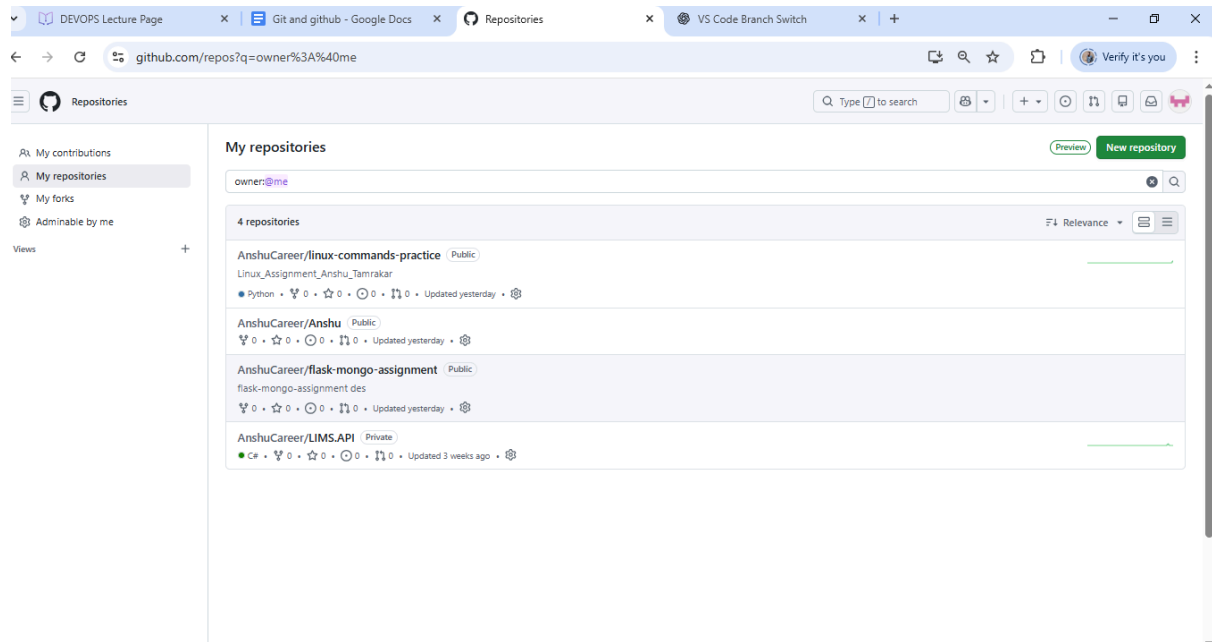


1. Create a new GitHub repository.
 - Clone the repository to your local machine using SSH (generate an SSH key if needed, add the public key to your GitHub account).
 - Create a new branch named after your username (e.g., `Tutedude`).
 - Add your Flask project files to this branch.

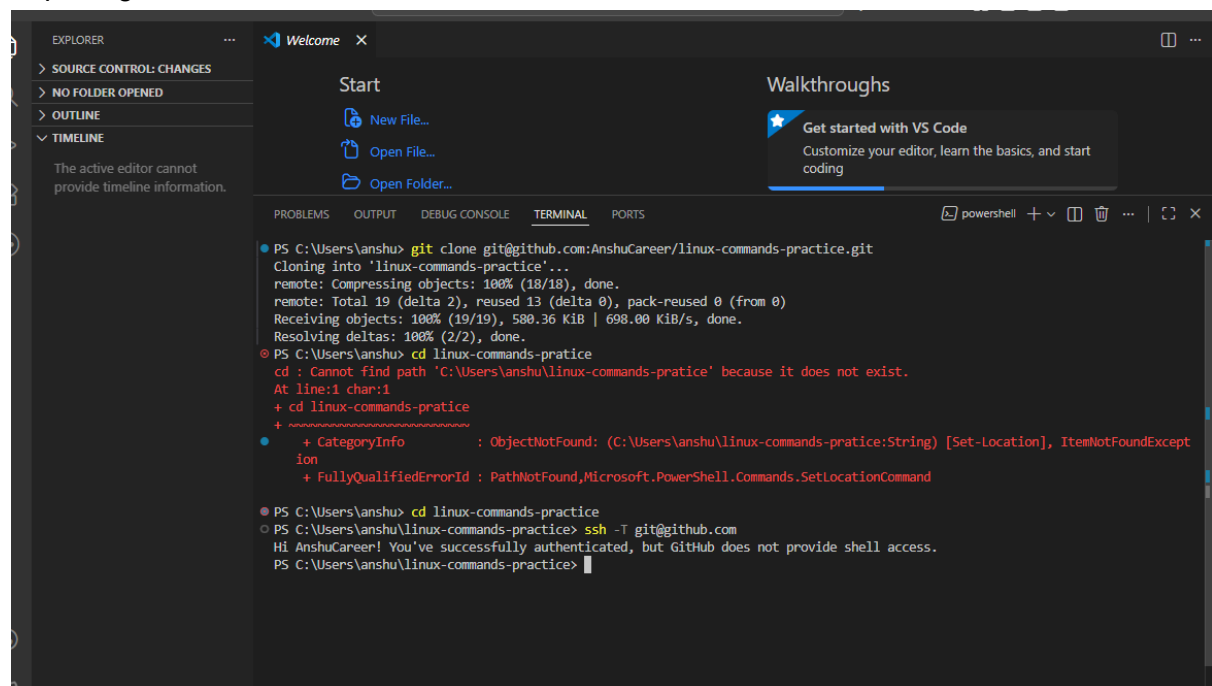
Commit the changes and merge the branch into the `main` branch.

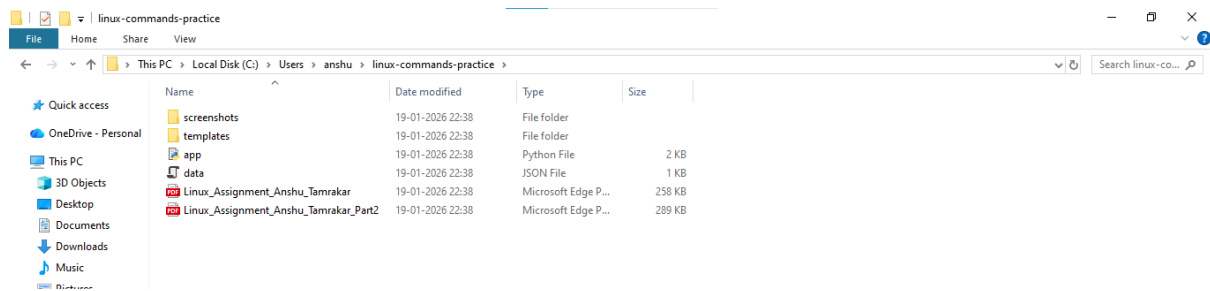
Ans :



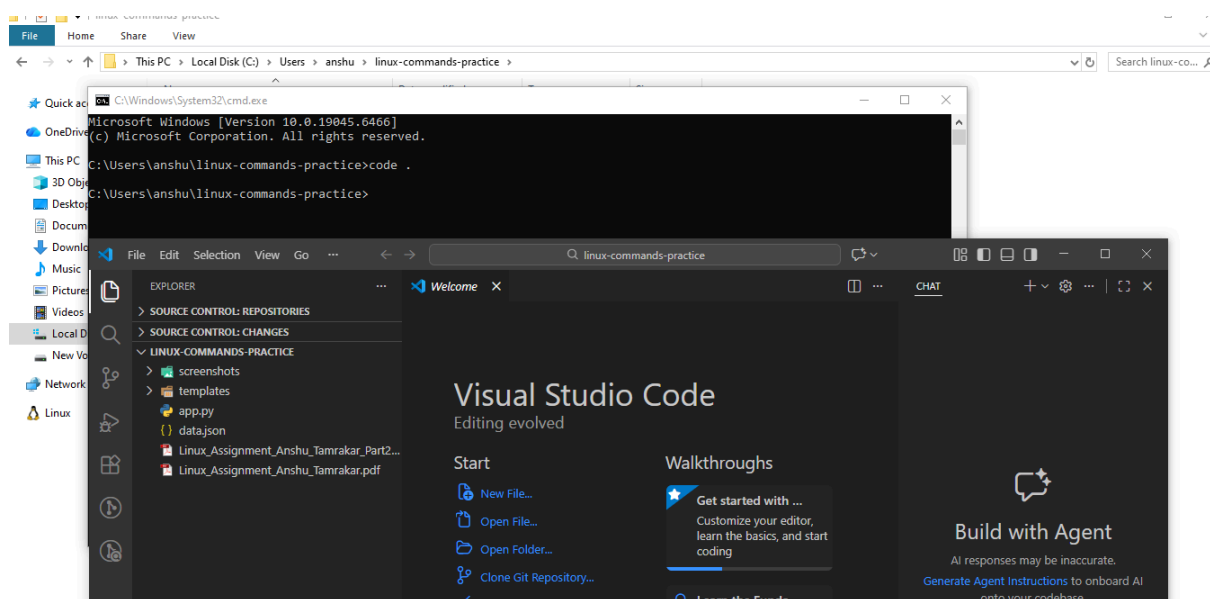
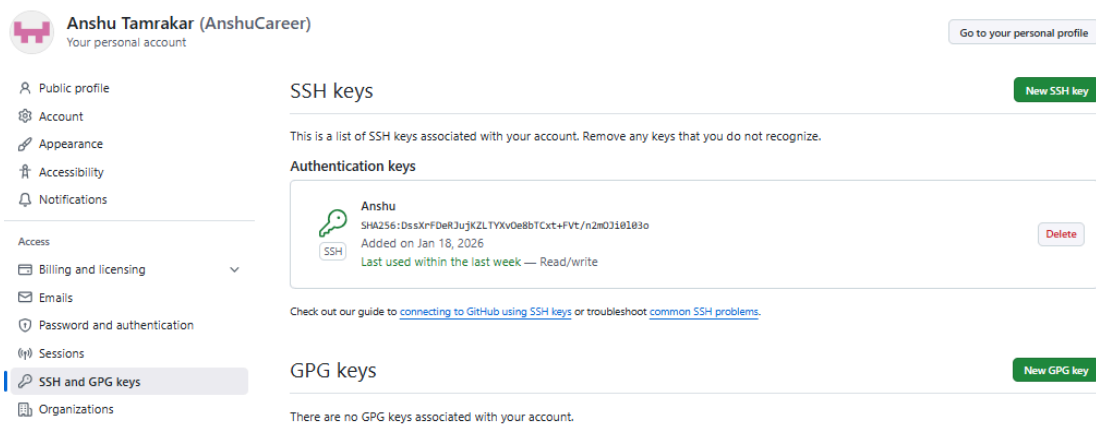
In The above Screenshot I Have created first flask-mongo-assignment

Repo In github .

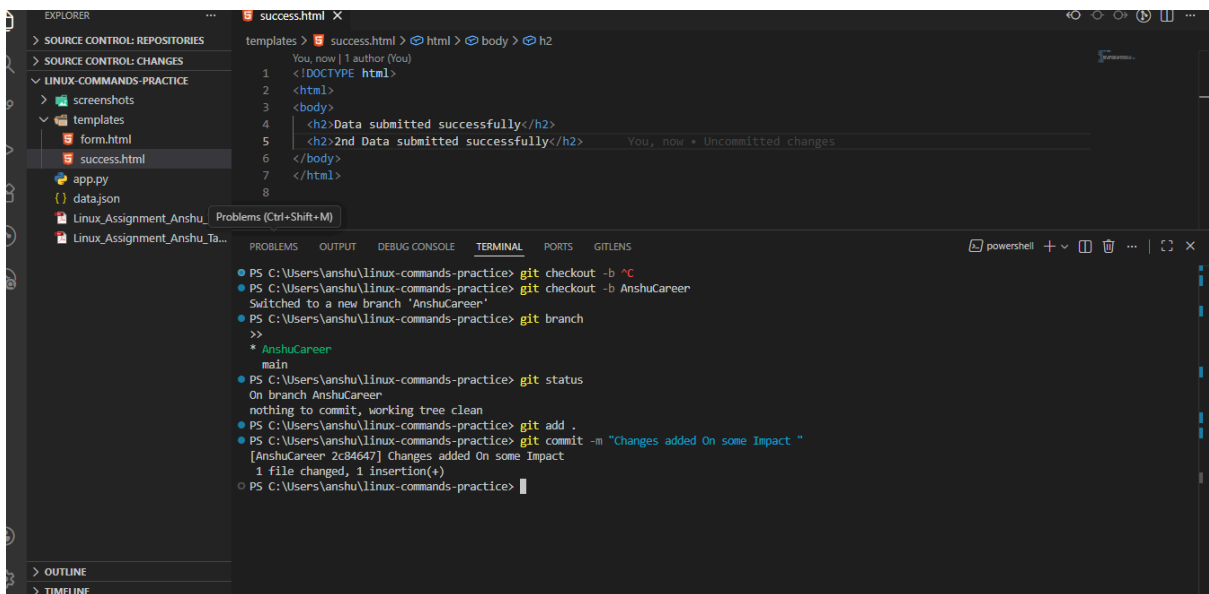
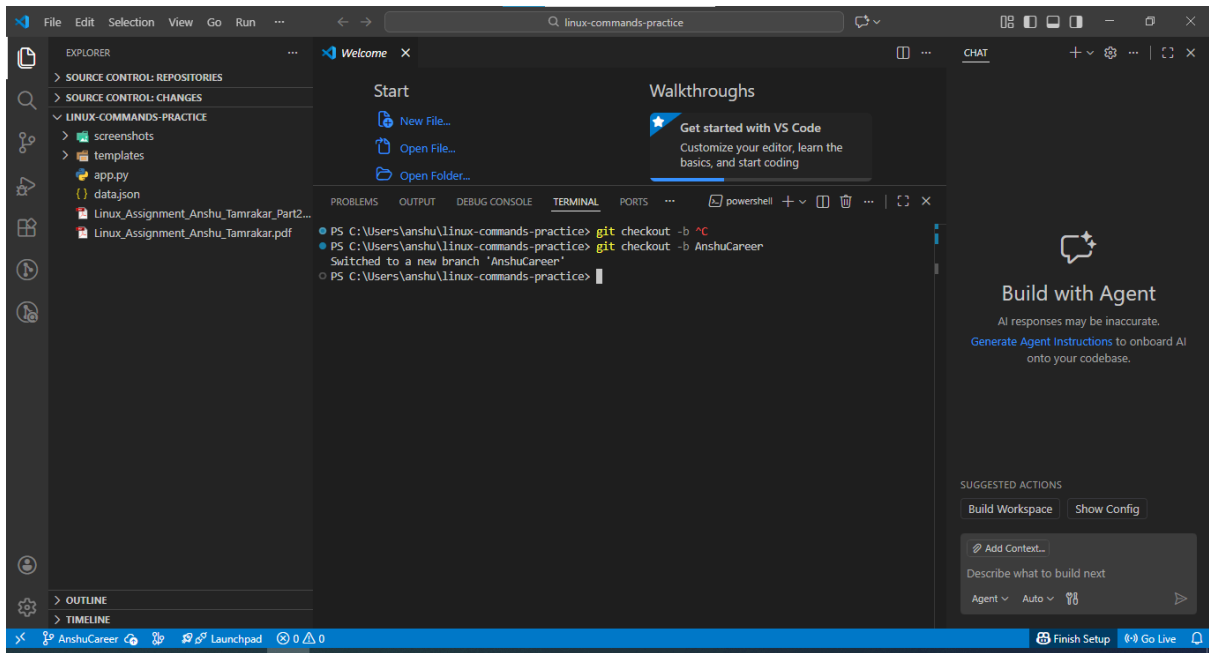


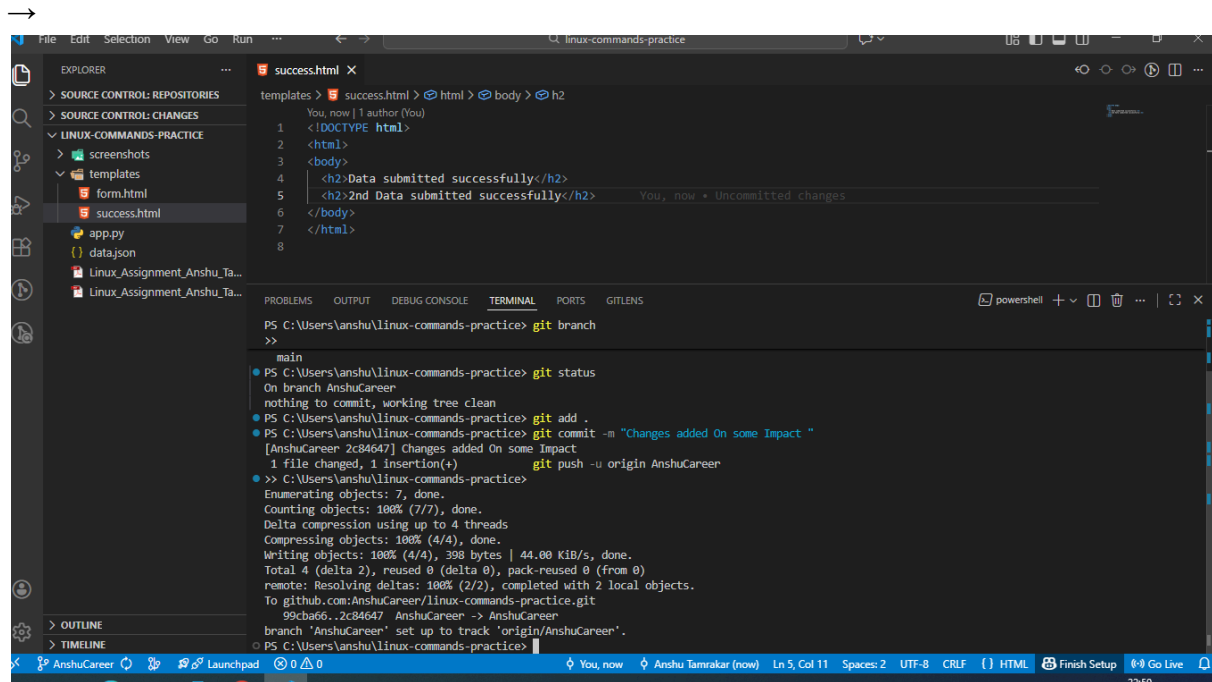


See in The above screen shot I Have done The cloning with using SSH (generated an SSH key on GitHub account).



→



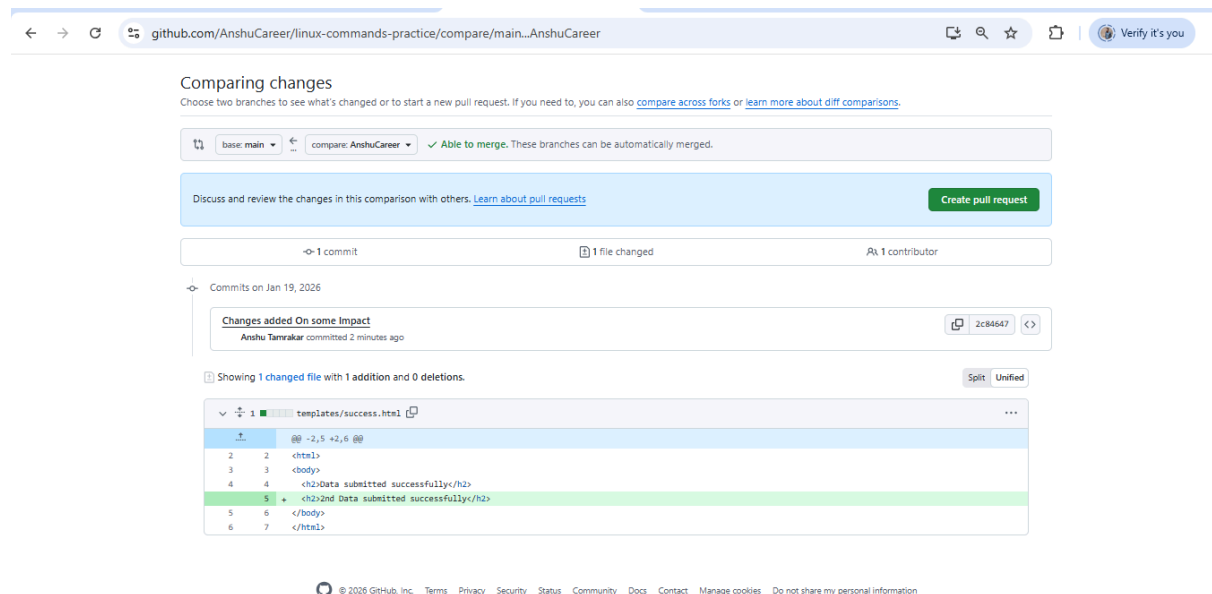


The screenshot shows a Visual Studio Code editor with a terminal window open. The terminal displays the following commands and output:

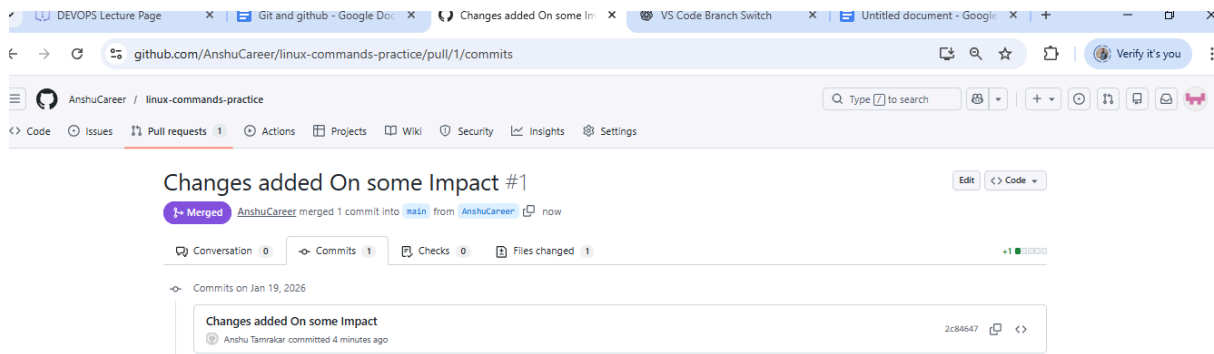
```
PS C:\Users\Anshu\linux-commands-practice> git branch
>>
main
PS C:\Users\Anshu\linux-commands-practice> git status
On branch AnshuCareer
nothing to commit, working tree clean
PS C:\Users\Anshu\linux-commands-practice> git add .
PS C:\Users\Anshu\linux-commands-practice> git commit -m "Changes added On some Impact "
[AnshuCareer 2c84647] Changes added On some Impact
1 file changed, 1 insertion(+)
git push -u origin AnshuCareer
Enumerating objects: 7, done.
Counting objects: 100% (7/7), done.
Delta compression using up to 4 threads
Compressing objects: 100% (4/4), done.
Writing objects: 100% (4/4), 398 bytes | 44.00 KiB/s, done.
Total 4 (delta 2), reused 0 (delta 0), pack-reused 0 (from 0)
remote: Resolving deltas: 100% (2/2), completed with 2 local objects.
To github.com:AnshuCareer/linux-commands-practice.git
99cba66..2c84647 AnshuCareer -> AnshuCareer
branch 'AnshuCareer' set up to track 'origin/AnshuCareer'.
PS C:\Users\Anshu\linux-commands-practice>
```

The Explorer sidebar on the left shows the project structure:

- SOURCE CONTROL: REPOSITORIES
- SOURCE CONTROL: CHANGES
- LINUX-COMMANDS-PRACTICE
 - screenshots
 - templates
 - form.html
 - success.html
 - app.py
 - datajson
 - Linux_Assignment_Anshu_Ta...
 - Linux_Assignment_Anshu_Ta...
- OUTLINE
- TIMELINE



See here the I have push this code Change In New created Branch Which You have Suggested You Now i Have To Give The pull request To The respected User .



Merge this changes Into Main branch .

2. Create a new branch named `<your_name>_new` (e.g., `Tutedude_new`).

- Update the content of the JSON file used for the `/api` route in this branch.
- Merge the `<your_name>_new` branch into the `main` branch.
- If there are conflicts during the merge, resolve them by accepting the changes from the `<your_name>_new` branch.
- Add the resolved changes to the staging area, commit them, and push the updates to the remote repository.

Ans 👍

A screenshot of a terminal window in Visual Studio Code. The terminal shows the following commands and output:

```
PS C:\Users\anshu\linux-commands-practice> git branch
PS C:\Users\anshu\linux-commands-practice> git checkout main
Your branch is up to date with 'origin/main'.
PS C:\Users\anshu\linux-commands-practice> git pull origin main
remote: Enumerating objects: 1, done.
remote: Counting objects: 100% (1/1), done.
remote: Total 1 (delta 0), reused 0 (delta 0), pack-reused 0 (from 0)
Unpacking objects: 100% (1/1), 987 bytes | 69.00 KiB/s, done.
From github.com:AnshuCareer/linux-commands-practice
* branch      main      -> FETCH_HEAD
   99cba66..bc204de main    -> origin/main
Updating 99cba66..bc204de
Fast-forward
 templates/success.html | 1 +
 1 file changed, 1 insertion(+)
PS C:\Users\anshu\linux-commands-practice>
```

First checkout The main branch & take Latest by using pull AI changes .

The screenshot shows the VS Code interface with the 'SOURCE CONTROL: CHANGES' view on the left. The file explorer shows a project named 'LINUX-COMMANDS-PRACTICE' with files like 'form.html', 'success.html', 'app.py', 'data.json', and two PDF files. The terminal window shows the following commands and output:

```
PS C:\Users\anshu\linux-commands-practice> git checkout -b ^C
PS C:\Users\anshu\linux-commands-practice> git checkout -b AnshuCareer
Switched to a new branch 'AnshuCareer'
PS C:\Users\anshu\linux-commands-practice> git branch
* AnshuCareer
  main
PS C:\Users\anshu\linux-commands-practice> git checkout -b Anshu_new
Switched to a new branch 'Anshu_new'
PS C:\Users\anshu\linux-commands-practice> ls

Directory: C:\Users\anshu\linux-commands-practice

Mode                LastWriteTime         Length Name
----                -
d-----            19-01-2026   22:38          screenshots
d-----            19-01-2026   22:56          templates
-a----            19-01-2026   22:38           1586 app.py
-a----            19-01-2026   22:38            71 data.json
-a----            19-01-2026   22:38       263472 Linux_Assignment_Anshu_Tamrakar.pdf
-a----            19-01-2026   22:38       295247 Linux_Assignment_Anshu_Tamrakar_Part2.pdf

PS C:\Users\anshu\linux-commands-practice> git branch
* Anshu_new
  main
PS C:\Users\anshu\linux-commands-practice>
```

Created New branch name As Anshu_New And Check Out That branch In Local now.

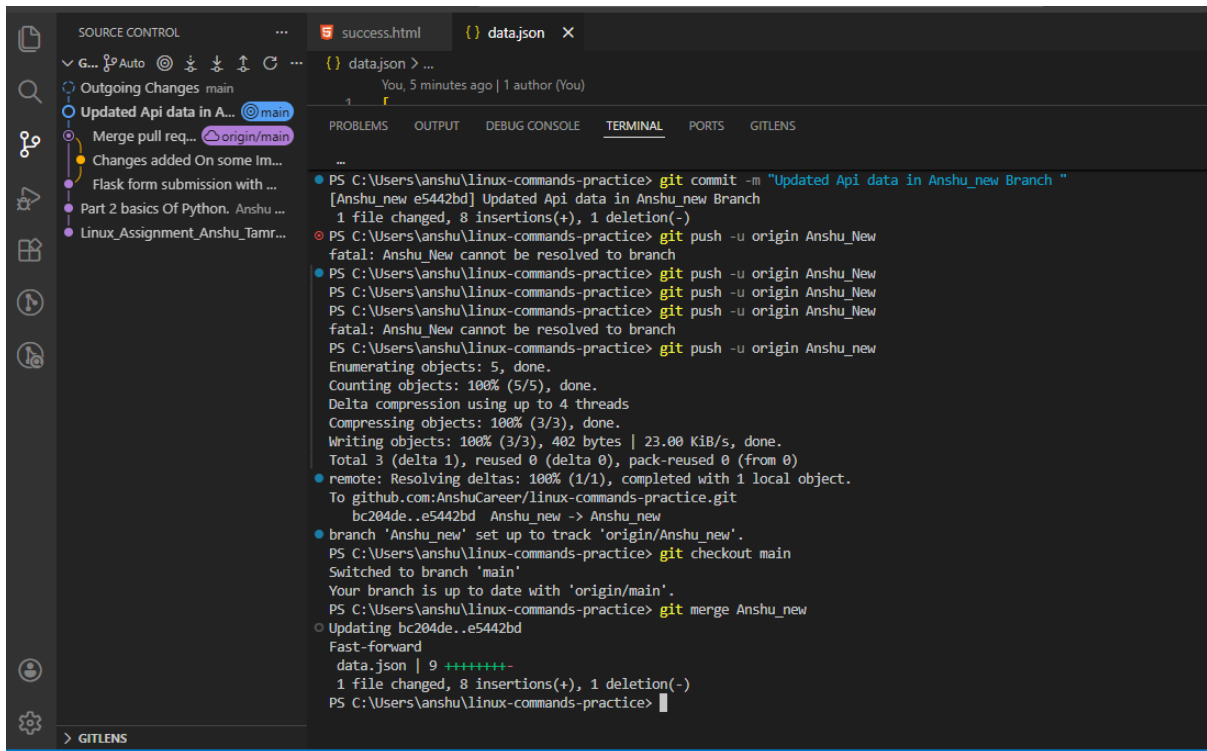
The screenshot shows the VS Code interface with the 'SOURCE CONTROL: CHANGES' view on the left. The file explorer shows a project named 'LINUX-COMMANDS-PRACTICE' with files like 'form.html', 'success.html', 'app.py', 'data.json', and two PDF files. The terminal window shows the following commands and output:

```
PS C:\Users\anshu\linux-commands-practice> git commit -m "Updated Api data in Anshu_new Branch "
[Anshu_new e5442bd] Updated Api data in Anshu_new Branch
1 file changed, 8 insertions(+), 1 deletion(-)
PS C:\Users\anshu\linux-commands-practice>
```

The diff view shows the changes made to the 'data.json' file:

```
1  [
2  { "id": 1, "name": "Anshu" },
3  { "id": 2, "name": "Rahul" },
4  {
5  "status": "success",
6  "message": "API data updated from Anshu_new branch",
7  "version": 2
8  }
9  ]
10
11
12
```

Updated Api data into data.json file .

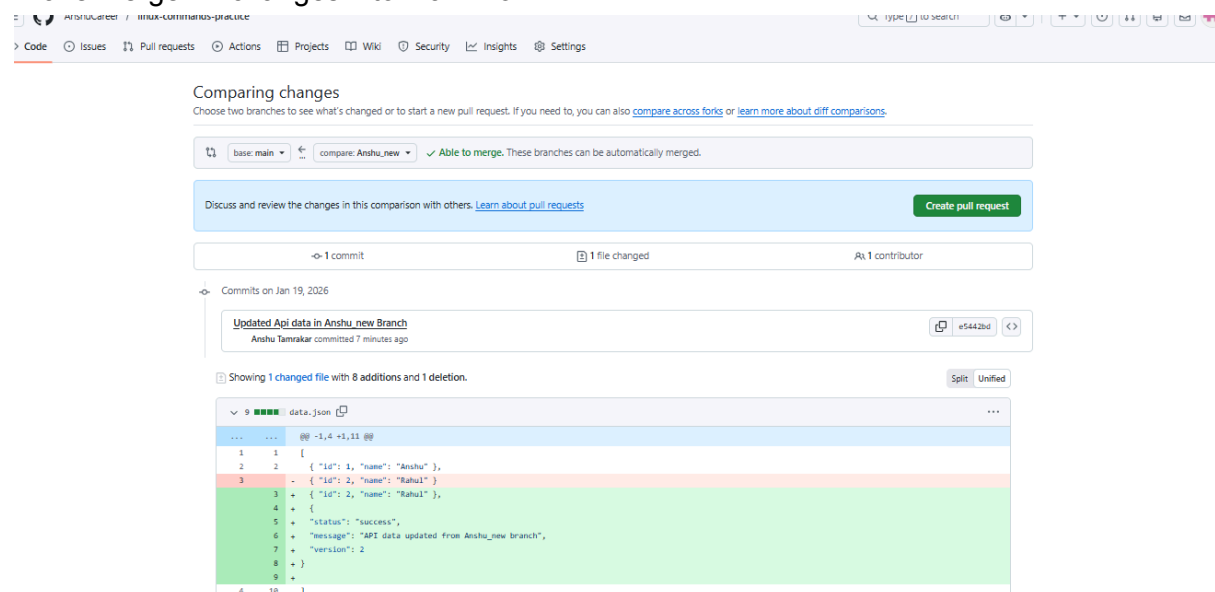


```
SOURCE CONTROL
G... Auto
Outgoing Changes main
Updated Api data in A... @main
Merge pull req... origin/main
Changes added On some Im...
Flask form submission with ...
Part 2 basics Of Python. Anshu ...
Linux_Assignment_Anshu_Tamr...

PROBLEMS OUTPUT DEBUG CONSOLE TERMINAL PORTS GITLENS

PS C:\Users\anshu\linux-commands-practice> git commit -m "Updated Api data in Anshu_new Branch"
[Anshu_new e5442bd] Updated Api data in Anshu_new Branch
1 file changed, 8 insertions(+), 1 deletion(-)
PS C:\Users\anshu\linux-commands-practice> git push -u origin Anshu_New
fatal: Anshu_New cannot be resolved to branch
PS C:\Users\anshu\linux-commands-practice> git push -u origin Anshu_New
PS C:\Users\anshu\linux-commands-practice> git push -u origin Anshu_New
fatal: Anshu_New cannot be resolved to branch
PS C:\Users\anshu\linux-commands-practice> git push -u origin Anshu_new
Enumerating objects: 5, done.
Counting objects: 100% (5/5), done.
Delta compression using up to 4 threads
Compressing objects: 100% (3/3), done.
Writing objects: 100% (3/3), 402 bytes | 23.00 KiB/s, done.
Total 3 (delta 1), reused 0 (delta 0), pack-reused 0 (from 0)
remote: Resolving deltas: 100% (1/1), completed with 1 local object.
To github.com:AnshuCareer/linux-commands-practice.git
bc204de..e5442bd Anshu_new -> Anshu_new
branch 'Anshu_new' set up to track 'origin/Anshu_new'.
PS C:\Users\anshu\linux-commands-practice> git checkout main
Switched to branch 'main'
Your branch is up to date with 'origin/main'.
PS C:\Users\anshu\linux-commands-practice> git merge Anshu_new
Updating bc204de..e5442bd
Fast-forward
 data.json | 9 ++++++--
1 file changed, 8 insertions(+), 1 deletion(-)
PS C:\Users\anshu\linux-commands-practice>
```

I have Merge All changes into main Now ..



Comparing changes

Choose two branches to see what's changed or to start a new pull request. If you need to, you can also [compare across forks](#) or [learn more about diff comparisons](#).

base: main ← compare: Anshu_new ✓ Able to merge. These branches can be automatically merged.

Discuss and review the changes in this comparison with others. [Learn about pull requests](#) [Create pull request](#)

→ 1 commit 1 file changed Rx 1 contributor

Commits on Jan 19, 2026

Updated Api data in Anshu_new Branch
Anshu Tamrakar committed 7 minutes ago

Showing 1 changed file with 8 additions and 1 deletion. Split Unified

```
data.json
@@ -1,4 +1,11 @@
1 1  [
2 2  { "id": 1, "name": "Anshu" },
3 - { "id": 2, "name": "Rahul" },
4 + {
5 +   "status": "success",
6 +   "message": "API data updated from Anshu_new branch",
7 +   "version": 2
8 + }
9 + ]
4 10 ]
```

Creating pull request Here again

```

PS C:\Users\anshu\linux-commands-practice> git commit -m "Updated Api data in Anshu_new Branch "
PS C:\Users\anshu\linux-commands-practice> git push -u origin Anshu_New
fatal: Anshu_New cannot be resolved to branch
PS C:\Users\anshu\linux-commands-practice> git push -u origin Anshu_New
PS C:\Users\anshu\linux-commands-practice> git push -u origin Anshu_New
PS C:\Users\anshu\linux-commands-practice> git add data.json
>> git commit -m "Resolved merge conflict using Anshu_new changes"
>>
On branch main
Your branch is ahead of 'origin/main' by 1 commit.
  (use "git push" to publish your local commits)

nothing to commit, working tree clean
PS C:\Users\anshu\linux-commands-practice> git push origin main
>>
Total 0 (delta 0), reused 0 (delta 0), pack-reused 0 (from 0)
To github.com:AnshuCareer/linux-commands-practice.git
   bc204de..e5442bd  main -> main
PS C:\Users\anshu\linux-commands-practice>

```

3. Branch Creation:

- Create two branches: `master_1` and `master_2` from the `main` branch.
- **Feature Development in `master_1`:**
- In the `master_1` branch, create a **To-Do Page** in the frontend.
 - The page should contain a form with the following fields:
 - **Item Name**
 - **Item Description**
- **Backend API in `master_2`:**
- In the `master_2` branch, create a backend route named `/submittodoitem`.
- This route will:
 - Accept `itemName` and `itemDescription` via a POST request.
 - Store these details in a MongoDB database.
- **Merging Changes:**
- Merge the changes from both `master_1` and `master_2` into the `main` branch.

Ans


```
File Edit Selection View Go Run ... linux-commands-practice
```

EXPLORER

- SOURCE CONTROL: REPOSITORIES
- SOURCE CONTROL: CHANGES
- LINUX-COMMANDS-PRACTICE
 - screenshots
 - templates
 - form.html
 - success.html
 - todo.html
 - app.py
 - data.json
 - Linux_Assignment_Anshu_Ta...
 - Linux_Assignment_Anshu_Ta...

terminal

```
PS C:\Users\vanshu\linux-commands-practice> git checkout -b master_1
PS C:\Users\vanshu\linux-commands-practice> git add .
PS C:\Users\vanshu\linux-commands-practice> git commit -m "Added Ne template html file in todo"
[master_1 7f0d8ec] Added Ne template html file in todo
1 file changed, 14 insertions(+)
create mode 100644 templates/todo.html
PS C:\Users\vanshu\linux-commands-practice> git push -u origin master_1
Enumerating objects: 6, done.
Counting objects: 100% (6/6), done.
Delta compression using up to 4 threads
Compressing objects: 100% (4/4), done.
Writing objects: 100% (4/4), 611 bytes | 305.00 KiB/s, done.
Total 4 (delta 1), reused 0 (delta 0), pack-reused 0 (from 0)
remote: Resolving deltas: 100% (1/1), completed with 1 local object.
To github.com:AnshuCareer/linux-commands-practice.git
e5442bd..7f0d8ec master_1 -> master_1
branch 'master_1' set up to track 'origin/master_1'.
PS C:\Users\vanshu\linux-commands-practice>
```

Reated Master_1 completed

```
File Edit Selection View Go Run ... linux-commands-practice
```

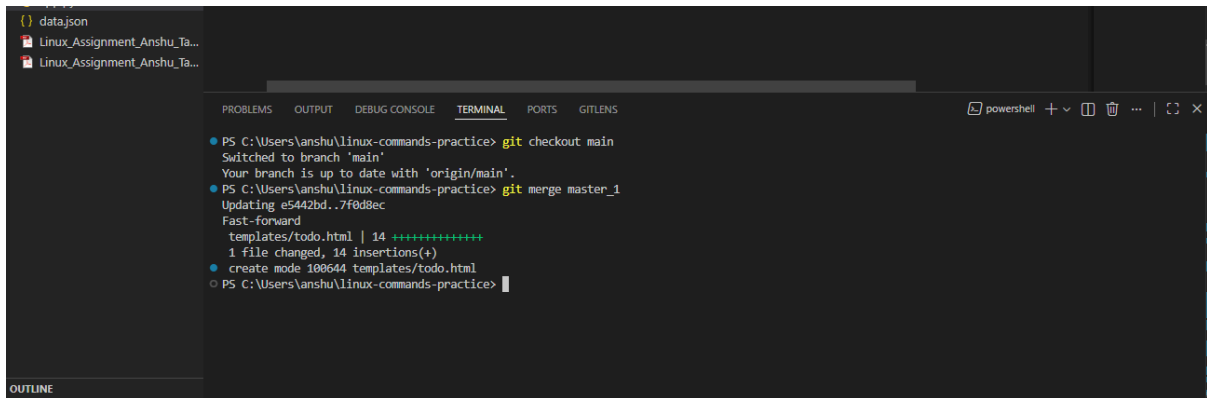
EXPLORER

- SOURCE CONTROL: REPOSITORIES
- SOURCE CONTROL: CHANGES
- LINUX-COMMANDS-PRACTICE
 - screenshots
 - templates
 - form.html
 - success.html
 - todo.html
 - app.py
 - data.json
 - Linux_Assignment_Anshu_Ta...
 - Linux_Assignment_Anshu_Ta...

terminal

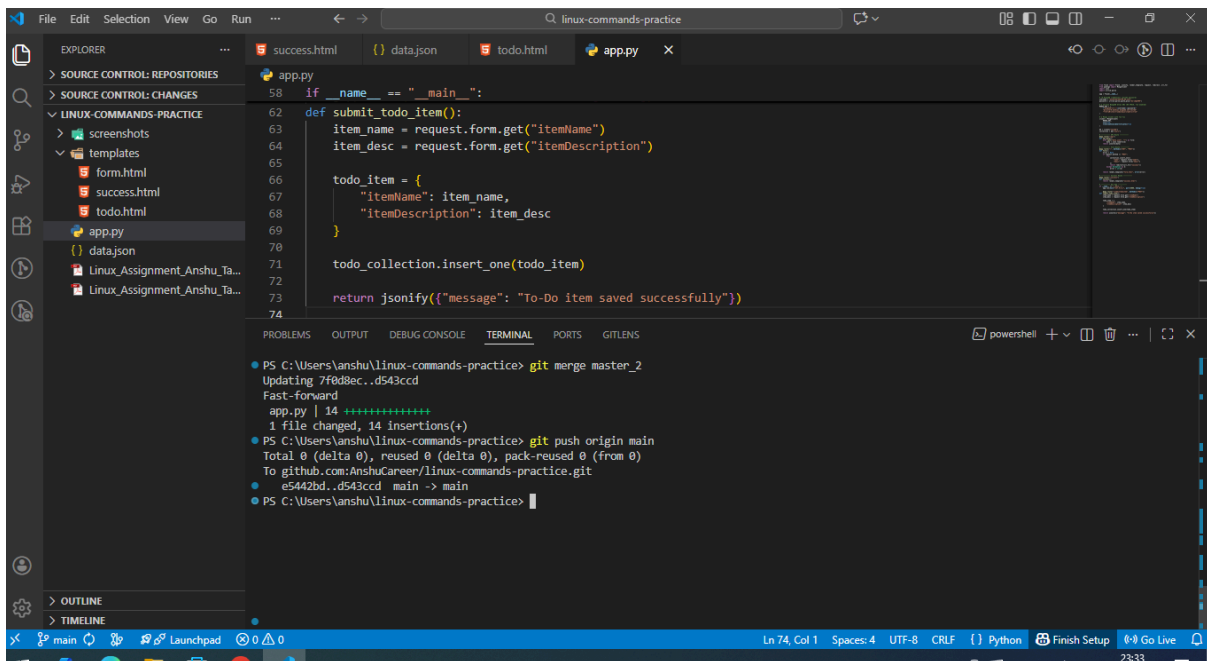
```
PS C:\Users\vanshu\linux-commands-practice> git commit -m "Added In New method As Post Api In App.py page"
[master_2 d543ccd] Added In New method As Post Api In App.py page
1 file changed, 14 insertions(+)
PS C:\Users\vanshu\linux-commands-practice> git push -u origin mmaster_2
error: src refspec mmaster_2 does not match any
error: failed to push some refs to 'github.com:AnshuCareer/linux-commands-practice.git'
PS C:\Users\vanshu\linux-commands-practice> git push -u origin master_2
Enumerating objects: 5, done.
Counting objects: 100% (5/5), done.
Delta compression using up to 4 threads
Compressing objects: 100% (3/3), done.
Writing objects: 100% (3/3), 549 bytes | 183.00 KiB/s, done.
Total 3 (delta 2), reused 0 (delta 0), pack-reused 0 (from 0)
remote: Resolving deltas: 100% (2/2), completed with 2 local objects.
To github.com:AnshuCareer/linux-commands-practice.git
e5442bd..d543ccd master_2 -> master_2
branch 'master_2' set up to track 'origin/master_2'.
PS C:\Users\vanshu\linux-commands-practice>
```

related Master_2 Completed



```
PS C:\Users\anshu\linux-commands-practice> git checkout main
Switched to branch 'main'
Your branch is up to date with 'origin/main'.
PS C:\Users\anshu\linux-commands-practice> git merge master_1
Updating e5442bd..7f0d8ec
Fast-forward
 templates/todo.html | 14 ++++++
 1 file changed, 14 insertions(+)
 create mode 100644 templates/todo.html
PS C:\Users\anshu\linux-commands-practice>
```

Merge the Master_1 into mian branch



```
def submit_todo_item():
    item_name = request.form.get("itemName")
    item_desc = request.form.get("itemDescription")

    todo_item = {
        "itemName": item_name,
        "itemDescription": item_desc
    }

    todo_collection.insert_one(todo_item)

    return jsonify({"message": "To-Do item saved successfully"})

PS C:\Users\anshu\linux-commands-practice> git merge master_2
Updating 7f0d8ec..d543ccd
Fast-forward
 app.py | 14 ++++++
 1 file changed, 14 insertions(+)
PS C:\Users\anshu\linux-commands-practice> git push origin main
Total 0 (delta 0), reused 0 (delta 0), pack-reused 0 (from 0)
To github.com:AnshuCareer/linux-commands-practice.git
 e5442bd..d543ccd main -> main
PS C:\Users\anshu\linux-commands-practice>
```

Here all Merge Main to main now .

Ex : Two branches named master_1 and master_2 were created from the main branch. In the master_1 branch, a frontend To-Do page was developed with fields for Item Name and Item Description. In the master_2 branch, a backend APi submit was implemented to accept form data via POST request and store it in MongoDB. Finally, the changes from both branches were merged into the main branch..

4. Enhancing the To-Do Form in master_1:

- In the master_1 branch, add the following fields to the To-Do form:
 - Item ID
 - Item UUID
 - Item Hash

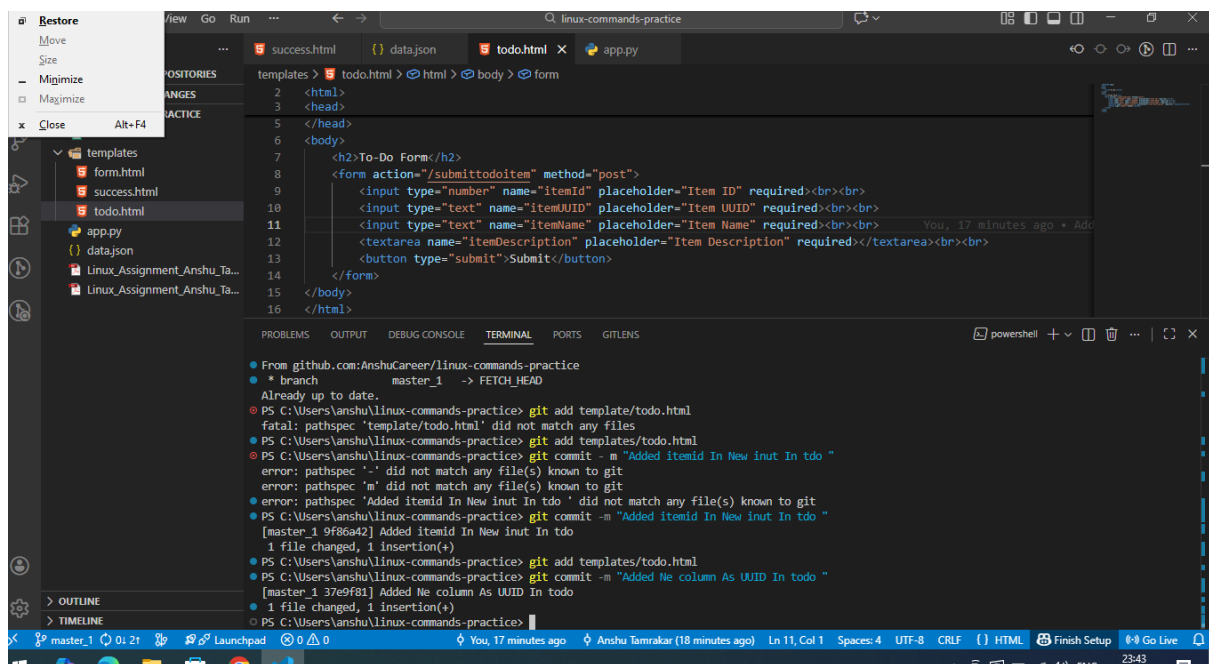
- **Committing in Sequence:**
- Add and commit each field separately in the following order:
 - **First commit:** Add **Item ID** field.
 - **Second commit:** Add **Item UUID** field.
 - **Third commit:** Add **Item Hash** field.
- **Merging to main:**
- Merge the `master_1` branch into the `main` branch.
- **Git Reset and Commit Deletion:**
- In the `main` branch, use **Git Reset** to roll back to the commit where only the **Item ID** field was added.
- Use `git reset --soft` to ensure changes remain staged.
- Re-commit this state to the `main` branch.
- Merge this updated state to the `main` branch.
- **Rebasing Changes:**
- Rebase the updated changes in the `main` branch to the `master_1` branch.

Clarification:

- During rebasing, **preserve individual commits** to maintain the commit history for each change (i.e., do not squash commits).

Use `git rebase main master_1` to integrate changes from the `main` branch back into the `master_1` branch.

Ans : 4



Added Item Id & UUID two New inputs With command s
Next I need To Add

```
form.html
success.html
todo.html

app.py
datajson
Linux_Assignment_Anshu_Ta...
Linux_Assignment_Anshu_Ta...

9 | <input type="number" name="itemId" placeholder="Item ID" required><br><br>

PROBLEMS OUTPUT DEBUG CONSOLE TERMINAL PORTS GITLENS
P5 C:\Users\anshu\linux-commands-practice> git checkout master_1
P5 C:\Users\anshu\linux-commands-practice> git checkout master_1
Switched to branch 'master_1'
P5 C:\Users\anshu\linux-commands-practice> git pull origin master_1
P5 C:\Users\anshu\linux-commands-practice> git add templates/todo.html
P5 C:\Users\anshu\linux-commands-practice> git commit -m "Added item hash feild to To do form "
[ma
1 Focus folder in explorer (ctrl + click)
P5 C:\Users\anshu\linux-commands-practice> git puch origin master_1
git: 'puch' is not a git command. See 'git --help'.

The most similar command is
push
P5 C:\Users\anshu\linux-commands-practice> git push origin master_1
Enumerating objects: 15, done.
Counting objects: 100% (15/15), done.
Delta compression using up to 4 threads
Compressing objects: 100% (12/12), done.
Writing objects: 100% (12/12), 1.04 KiB | 53.00 KiB/s, done.
Total 12 (delta 9), reused 0 (delta 0), pack-reused 0 (from 0)
remote: Resolving deltas: 100% (9/9), completed with 3 local objects.
To github.com:AnshuCareer/linux-commands-practice.git
7fd8dec..c4a72f1 master_1 -> master_1
P5 C:\Users\anshu\linux-commands-practice> |
```

```
EXPLORER SOURCE CONTROL: REPOSITORIES SOURCE CONTROL: CHANGES LINUX-COMMANDS-PRACTICE
screenshots templates
form.html success.html todo.html M
app.py datajson
Linux_Assignment_Anshu_Ta...
Linux_Assignment_Anshu_Ta...

OUTLINE
TIMELINE

templates > todo.html > html > body > form
2 <html>
5 </head>
6 <body>
7 <h2>To-Do Form</h2>
8 <form action="/submittodoitem" method="post">
9 <input type="number" name="itemId" placeholder="Item ID" required><br><br>

PROBLEMS OUTPUT DEBUG CONSOLE TERMINAL PORTS GITLENS
P5 C:\Users\anshu\linux-commands-practice> git push origin main
Everything up-to-date
P5 C:\Users\anshu\linux-commands-practice> git log --oneline
>>
d543ccd (HEAD -> main, origin/master_2, origin/main, origin/HEAD, master_2) Added In New method As Post Api In App.py page
7fd8dec Added Ne template hital file in todo
e5442bd (origin/Anshu_new, Anshu_new) Updated Api data in Anshu_new Branch
bc204de Merge pull request #1 from AnshuCareer/AnshuCareer
2c84647 (origin/AnshuCareer, AnshuCareer) Changes added On some Impact
99c8a66 Flask form submission with MongoDB Atlas
c4d58c4 Part 2 basics Of Python.
1be2152 Linux Assignment Anshu Tamrakar
P5 C:\Users\anshu\linux-commands-practice> |
```

The screenshot shows a Visual Studio Code editor with a file explorer on the left and a terminal at the bottom. The file explorer shows a project named 'linux-commands-practice' with files like 'form.html', 'success.html', and 'todo.html'. The 'todo.html' file is open in the editor, showing an HTML form with a text input for 'Item ID' and a submit button. The terminal at the bottom shows the output of several git commands: a commit, a push to the main branch, a checkout to the master_1 branch, and a rebase of the master_1 branch onto the main branch. The output indicates that the rebase was successful and the refs/heads/master_1 were updated.

```
templates > todo.html > HTML > body > form
2 <html>
5 </head>
6 <body>
7 <h2>To-Do Form</h2>
8 <form action="/submittodoitem" method="post">
9 <input type="number" name="itemId" placeholder="Item ID" required><br><br>

PROBLEMS OUTPUT DEBUG CONSOLE TERMINAL PORTS GITLENS
powershell + - - - - -

Everything up-to-date
• PS C:\Users\anshu\linux-commands-practice> git commit -m "Reset main branch to Item ID field only"
[main 79550e2] Reset main branch to Item ID field only
• PS C:\Users\anshu\linux-commands-practice> git push origin main --force
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% (2/2), 304 bytes | 304.00 KiB/s, done.
Total 2 (delta 1), reused 0 (delta 0), pack-reused 0 (from 0)
remote: Resolving deltas: 100% (1/1), completed with 1 local object.
To github.com:AnshuCareer/linux-commands-practice.git
d543ccd..79550e2 main -> main
• PS C:\Users\anshu\linux-commands-practice> git checkout master_1
Switched to branch 'master_1'
Your branch is up to date with 'origin/master_1'.
• PS C:\Users\anshu\linux-commands-practice> git rebase main
Successfully rebased and updated refs/heads/master_1.
• PS C:\Users\anshu\linux-commands-practice>

Successfully rebased and updated refs/heads/master_1.
PS C:\Users\anshu\linux-commands-practice> git push origin master_1 --force
>>
Total 0 (delta 0), reused 0 (delta 0), pack-reused 0 (from 0)
To github.com:AnshuCareer/linux-commands-practice.git
c4a72f1..79550e2 master_1 -> master_1
PS C:\Users\anshu\linux-commands-practice>
```

The To-Do form was enhanced in the master_1 branch by adding Item ID, Item UUID, and Item Hash fields.

Each field was committed separately to preserve commit history.

The branch was merged into the main branch.

Git soft reset was used to roll back the main branch to the commit where only the Item ID field was added, and the state was re-committed.

Finally, the updated main branch changes were rebased into the master_1 branch while preserving individual commits.