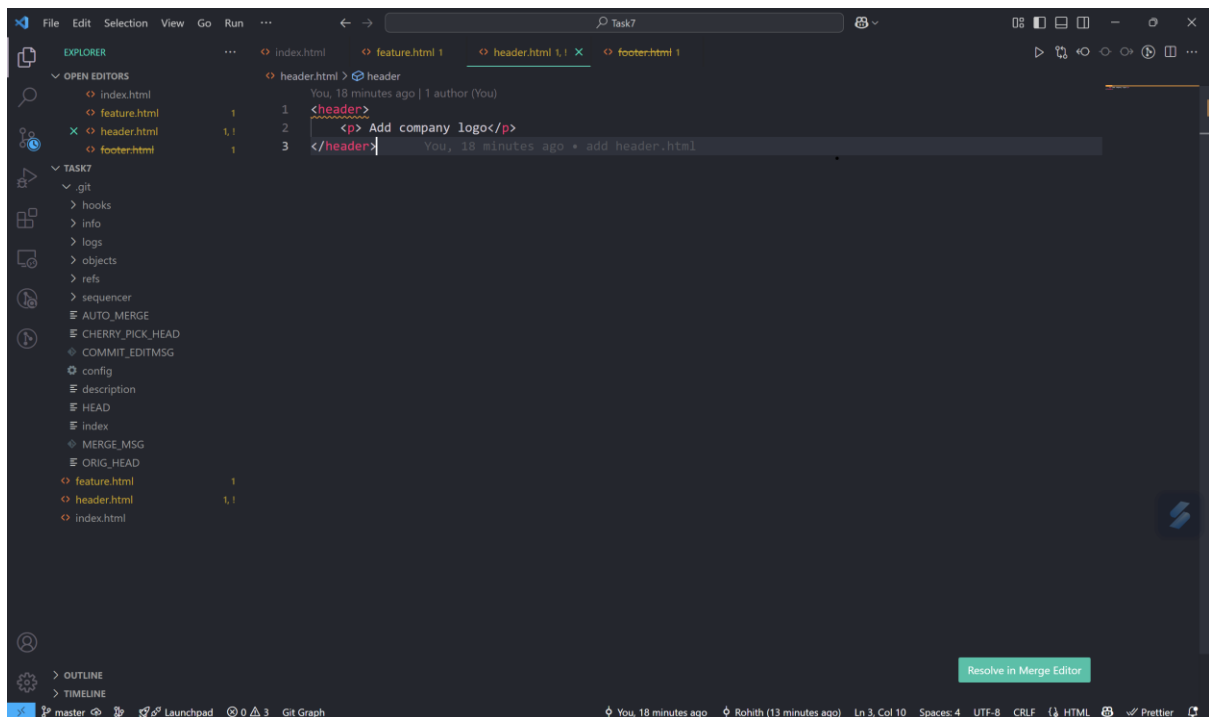
Here first its cherry picking 'update header.html' and then 'add herader.html'. Hence once the first cherry pick is done, it results in conflict during the second cherry pick command.

Resolve the conflict manually and stage the file by git add <filename> then complete the cherry-pick by git cherry-pick --continue or git cherry-pick --abort.

```
MINGW64:/c/Rohith/Backup/Desktop/Presidio/Pre-Training/1. Version Cont...
ontrol using Git/Task7 (master)
$ git log header --oneline
80be875 (header) update header.html
79a7911 add footer.html
dc6cb93 add header.html
9fc63e3 add feature.html
a9b2b98 Add index file

rohit@Rohith MINGW64 /c/Rohith/Backup/Desktop/Presidio/Pre-Training/1. Version C
ontrol using Git/Task7 (master)
$ git cherry-pick 80be875 dc6cb93
[master cccdc03] update header.html
Date: Sun Mar 23 16:30:55 2025 +0530
1 file changed, 1 insertion(+)
Auto-merging header.html
CONFLICT (add/add): Merge conflict in header.html
error: could not apply dc6cb93... add header.html
hint: After resolving the conflicts, mark them with
hint: "git add/rm <paths>", then run
hint: "git cherry-pick --continue".
hint: You can instead skip this commit with "git cherry-pick --skip".
hint: To abort and get back to the state before "git cherry-pick",
hint: run "git cherry-pick --abort".
hint: Disable this message with "git config set advice.mergeConflict false"
```





```
MINGW64:/c/Rohith/Backup/Desktop/Presidio/Pre-Training/1. Version Cont...
hint: Disable this message with "git config set advice.mergeConflict false"
rohit@Rohith MINGW64 /c/Rohith/Backup/Desktop/Presidio/Pre-Training/1. Version C
ontrol using Git/Task7 (master|CHERRY-PICKING)
$ git status
On branch master
You are currently cherry-picking commit dc6cb93.
(fix conflicts and run "git cherry-pick --continue")
(use "git cherry-pick --skip" to skip this patch)
(use "git cherry-pick --abort" to cancel the cherry-pick operation)

Unmerged paths:
  (use "git add <file>..." to mark resolution)
    both added:      header.html

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

rohit@Rohith MINGW64 /c/Rohith/Backup/Desktop/Presidio/Pre-Training/1. Version C
ontrol using Git/Task7 (master|CHERRY-PICKING)
$ git add header.html

rohit@Rohith MINGW64 /c/Rohith/Backup/Desktop/Presidio/Pre-Training/1. Version C
ontrol using Git/Task7 (master|CHERRY-PICKING)
$ git cherry-pick --abort
```

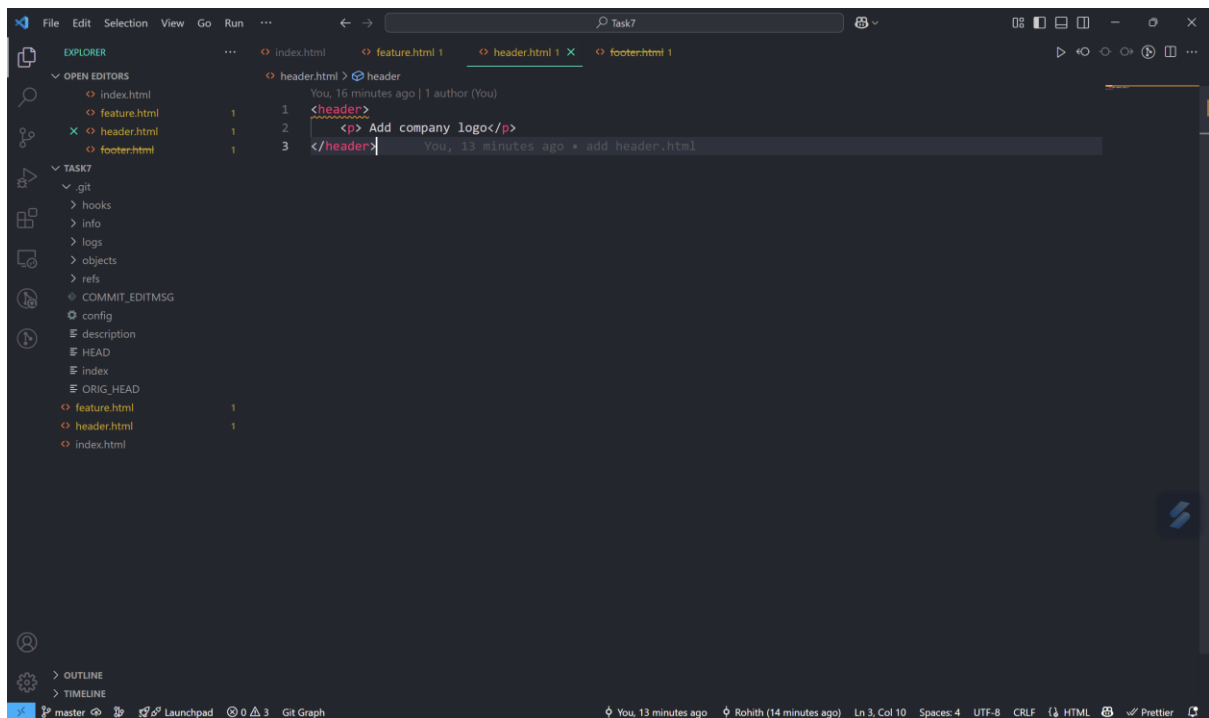
```
MINGW64:/c/Rohith/Backup/Desktop/Presidio/Pre-Training/1. Version Cont...
rohit@Rohith MINGW64 /c/Rohith/Backup/Desktop/Presidio/Pre-Training/1. Version Cont...
ontrol using Git/Task7 (master|CHERRY-PICKING)
$ git add header.html

rohit@Rohith MINGW64 /c/Rohith/Backup/Desktop/Presidio/Pre-Training/1. Version Cont...
ontrol using Git/Task7 (master|CHERRY-PICKING)
$ git cherry-pick --abort

rohit@Rohith MINGW64 /c/Rohith/Backup/Desktop/Presidio/Pre-Training/1. Version Cont...
ontrol using Git/Task7 (master)
$ git status
On branch master
nothing to commit, working tree clean

rohit@Rohith MINGW64 /c/Rohith/Backup/Desktop/Presidio/Pre-Training/1. Version Cont...
ontrol using Git/Task7 (master)
$ git log --oneline
a5f44c2 (HEAD -> master) add header.html
9fc63e3 add feature.html
a9b2b98 Add index file

rohit@Rohith MINGW64 /c/Rohith/Backup/Desktop/Presidio/Pre-Training/1. Version Cont...
ontrol using Git/Task7 (master)
$ |
```



Now lets do the same and continue instead of aborting

```
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/Task7 (master)
$ git log --oneline
a5f44c2 (HEAD -> master) add header.html
9fc63e3 add feature.html
a9b2b98 Add index file

rohit@Rohith MINGW64 /c/Rohith/Backup/Desktop/Presidio/Pre-Training/1. Version C
ontrol using Git/Task7 (master)
$ git log header --oneline
80be875 (header) update header.html
79a7911 add footer.html
dc6cb93 add header.html
9fc63e3 add feature.html
a9b2b98 Add index file

rohit@Rohith MINGW64 /c/Rohith/Backup/Desktop/Presidio/Pre-Training/1. Version C
ontrol using Git/Task7 (master)
$ git cherry-pick 80be875 dc6cb93
[master 28d8ab3] update header.html
Date: Sun Mar 23 16:30:55 2025 +0530
1 file changed, 1 insertion(+)
Auto-merging header.html
```

```
MINGW64:/c/Rohith/Backup/Desktop/Presidio/Pre-Training/1. Version Cont...
dc6cb93 add header.html
9fc63e3 add feature.html
a9b2b98 Add index file

rohit@Rohith MINGW64 /c/Rohith/Backup/Desktop/Presidio/Pre-Training/1. Version C
ontrol using Git/Task7 (master)
$ git cherry-pick 80be875 dc6cb93
[master 28d8ab3] update header.html
Date: Sun Mar 23 16:30:55 2025 +0530
1 file changed, 1 insertion(+)
Auto-merging header.html
CONFLICT (add/add): Merge conflict in header.html
error: could not apply dc6cb93... add header.html
hint: After resolving the conflicts, mark them with
hint: "git add/rm <paths>", then run
hint: "git cherry-pick --continue".
hint: You can instead skip this commit with "git cherry-pick --skip".
hint: To abort and get back to the state before "git cherry-pick",
hint: run "git cherry-pick --abort".
hint: Disable this message with "git config set advice.mergeConflict false"

rohit@Rohith MINGW64 /c/Rohith/Backup/Desktop/Presidio/Pre-Training/1. Version C
ontrol using Git/Task7 (master|CHERRY-PICKING)
$ |
```

File Edit Selection View Go Run ... Task7

EXPLORER

- index.html
- feature.html 1
- header.html 9+, 1
- footer.html 1

OPEN EDITORS

- index.html
- feature.html 1
- header.html 9+, 1
- footer.html 1

TASK7

- git
- hooks
- info
- logs
- objects
- refs
- sequencer
- AUTO_MERGE
- CHERRY_PICK_HEAD
- COMMIT_EDITMSG
- config
- description
- HEAD
- index
- MERGE_MSG
- ORIG_HEAD
- feature.html 1
- header.html 9+, 1
- index.html

header.html > header

You, 47 seconds ago | 1 author (You)

```
1 <header>
2 <p> Add company logo</p>
3
4 <<<<<< HEAD (Current Change)
5 <p> Add company name</p>
6 =====
7 >>>>>> dc6cb93 (add header.html) (Incoming Change)
  </header>
```

Accept Current Change | Accept Incoming Change | Accept Both Changes | Compare Changes

Resolve in Merge Editor

master Launchpad 0 17 Git Graph You, 13 minutes ago Rohith (13 minutes ago) Ln 7, Col 10 Spaces: 4 UTF-8 CRLF HTML Prettier

File Edit Selection View Go Run ... Task7

EXPLORER

- index.html
- feature.html 1
- header.html 1, 1
- footer.html 1

OPEN EDITORS

- index.html
- feature.html 1
- header.html 1, 1
- footer.html 1

TASK7

- git
- hooks
- info
- logs
- objects
- refs
- sequencer
- AUTO_MERGE
- CHERRY_PICK_HEAD
- COMMIT_EDITMSG
- config
- description
- HEAD
- index
- MERGE_MSG
- ORIG_HEAD
- feature.html 1
- header.html 1, 1
- index.html

header.html > header

You, 18 minutes ago | 1 author (You)

```
1 <header>
2 <p> Add company logo</p>
3 </header>
```

You, 18 minutes ago + add header.html

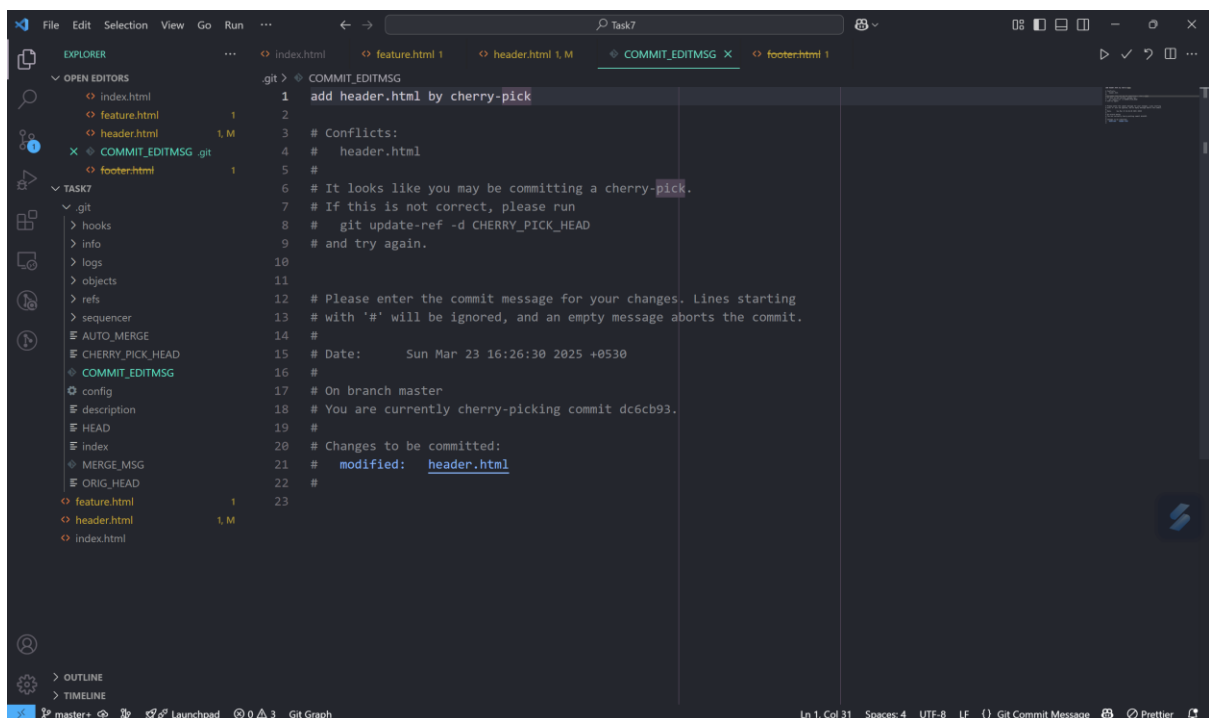
Resolve in Merge Editor

master Launchpad 0 3 Git Graph You, 18 minutes ago Rohith (13 minutes ago) Ln 3, Col 10 Spaces: 4 UTF-8 CRLF HTML Prettier

```
MINGW64:/c/Rohith/Backup/Desktop/Presidio/Pre-Training/1. Version Cont...
ontrol using Git/Task7 (master)
$ git cherry-pick 80be875 dc6cb93
[master 28d8ab3] update header.html
Date: Sun Mar 23 16:30:55 2025 +0530
1 file changed, 1 insertion(+)
Auto-merging header.html
CONFLICT (add/add): Merge conflict in header.html
error: could not apply dc6cb93... add header.html
hint: After resolving the conflicts, mark them with
hint: "git add/rm <paths>", then run
hint: "git cherry-pick --continue".
hint: You can instead skip this commit with "git cherry-pick --skip".
hint: To abort and get back to the state before "git cherry-pick",
hint: run "git cherry-pick --abort".
hint: Disable this message with "git config set advice.mergeConflict false"

rohit@Rohith MINGW64 /c/Rohith/Backup/Desktop/Presidio/Pre-Training/1. Version C
ontrol using Git/Task7 (master|CHERRY-PICKING)
$ git add header.html

rohit@Rohith MINGW64 /c/Rohith/Backup/Desktop/Presidio/Pre-Training/1. Version C
ontrol using Git/Task7 (master|CHERRY-PICKING)
$ git cherry-pick --continue
hint: Waiting for your editor to close the file...
```



```
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/Task7 (master|CHERRY-PICKING)
$ git add header.html

rohit@Rohith MINGW64 /c/Rohith/Backup/Desktop/Presidio/Pre-Training/1. Version C
ontrol using Git/Task7 (master|CHERRY-PICKING)
$ git cherry-pick --continue
[master f66010b] add header.html by cherry-pick
Date: Sun Mar 23 16:26:30 2025 +0530
1 file changed, 1 deletion(-)

rohit@Rohith MINGW64 /c/Rohith/Backup/Desktop/Presidio/Pre-Training/1. Version C
ontrol using Git/Task7 (master)
$ git log --oneline
f66010b (HEAD -> master) add header.html by cherry-pick
28d8ab3 update header.html
a5f44c2 add header.html
9fc63e3 add feature.html
a9b2b98 Add index file

rohit@Rohith MINGW64 /c/Rohith/Backup/Desktop/Presidio/Pre-Training/1. Version C
ontrol using Git/Task7 (master)
$
```