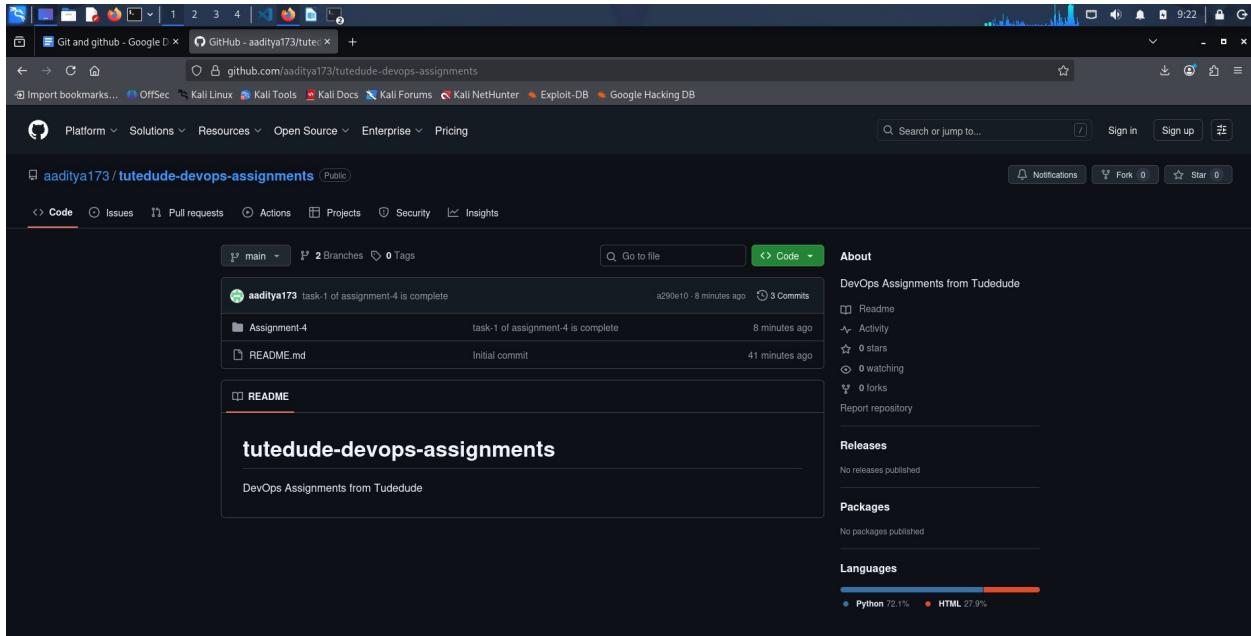
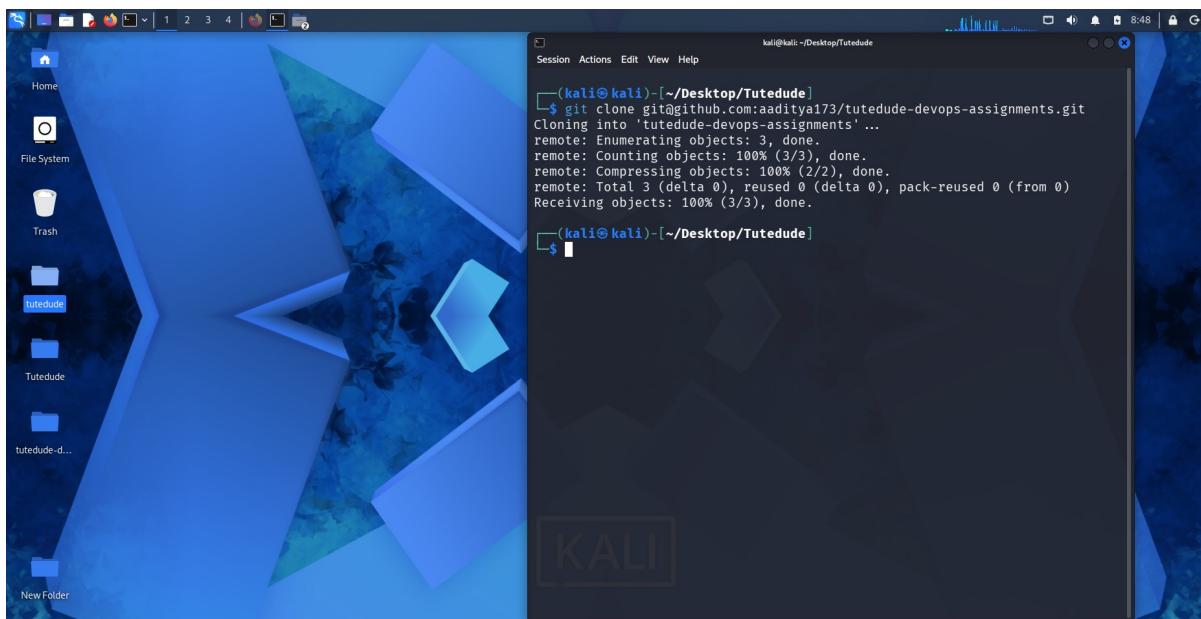


1. Create a new GitHub repository.



- 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`).

The screenshot shows a Kali Linux desktop environment with a blue hexagonal background. A terminal window is open in the top right corner, displaying the following session:

```
kali@kali: ~/Desktop/Tutedude/tutedude-devops-assignments
Session Actions Edit View Help

[kali@kali:~/Desktop/Tutedude] $ git clone git@github.com:aaditya173/tutedude-devops-assignments.git
Cloning into 'tutedude-devops-assignments'...
remote: Enumerating objects: 3, done.
remote: Counting objects: 100% (3/3), done.
remote: Compressing objects: 100% (2/2), done.
remote: Total 3 (delta 0), reused 0 (delta 0), pack-reused 0 (from 0)
Receiving objects: 100% (3/3), done.

[kali@kali:~/Desktop/Tutedude] $ git checkout -b Aaditya173
fatal: not a git repository (or any of the parent directories): .git

[kali@kali:~/Desktop/Tutedude] $ cd tutedude-devops-assignments

[kali@kali:~/Desktop/Tutedude/tutedude-devops-assignments] $ git checkout -b Aaditya173
Switched to a new branch 'Aaditya173'

[kali@kali:~/Desktop/Tutedude/tutedude-devops-assignments] $ git branch
* Aaditya173
  main

[kali@kali:~/Desktop/Tutedude/tutedude-devops-assignments] $
```

- Add your Flask project files to this branch.

```
kali@kali:~/Desktop/Tutedude/tutedude-devops-assignments
```

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

```
(kali㉿kali)-[~/Desktop/Tutedude/tutedude-devops-assignments]
```

```
$ git add Assignment-4
```

```
(kali㉿kali)-[~/Desktop/Tutedude/tutedude-devops-assignments]
```

```
$ ls
```

```
Assignment-4 README.md
```

```
(kali㉿kali)-[~/Desktop/Tutedude/tutedude-devops-assignments]
```

```
$ git status
```

On branch aaditya173
Changes to be committed:
(use "git restore --staged <file>" to unstage)
 new file: Assignment-4/Flask_Projects/task-1/.gitignore
 new file: Assignment-4/Flask_Projects/task-1/README.md
 new file: Assignment-4/Flask_Projects/task-1/app.py
 new file: Assignment-4/Flask_Projects/task-1/data.json
 new file: Assignment-4/Flask_Projects/task-1/requirements
.txt
 new file: Assignment-4/Flask_Projects/task-2/.env.example
 new file: Assignment-4/Flask_Projects/task-2/.gitignore
 new file: Assignment-4/Flask_Projects/task-2/README.md
 new file: Assignment-4/Flask_Projects/task-2/app.py
 new file: Assignment-4/Flask_Projects/task-2/requirements
.txt
 new file: Assignment-4/Flask_Projects/task-2/templates/in
dex.html

```
(kali㉿kali)-[~/Desktop/Tutedude/tutedude-devops-assignments]
```

```
$
```

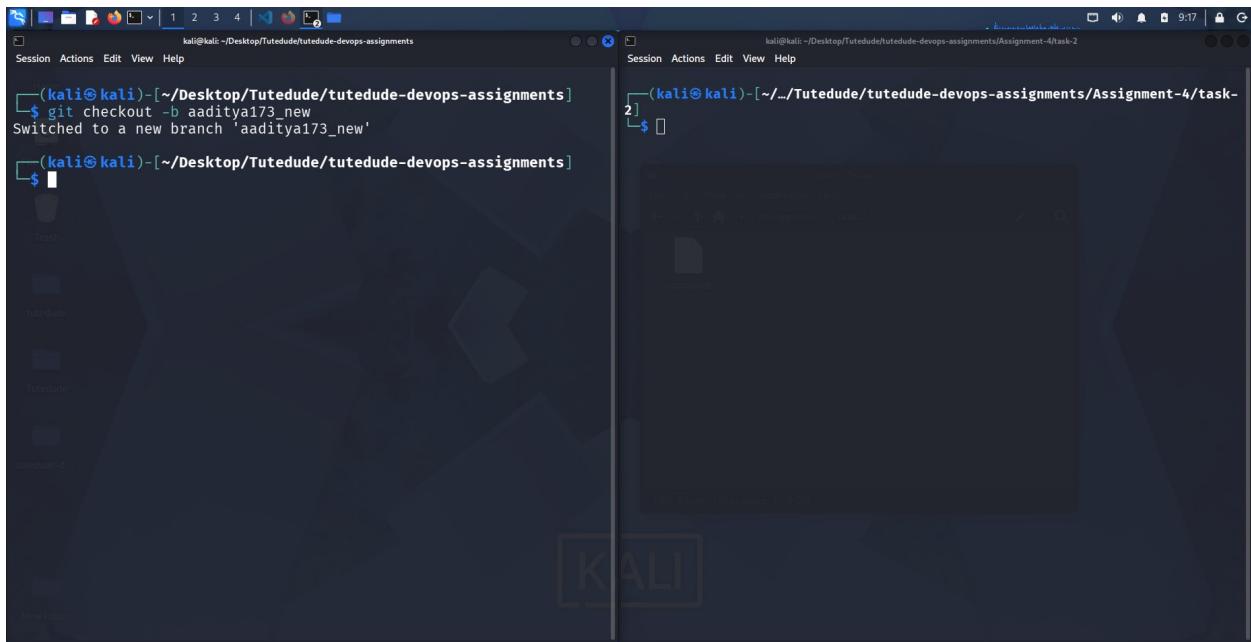
- Commit the changes and merge the branch into the `main` branch.

```
kali@kali: ~/Desktop/Tutedude/tutedude-devops-assignments
Session Actions Edit View Help
Your branch is up to date with 'origin/main'.
(kali㉿kali)-[~/Desktop/Tutedude/tutedude-devops-assignments]
$ git merge aaditya173
Updating d2f31c0..f56b4c4
Fast-forward
... /Flask_Projects/task-1/.gitignore      |    2 +
... /Flask_Projects/task-1/README.md       |   61 ++++++++-
Assignment-4/Flask_Projects/task-1/app.py  |   27 +////
... /Flask_Projects/task-1/data.json        |    17 +++
... /Flask_Projects/task-1/requirements.txt |     7 ++
... /Flask_Projects/task-2/.env.example    |     3 +
... /Flask_Projects/task-2/.gitignore       |     2 +
... /Flask_Projects/task-2/README.md        | 113 ++++++-----
Assignment-4/Flask_Projects/task-2/app.py  |   37 +////
... /Flask_Projects/task-2/requirements.txt |    11 ++
... /task-2/templates/index.html          |   22 +++
11 files changed, 302 insertions(+)
create mode 100644 Assignment-4/Flask_Projects/task-1/.gitignore
create mode 100644 Assignment-4/Flask_Projects/task-1/README.md
create mode 100644 Assignment-4/Flask_Projects/task-1/app.py
create mode 100644 Assignment-4/Flask_Projects/task-1/data.json
create mode 100644 Assignment-4/Flask_Projects/task-1/requirements
.txt
create mode 100644 Assignment-4/Flask_Projects/task-2/.env.example
create mode 100644 Assignment-4/Flask_Projects/task-2/.gitignore
create mode 100644 Assignment-4/Flask_Projects/task-2/README.md
create mode 100644 Assignment-4/Flask_Projects/task-2/app.py
create mode 100644 Assignment-4/Flask_Projects/task-2/requirements
.txt
create mode 100644 Assignment-4/Flask_Projects/task-2/templates/in
dex.html
```

```
kali@kali: ~/Desktop/Tutedude/tutedude-devops-assignments
Session Actions Edit View Help
(kali㉿kali)-[~/Desktop/Tutedude/tutedude-devops-assignments]
$ git push origin main
Everything up-to-date

(kali㉿kali)-[~/Desktop/Tutedude/tutedude-devops-assignments]
$
```

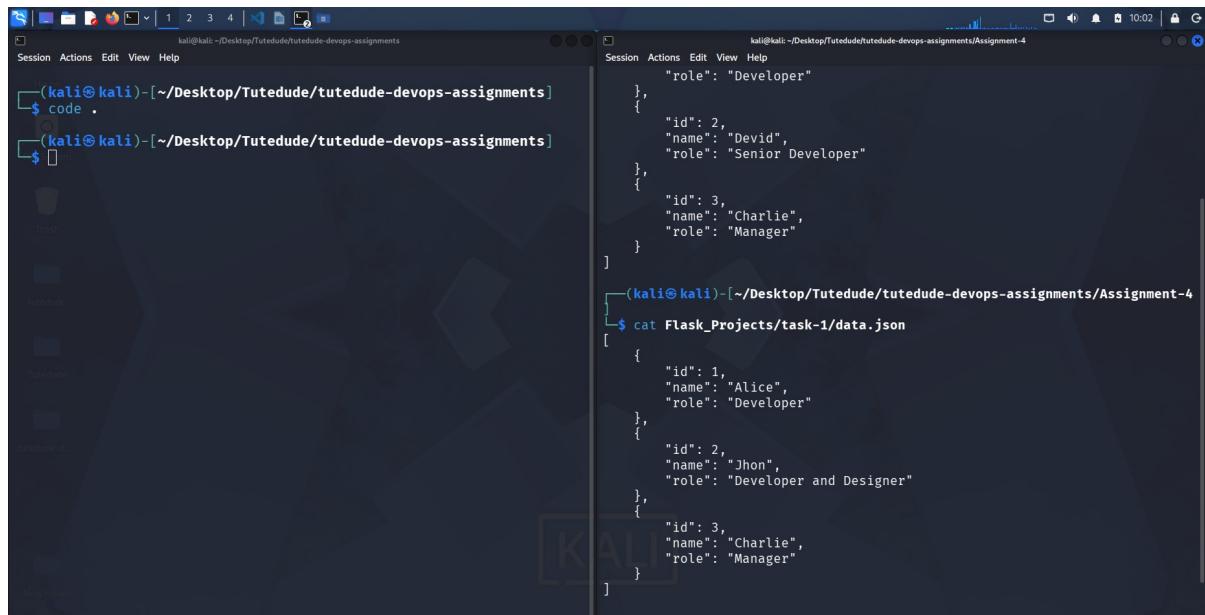
2. Create a new branch named <your_name>_new (e.g., Tutedude_new).



```
(kali㉿kali)-[~/Desktop/Tutedude/tutedude-devops-assignments]
$ git checkout -b aaditya173_new
Switched to a new branch 'aaditya173_new'

(kali㉿kali)-[~/Desktop/Tutedude/tutedude-devops-assignments]
```

- Update the content of the JSON file used for the /api route in this branch.



```
(kali㉿kali)-[~/Desktop/Tutedude/tutedude-devops-assignments]
$ code .

(kali㉿kali)-[~/Desktop/Tutedude/tutedude-devops-assignments]
$ cat Flask_Projects/task-1/data.json
[
    {
        "id": 1,
        "name": "Alice",
        "role": "Developer"
    },
    {
        "id": 2,
        "name": "Jhon",
        "role": "Developer and Designer"
    },
    {
        "id": 3,
        "name": "Charlie",
        "role": "Manager"
    }
]
```

- Merge the `<your_name>_new` branch into the `main` branch.

```

(kali㉿kali)-[~/Desktop/Tutedude/tutedude-devops-assignments]
$ git add .
(kali㉿kali)-[~/Desktop/Tutedude/tutedude-devops-assignments]
$ git commit -m "add data on data.json file of flask project in b
ranch aaditya173_new"
[aaditya173_new d961916] add data on data.json file of flask projec
t in branch aaditya173_new
1 file changed, 22 insertions(+)

(kali㉿kali)-[~/Desktop/Tutedude/tutedude-devops-assignments]
$ git checkout main
Switched to branch 'main'.
Your branch is up to date with 'origin/main'.

(kali㉿kali)-[~/Desktop/Tutedude/tutedude-devops-assignments]
$ git merge aaditya173
Already up to date.

(kali㉿kali)-[~/Desktop/Tutedude/tutedude-devops-assignments]
$ git merge aaditya173_new
Updating a290e10..d961916
Fast-forward
Assignment-4/Flask_Projects/task-1/data.json | 13 ++++++----
1 file changed, 9 insertions(+), 4 deletions(-)

(kali㉿kali)-[~/Desktop/Tutedude/tutedude-devops-assignments]
$ 

```

- If there are conflicts during the merge, resolve them by accepting the changes from the `<your_name>_new` branch.

```

(kali㉿kali)-[~/Desktop/Tutedude/tutedude-devops-assignments]
$ git add .
(kali㉿kali)-[~/Desktop/Tutedude/tutedude-devops-assignments]
$ git commit -m "add data on data.json file of flask project in b
ranch aaditya173_new"
[aaditya173_new d961916] add data on data.json file of flask projec
t in branch aaditya173_new
1 file changed, 22 insertions(+)

(kali㉿kali)-[~/Desktop/Tutedude/tutedude-devops-assignments]
$ git checkout main
Switched to branch 'main'.
Your branch is up to date with 'origin/main'.

(kali㉿kali)-[~/Desktop/Tutedude/tutedude-devops-assignments]
$ git merge aaditya173
Already up to date.

(kali㉿kali)-[~/Desktop/Tutedude/tutedude-devops-assignments]
$ git merge aaditya173_new
Updating a290e10..d961916
Fast-forward
Assignment-4/Flask_Projects/task-1/data.json | 13 ++++++----
1 file changed, 9 insertions(+), 4 deletions(-)

(kali㉿kali)-[~/Desktop/Tutedude/tutedude-devops-assignments]
$ 

```

3. Branch Creation:

- Create two branches: `master_1` and `master_2` from the `main` branch.

The screenshot shows a terminal window with two panes. The left pane displays the command history for creating branches:

```
(kali㉿kali)-[~/Desktop/Tutedude/tutedude-devops-assignments]
$ git checkout -b master_1
Switched to a new branch 'master_1'

(kali㉿kali)-[~/Desktop/Tutedude/tutedude-devops-assignments]
$ git checkout main
Switched to branch 'main'
Your branch is ahead of 'origin/main' by 2 commits.
  (use "git push" to publish your local commits)

(kali㉿kali)-[~/Desktop/Tutedude/tutedude-devops-assignments]
$ git checkout -b master_2
Switched to a new branch 'master_2'

(kali㉿kali)-[~/Desktop/Tutedude/tutedude-devops-assignments]
```

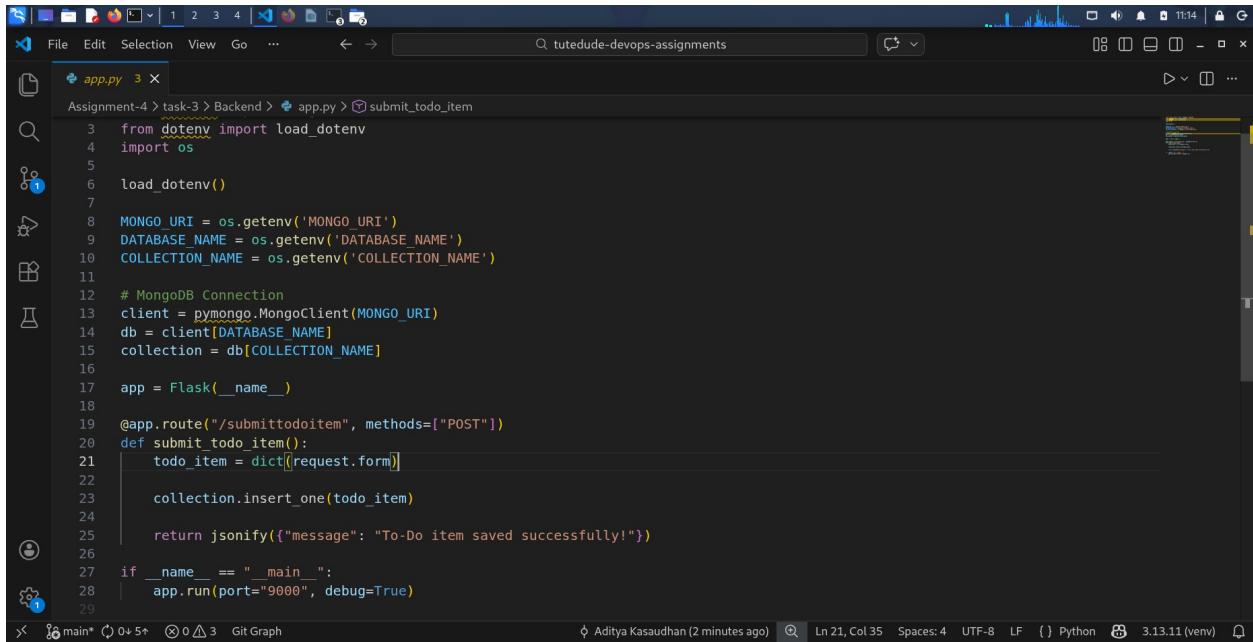
The right pane is a blank terminal session.

- 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

The screenshot shows a code editor window displaying the `index.html` file. The code defines a simple form for creating a to-do item:

```
<!DOCTYPE html>
<html>
<head>
  <title>To-Do Page</title>
</head>
<body>
  <h2>Create To-Do Item</h2>
  <form action="/submittodoitem" method="POST">
    <label>Item Name:</label><br>
    <input type="text" name="itemName" required><br><br>
    <label>Item Description:</label><br>
    <textarea name="itemDescription" required></textarea><br><br>
    <button type="submit">Submit</button>
  </form>
</body>
</html>
```

- **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.



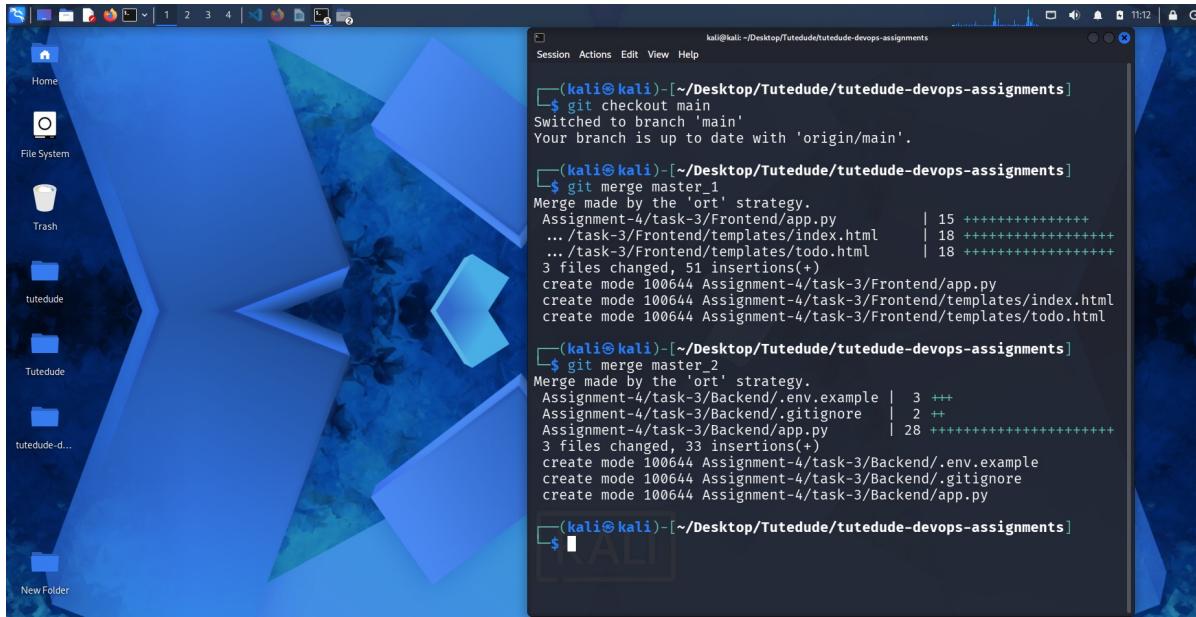
```

app.py 3 ✘
Assignment-4 > task-3 > Backend > app.py > submit_todo_item
3   from dotenv import load_dotenv
4   import os
5
6   load_dotenv()
7
8   MONGO_URI = os.getenv('MONGO_URI')
9   DATABASE_NAME = os.getenv('DATABASE_NAME')
10  COLLECTION_NAME = os.getenv('COLLECTION_NAME')
11
12  # MongoDB Connection
13  client = pymongo.MongoClient(MONGO_URI)
14  db = client[DATABASE_NAME]
15  collection = db[COLLECTION_NAME]
16
17  app = Flask(__name__)
18
19  @app.route("/submittodoitem", methods=["POST"])
20  def submit_todo_item():
21      todo_item = dict(request.form)
22
23      collection.insert_one(todo_item)
24
25      return jsonify({"message": "To-Do item saved successfully!"})
26
27  if __name__ == "__main__":
28      app.run(port=9000, debug=True)
29

```

Aditya Kasaudhan (2 minutes ago) | Ln 21, Col 35 | Spaces: 4 | UTF-8 | LF | Python | 3.13.11 (venv) | ↻

- **Merging Changes:**
- Merge the changes from both `master_1` and `master_2` into the `main` branch.



```

Session Actions Edit View Help
(kali㉿kali)-[~/Desktop/Tutedude/tutedude-devops-assignments]
$ git checkout main
Switched to branch 'main'
Your branch is up to date with 'origin/main'.

(kali㉿kali)-[~/Desktop/Tutedude/tutedude-devops-assignments]
$ git merge master_1
Merge made by the 'ort' strategy.
 Assignment-4/task-3/Frontend/app.py      | 15 ++++++=====
 .../task-3/Frontend/templates/index.html | 18 ++++++=====
 .../task-3/Frontend/templates/todo.html   | 18 ++++++=====
3 files changed, 51 insertions(+)
create mode 100644 Assignment-4/task-3/Frontend/app.py
create mode 100644 Assignment-4/task-3/Frontend/templates/index.html
create mode 100644 Assignment-4/task-3/Frontend/templates/todo.html

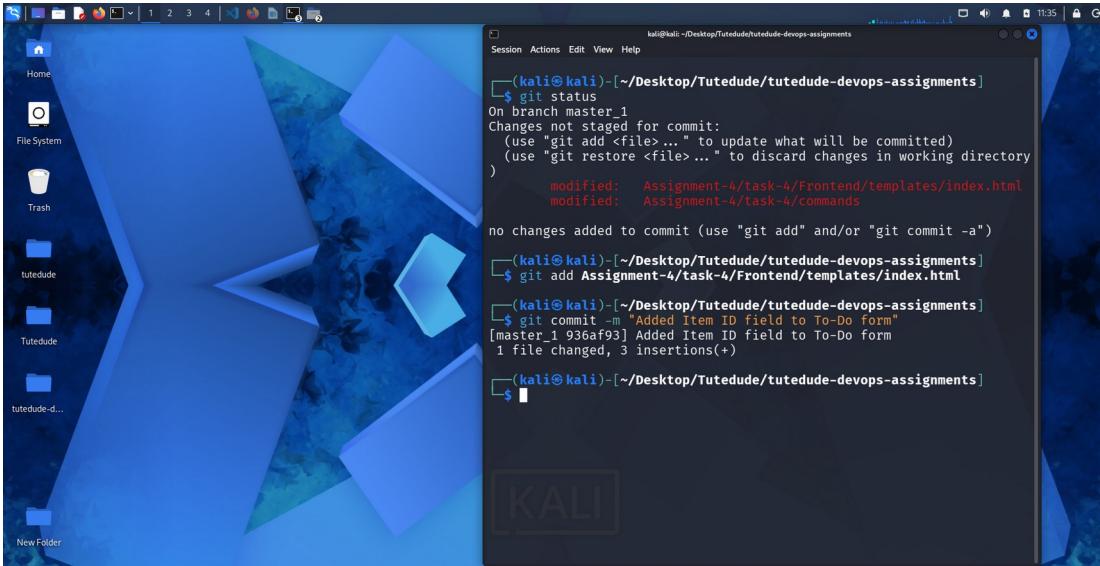
(kali㉿kali)-[~/Desktop/Tutedude/tutedude-devops-assignments]
$ git merge master_2
Merge made by the 'ort' strategy.
 Assignment-4/task-3/Backend/.env.example |  3 ++
 Assignment-4/task-3/Backend/.gitignore    |  2 ++
 Assignment-4/task-3/Backend/app.py       | 28 ++++++=====
3 files changed, 33 insertions(+)
create mode 100644 Assignment-4/task-3/Backend/.env.example
create mode 100644 Assignment-4/task-3/Backend/.gitignore
create mode 100644 Assignment-4/task-3/Backend/app.py

(kali㉿kali)-[~/Desktop/Tutedude/tutedude-devops-assignments]
$ 

```

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.



```
kali@kali:~/Desktop/Tutedude/tutedude-devops-assignments
Session Actions Edit View Help
(kali㉿kali)-[~/Desktop/Tutedude/tutedude-devops-assignments]
$ git status
On branch master_1
Changes not staged for commit:
  (use "git add <file>..." to update what will be committed)
  (use "git restore <file>..." to discard changes in working directory
)
    modified:   Assignment-4/task-4/Frontend/templates/index.html
    modified:   Assignment-4/task-4/commands

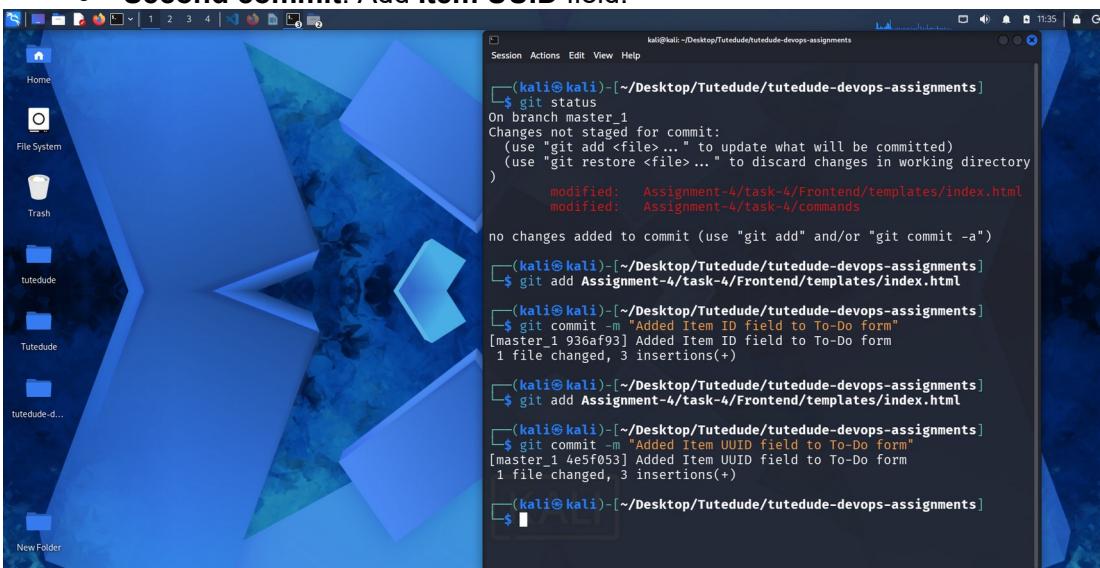
no changes added to commit (use "git add" and/or "git commit -a")

(kali㉿kali)-[~/Desktop/Tutedude/tutedude-devops-assignments]
$ git add Assignment-4/task-4/Frontend/templates/index.html

(kali㉿kali)-[~/Desktop/Tutedude/tutedude-devops-assignments]
$ git commit -m "Added Item ID field to To-Do form"
[master_1 936af93] Added Item ID field to To-Do form
1 file changed, 3 insertions(+)

(kali㉿kali)-[~/Desktop/Tutedude/tutedude-devops-assignments]
$
```

- **Second commit:** Add **Item UUID** field.



```
kali@kali:~/Desktop/Tutedude/tutedude-devops-assignments
Session Actions Edit View Help
(kali㉿kali)-[~/Desktop/Tutedude/tutedude-devops-assignments]
$ git status
On branch master_1
Changes not staged for commit:
  (use "git add <file>..." to update what will be committed)
  (use "git restore <file>..." to discard changes in working directory
)
    modified:   Assignment-4/task-4/Frontend/templates/index.html
    modified:   Assignment-4/task-4/commands

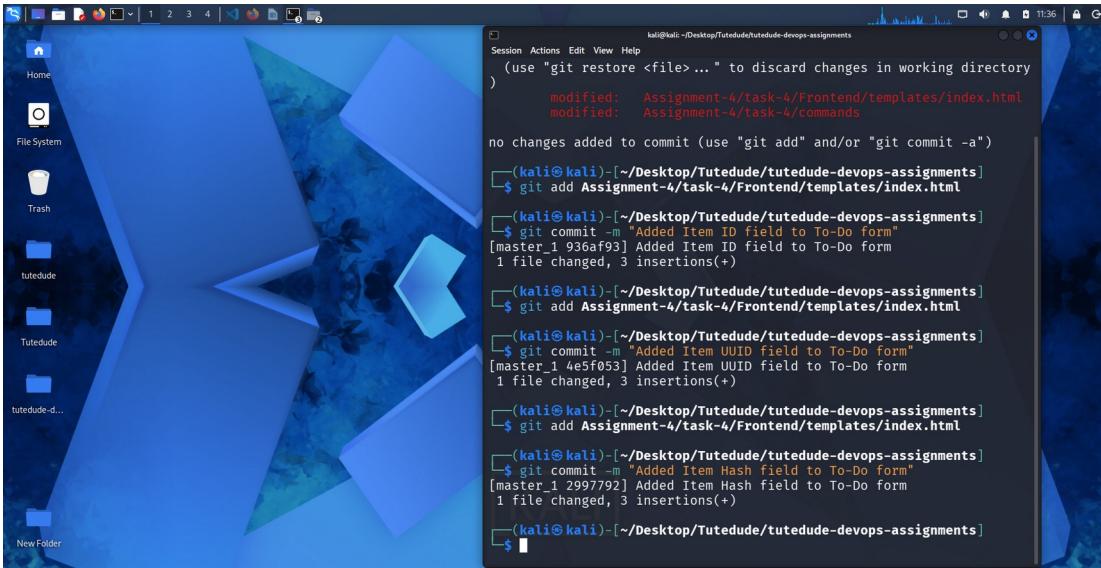
no changes added to commit (use "git add" and/or "git commit -a")

(kali㉿kali)-[~/Desktop/Tutedude/tutedude-devops-assignments]
$ git add Assignment-4/task-4/Frontend/templates/index.html

(kali㉿kali)-[~/Desktop/Tutedude/tutedude-devops-assignments]
$ git commit -m "Added Item UUID field to To-Do form"
[master_1 4e5f053] Added Item UUID field to To-Do form
1 file changed, 3 insertions(+)

(kali㉿kali)-[~/Desktop/Tutedude/tutedude-devops-assignments]
$
```

○ Third commit: Add Item Hash field.



A screenshot of a Linux desktop environment. On the left is a file manager window showing a directory structure with folders like 'File System', 'Trash', 'tutedude', 'Tutedude', and 'tutedude-d...'. On the right is a terminal window titled 'kali@kali: ~/Desktop/Tutedude/tutedude-devops-assignments'. The terminal shows a series of git commands and their outputs:

```
Session Actions Edit View Help
(use "git restore <file>..." to discard changes in working directory)
modified: Assignment-4/task-4/Frontend/templates/index.html
modified: Assignment-4/task-4/commands

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

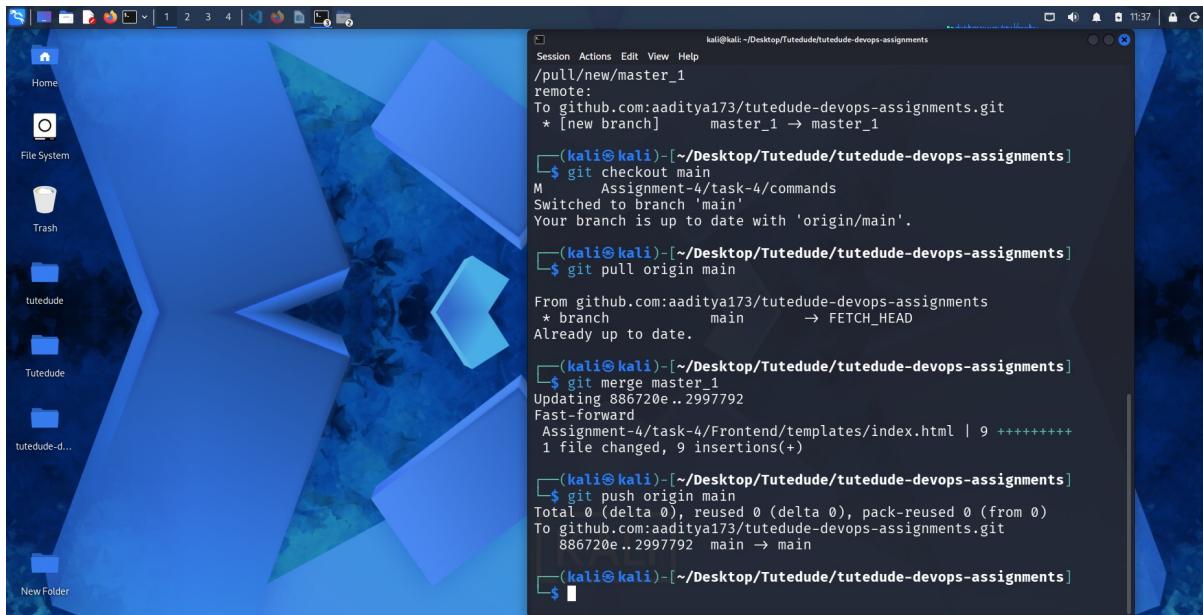
[kali@kali:~/Desktop/Tutedude/tutedude-devops-assignments]
$ git add Assignment-4/task-4/Frontend/templates/index.html
[kali@kali:~/Desktop/Tutedude/tutedude-devops-assignments]
$ git commit -m "Added Item ID field to To-Do form"
[master_1 936af93] Added Item ID field to To-Do form
1 file changed, 3 insertions(+)

[kali@kali:~/Desktop/Tutedude/tutedude-devops-assignments]
$ git add Assignment-4/task-4/commands
[kali@kali:~/Desktop/Tutedude/tutedude-devops-assignments]
$ git commit -m "Added Item UUID field to To-Do form"
[master_1 4e5f053] Added Item UUID field to To-Do form
1 file changed, 3 insertions(+)

[kali@kali:~/Desktop/Tutedude/tutedude-devops-assignments]
$ git add Assignment-4/Frontend/templates/index.html
[kali@kali:~/Desktop/Tutedude/tutedude-devops-assignments]
$ git commit -m "Added Item Hash field to To-Do form"
[master_1 2997792] Added Item Hash field to To-Do form
1 file changed, 3 insertions(+)

[kali@kali:~/Desktop/Tutedude/tutedude-devops-assignments]
```

- **Merging to main:**
- Merge the `master_1` branch into the `main` branch.



A screenshot of a Linux desktop environment. On the left is a file manager window showing a directory structure with folders like 'File System', 'Trash', 'tutedude', 'Tutedude', and 'tutedude-d...'. On the right is a terminal window titled 'kali@kali: ~/Desktop/Tutedude/tutedude-devops-assignments'. The terminal shows the following git commands:

```
/pull/new/master_1
remote:
To github.com:aaditya173/tutedude-devops-assignments.git
 * [new branch] master_1 -> master_1

[kali@kali:~/Desktop/Tutedude/tutedude-devops-assignments]
$ git checkout main
M Assignment-4/task-4/commands
Switched to branch 'main'.
Your branch is up to date with 'origin/main'.

[kali@kali:~/Desktop/Tutedude/tutedude-devops-assignments]
$ git pull origin main
From github.com:aaditya173/tutedude-devops-assignments
 * branch      main      -> FETCH_HEAD
Already up to date.

[kali@kali:~/Desktop/Tutedude/tutedude-devops-assignments]
$ git merge master_1
Updating 886720e..2997792
Fast-forward
 Assignment-4/Frontend/templates/index.html | 9 ++++++++
 1 file changed, 9 insertions(+)

[kali@kali:~/Desktop/Tutedude/tutedude-devops-assignments]
$ git push origin main
Total 0 (delta 0), reused 0 (delta 0), pack-reused 0 (from 0)
To github.com:aaditya173/tutedude-devops-assignments.git
 886720e..2997792 main -> main

[kali@kali:~/Desktop/Tutedude/tutedude-devops-assignments]
```

- **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.

```
(kali㉿kali)-[~/Desktop/Tutedude/tutedude-devops-assignments]
$ git log --oneline
2997792 (HEAD → main, origin/master_1, origin/main, origin/HEAD, master_1) Added Item Hash field to To-Do form
4e5f053 Added Item UUID field to To-Do form
936af93 Added Item ID field to To-Do form
886720e initial files for task-4 of assignment-4
2b79bf9 complete task-3 of assignment-4
ea70710 complete task-3 of assignment-4
5e2569e Merge branch 'master_2'
11b4832 Merge branch 'master_1'
c1cae7a (master_2) Added /submittodoitem backend route with MongoDB storage in master_2
dd18925 Add Feature Development in master_1
3ec0be9 task-2 of assignment-4 is complete
90c6790 task-2 of assignment-4 is complete
d961916 (aaditya173_new) add data on data.json file of flask project in branch aaditya173_new
f450507 remove all the data of data.json from the flask project
a290e10 task-1 of assignment-4 is complete
f56b4c4 (origin/aaditya173, aaditya173) Add flask project in aaditya173 branch for assignment-4 task-1
d2f31c0 Initial commit

(kali㉿kali)-[~/Desktop/Tutedude/tutedude-devops-assignments]
$
```

```
(kali㉿kali)-[~/Desktop/Tutedude/tutedude-devops-assignments]
$ git log --oneline
2997792 (HEAD → main, origin/master_1, origin/main, origin/HEAD, master_1) Added Item Hash field to To-Do form
4e5f053 Added Item UUID field to To-Do form
936af93 Added Item ID field to To-Do form
886720e initial files for task-4 of assignment-4
2b79bf9 complete task-3 of assignment-4
ea70710 complete task-3 of assignment-4
5e2569e Merge branch 'master_2'
11b4832 Merge branch 'master_1'
c1cae7a (master_2) Added /submittodoitem backend route with MongoDB storage in master_2
dd18925 Add Feature Development in master_1
3ec0be9 task-2 of assignment-4 is complete
90c6790 task-2 of assignment-4 is complete
d961916 (aaditya173_new) add data on data.json file of flask project in branch aaditya173_new
f450507 remove all the data of data.json from the flask project
a290e10 task-1 of assignment-4 is complete
f56b4c4 (origin/aaditya173, aaditya173) Add flask project in aaditya173 branch for assignment-4 task-1
d2f31c0 Initial commit

(kali㉿kali)-[~/Desktop/Tutedude/tutedude-devops-assignments]
$ git reset --soft 936af93
(kali㉿kali)-[~/Desktop/Tutedude/tutedude-devops-assignments]
$
```

- Re-commit this state to the `main` branch.

```

Session Actions Edit View Help
(use "git pull" to update your local branch)

Changes to be committed:
  (use "git restore --staged <file> ..." to unstage)
    modified: Assignment-4/task-4/Frontend/templates/index.html

Changes not staged for commit:
  (use "git add <file>..." to update what will be committed)
  (use "git restore <file>..." to discard changes in working directory)
    modified: Assignment-4/task-4/commands

(kali㉿kali)-[~/Desktop/Tutedude/tutedude-devops-assignments]
$ git commit -m "Recommitted state with only Item ID field"
[main b67fe7f] Recommitted state with only Item ID field
1 file changed, 6 insertions(+)

(kali㉿kali)-[~/Desktop/Tutedude/tutedude-devops-assignments]
$ git status
On branch main
Your branch and 'origin/main' have diverged,
and have 1 and 2 different commits each, respectively.
  (use "git pull" if you want to integrate the remote branch with yours)

Changes not staged for commit:
  (use "git add <file>..." to update what will be committed)
  (use "git restore <file>..." to discard changes in working directory)
    modified: Assignment-4/task-4/commands

no changes added to commit (use "git add" and/or "git commit -a")
(kali㉿kali)-[~/Desktop/Tutedude/tutedude-devops-assignments]
$ 

```

- Merge this updated state to the `main` branch.

```

Session Actions Edit View Help
(kali㉿kali)-[~/Desktop/Tutedude/tutedude-devops-assignments]
$ git status
On branch main
Your branch and 'origin/main' have diverged,
and have 1 and 2 different commits each, respectively.
  (use "git pull" if you want to integrate the remote branch with yours)

Changes not staged for commit:
  (use "git add <file>..." to update what will be committed)
  (use "git restore <file>..." to discard changes in working directory)
    modified: Assignment-4/task-4/commands

no changes added to commit (use "git add" and/or "git commit -a")
(kali㉿kali)-[~/Desktop/Tutedude/tutedude-devops-assignments]
$ git push origin main --force
Enumerating objects: 13, done.
Counting objects: 100% (13/13), done.
Delta compression using up to 2 threads
Compressing objects: 100% (7/7), done.
Writing objects: 100% (7/7), 700 bytes | 350.00 KiB/s, done.
Total 7 (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:aaditya173/tutedude-devops-assignments.git
 + 2997792 ... b67fe7f main → main (forced update)

(kali㉿kali)-[~/Desktop/Tutedude/tutedude-devops-assignments]
$ git checkout master_1
M Assignment-4/task-4/commands
Switched to branch 'master_1'

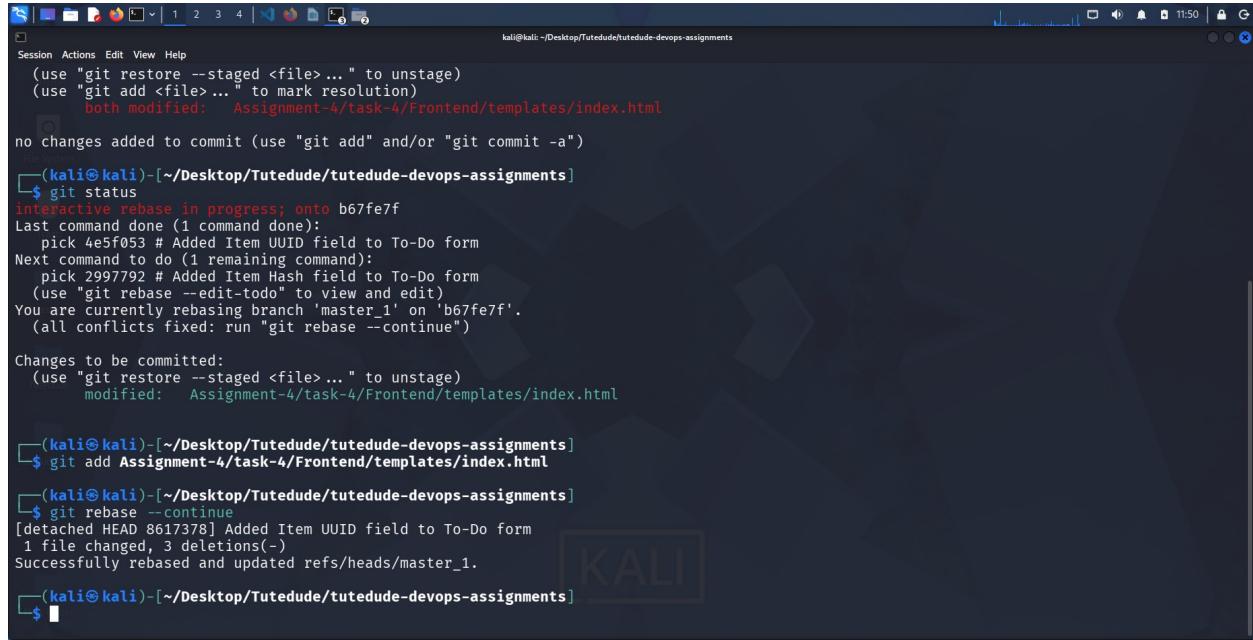
(kali㉿kali)-[~/Desktop/Tutedude/tutedude-devops-assignments]
$ 

```

- **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.



The screenshot shows a terminal window on a Kali Linux desktop environment. The terminal session is as follows:

```

Session Actions Edit View Help
Session Actions Edit View Help
kali@kali: ~/Desktop/Tutedude/tutedude-devops-assignments
(use "git restore --staged <file>..." to unstage)
(use "git add <file>..." to mark resolution)
  both modified: Assignment-4/task-4/Frontend/templates/index.html

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

(kali㉿kali)-[~/Desktop/Tutedude/tutedude-devops-assignments]
$ git status
interactive rebase in progress: onto b67fe7f
Last command done (1 command done):
pick 4e5f053 # Added Item UUID field to To-Do form
Next command to do (1 remaining command):
pick 2997792 # Added Item Hash field to To-Do form
(use "git rebase --edit-todo" to view and edit)
You are currently rebasing branch 'master_1' on 'b67fe7f'.
  (all conflicts fixed: run "git rebase --continue")

Changes to be committed:
  (use "git restore --staged <file>..." to unstage)
    modified: Assignment-4/task-4/Frontend/templates/index.html

(kali㉿kali)-[~/Desktop/Tutedude/tutedude-devops-assignments]
$ git add Assignment-4/task-4/Frontend/templates/index.html
(kali㉿kali)-[~/Desktop/Tutedude/tutedude-devops-assignments]
$ git rebase --continue
[detached HEAD 8617378] Added Item UUID field to To-Do form
  1 file changed, 3 deletions(-)
Successfully rebased and updated refs/heads/master_1.

(kali㉿kali)-[~/Desktop/Tutedude/tutedude-devops-assignments]
$ 

```

The terminal shows the user performing a git rebase operation. It starts by listing staged changes, then shows the interactive rebase in progress, and finally completes the rebase with a success message. The Kali logo watermark is visible in the background of the terminal window.