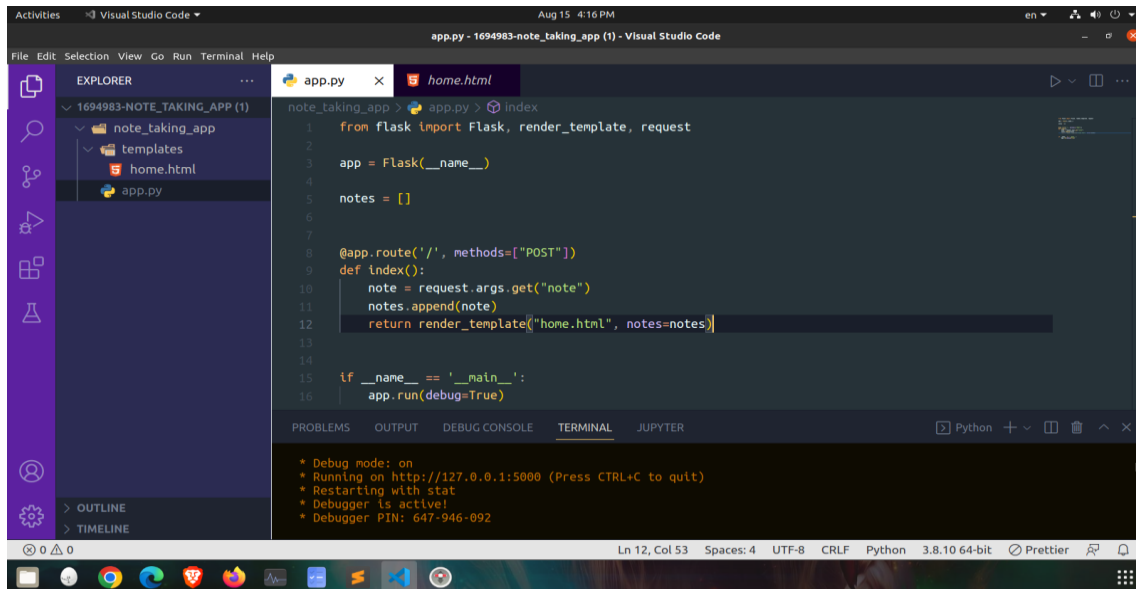


# DEBUGGING THE CODE

**STEP1:** Running the given code in VScode and viewing the application in Browser. [localhost:127.0.0.1:5000]

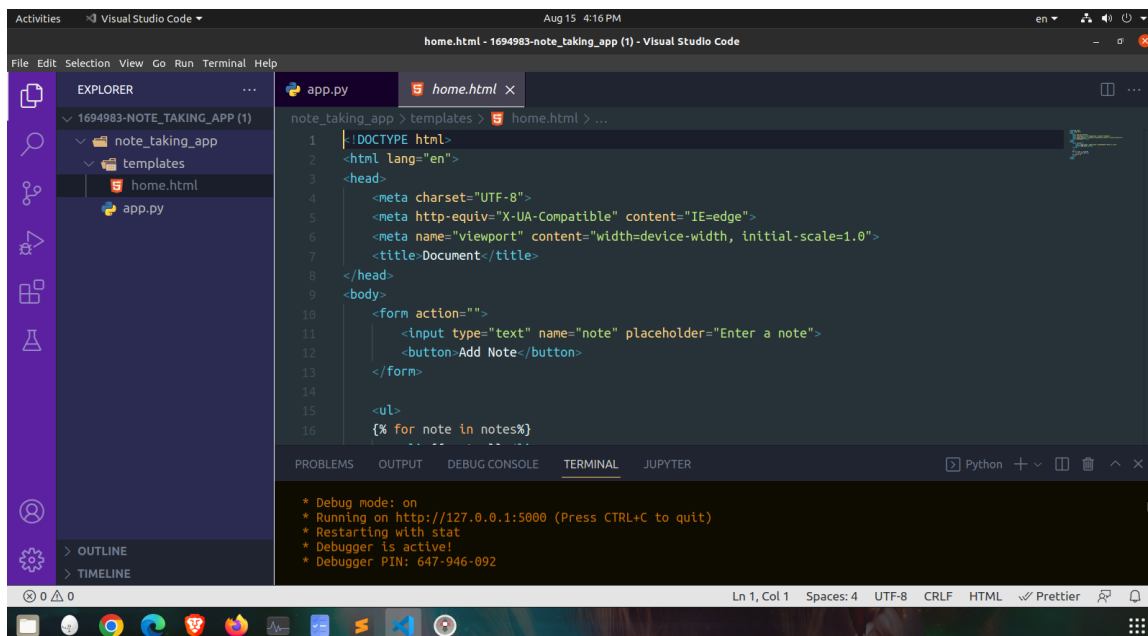


This screenshot shows the Visual Studio Code interface with the Python file `app.py` open. The Explorer sidebar on the left shows the project structure: `note_taking_app` containing `templates` (with `home.html`) and `app.py`. The main editor displays the following Python code:

```
1 from flask import Flask, render_template, request
2
3 app = Flask(__name__)
4
5 notes = []
6
7
8 @app.route('/', methods=['POST'])
9 def index():
10     note = request.args.get("note")
11     notes.append(note)
12     return render_template("home.html", notes=notes)
13
14
15 if __name__ == '__main__':
16     app.run(debug=True)
```

The bottom panel shows the TERMINAL output:

```
* Debug mode: on
* Running on http://127.0.0.1:5000 (Press CTRL+C to quit)
* Restarting with stat
* Debugger is active!
* Debugger PIN: 647-946-092
```

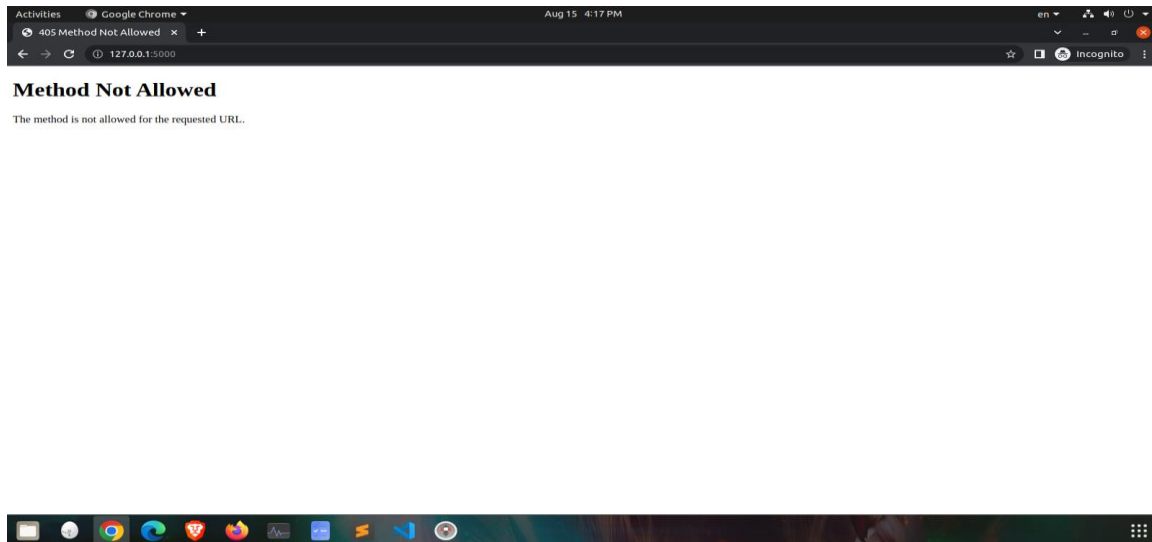


This screenshot shows the Visual Studio Code interface with the HTML file `home.html` open. The Explorer sidebar on the left shows the project structure: `note_taking_app` containing `templates` (with `home.html`) and `app.py`. The main editor displays the following HTML code:

```
1 <!DOCTYPE html>
2 <html lang="en">
3 <head>
4   <meta charset="UTF-8">
5   <meta http-equiv="X-UA-Compatible" content="IE=edge">
6   <meta name="viewport" content="width=device-width, initial-scale=1.0">
7   <title>Document</title>
8 </head>
9 <body>
10   <form action="">
11     <input type="text" name="note" placeholder="Enter a note">
12     <button>Add Note</button>
13   </form>
14
15   <ul>
16     {% for note in notes %}
```

The bottom panel shows the same TERMINAL output as the previous screenshot:

```
* Debug mode: on
* Running on http://127.0.0.1:5000 (Press CTRL+C to quit)
* Restarting with stat
* Debugger is active!
* Debugger PIN: 647-946-092
```



As we see there is an issue in executing the code, now we will find bug in the given code.

## STEP2: Finding the bug

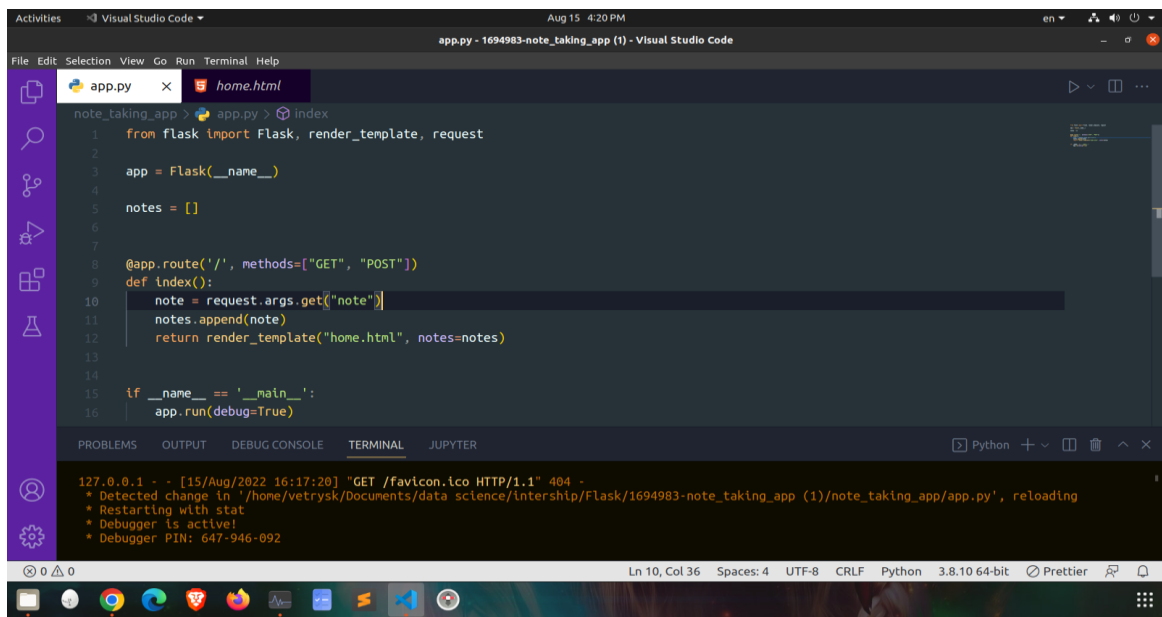
In `app.py` file, we can see that there is 'post' method mentioned in binding the function code, but while capturing data get request's capturing code is mentioned like:

```
@app.route('/', methods=["POST"])  
note = request.args.get("note")
```

Now, we need to fix bug by mentioning like:

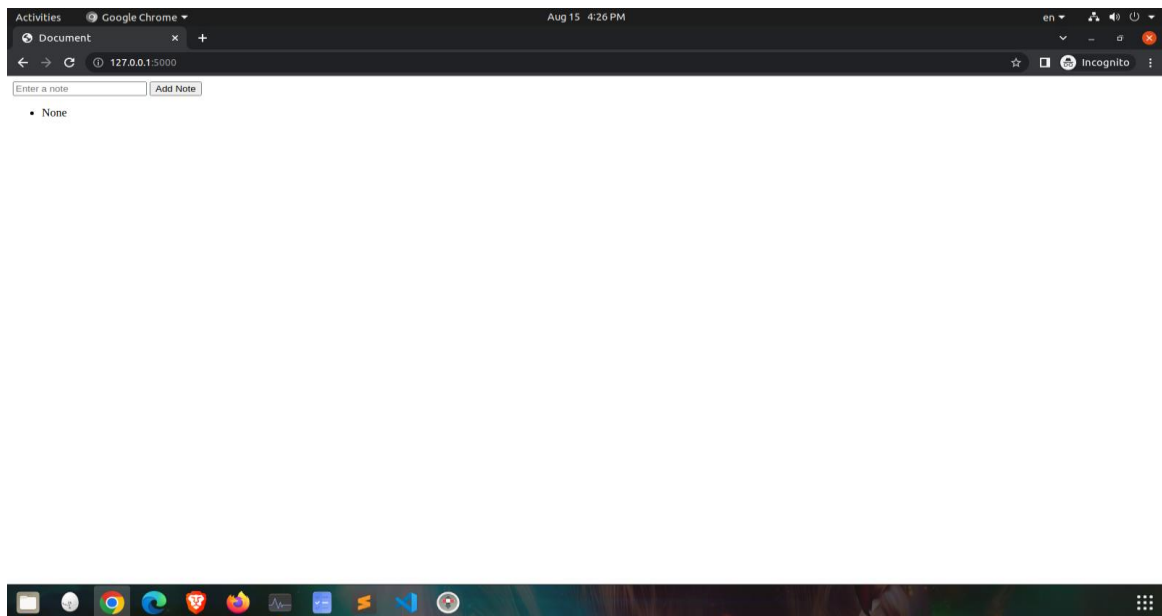
```
@app.route('/', methods=["GET", "POST"])
```

Now, will run the code.

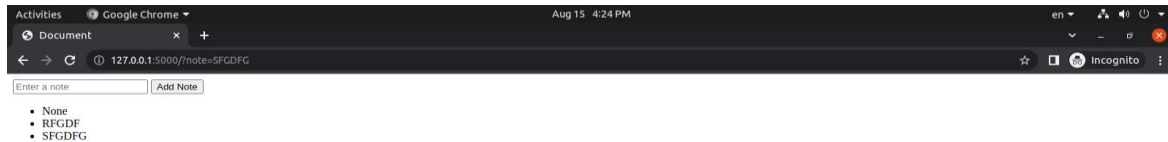


```
1 from flask import Flask, render_template, request
2
3 app = Flask(__name__)
4
5 notes = []
6
7
8 @app.route('/', methods=["GET", "POST"])
9 def index():
10     note = request.args.get("note")
11     notes.append(note)
12     return render_template("home.html", notes=notes)
13
14
15 if __name__ == '__main__':
16     app.run(debug=True)
```

127.0.0.1 - - [15/Aug/2022 16:17:20] "GET /favicon.ico HTTP/1.1" 404 -  
\* Detected change in '/home/vetrysk/Documents/data science/intership/Flask/1694983-note\_taking\_app (1)/note\_taking\_app/app.py', reloading  
\* Restarting with stat  
\* Debugger is active!  
\* Debugger PIN: 647-946-092



1. As we see code is running successfully, but there is an issue automatically **“None”** note point is displayed.

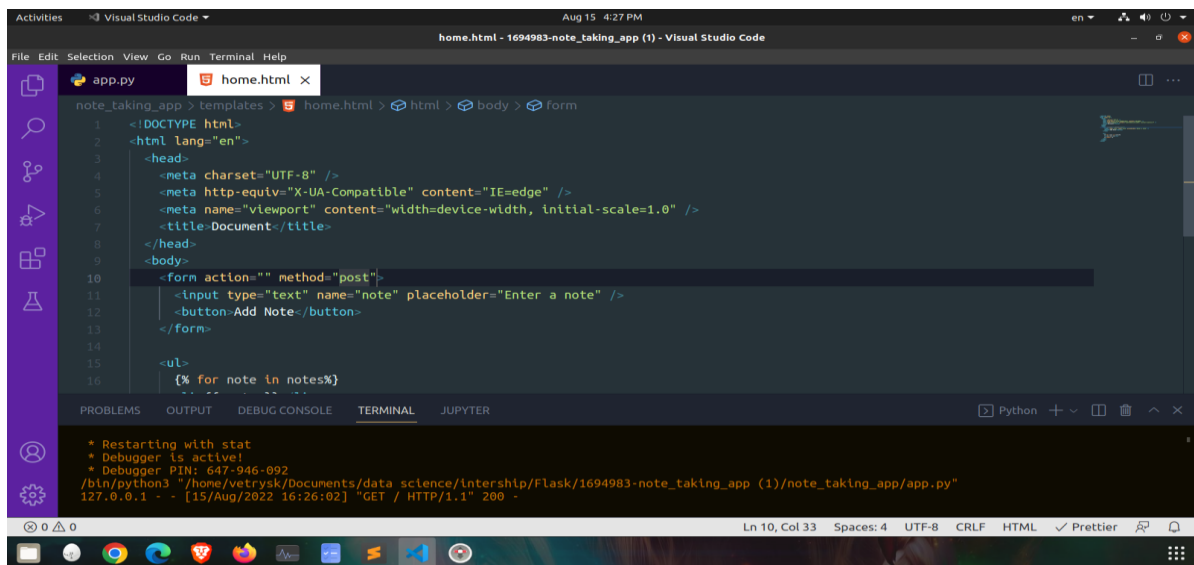


2. We can see that entered note is successfully displayed as unordered list below the text field on the same page. But we can see that post request is not called, instead get request is called.

### STEP3: Fixing the bug

1. To execute post request, mention post method in **html**.

```
<form action="" method="post">
```



```
note_taking_app > templates > home.html > html > body > form
1 <!DOCTYPE html>
2 <html lang="en">
3 <head>
4 <meta charset="UTF-8" />
5 <meta http-equiv="X-UA-Compatible" content="IE=edge" />
6 <meta name="viewport" content="width=device-width, initial-scale=1.0" />
7 <title>Document</title>
8 </head>
9 <body>
10 <form action="" method="post">
11 <input type="text" name="note" placeholder="Enter a note" />
12 <button>Add Note</button>
13 </form>
14
15 <ul>
16 {% for note in notes%}
```

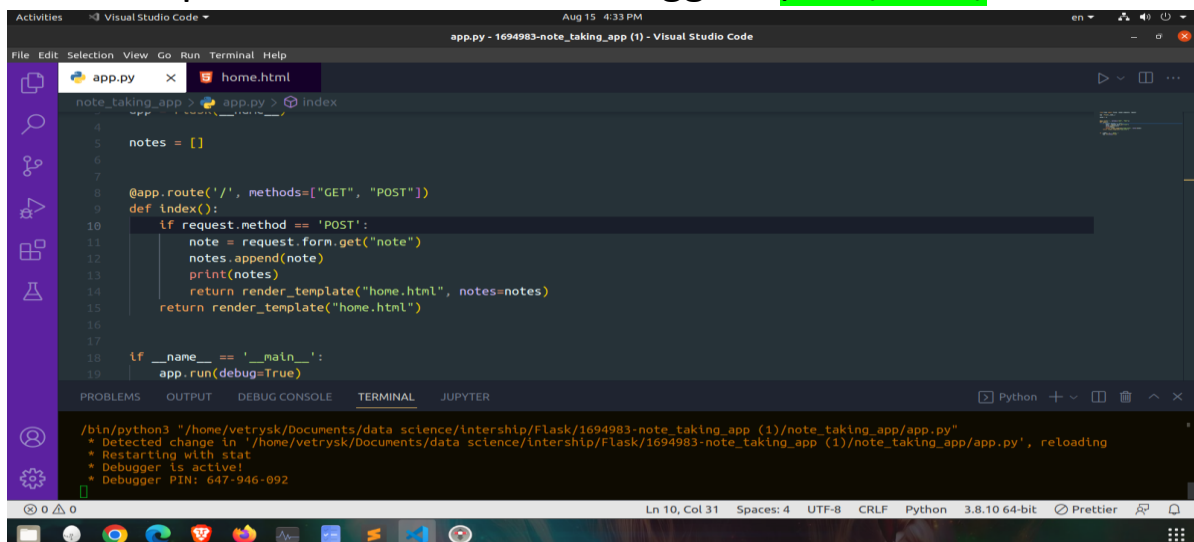
2. We need to mention request for both get and post, and we should capture data in post request, also add return code for both requests as:

If request.method == "POST":

note = request.form.get('note')

return render\_template("home.html")

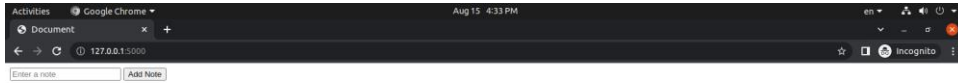
And add print to see code is debugged: print(notes)



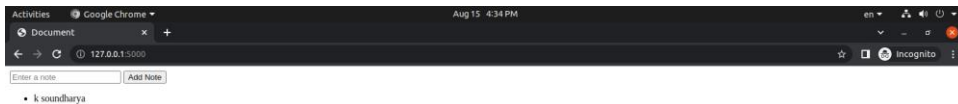
```
note_taking_app > app.py > index
4 notes = []
5
6
7
8 @app.route('/', methods=["GET", "POST"])
9 def index():
10     if request.method == 'POST':
11         note = request.form.get("note")
12         notes.append(note)
13         print(notes)
14         return render_template("home.html", notes=notes)
15     return render_template("home.html")
16
17
18 if __name__ == '__main__':
19     app.run(debug=True)
```

/bin/python3 /home/vetrysk/Documents/data science/Internship/Flask/1694983-note\_taking\_app (1)/note\_taking\_app/app.py  
\* Detected change in '/home/vetrysk/Documents/data science/Internship/Flask/1694983-note\_taking\_app (1)/note\_taking\_app/app.py', reloading  
\* Restarting with stat  
\* Debugger is active!  
\* Debugger PIN: 647-946-092

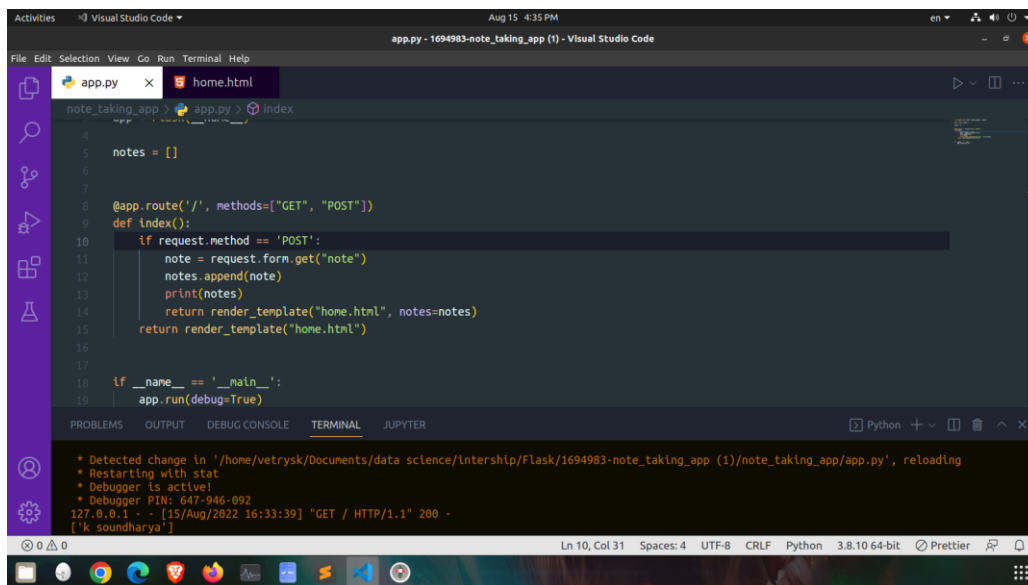
**STEP4:** Checking if all bug is debugged by running the code.



We can see that code is perfectly executed.



We can see that note is displayed as unordered list, successfully.



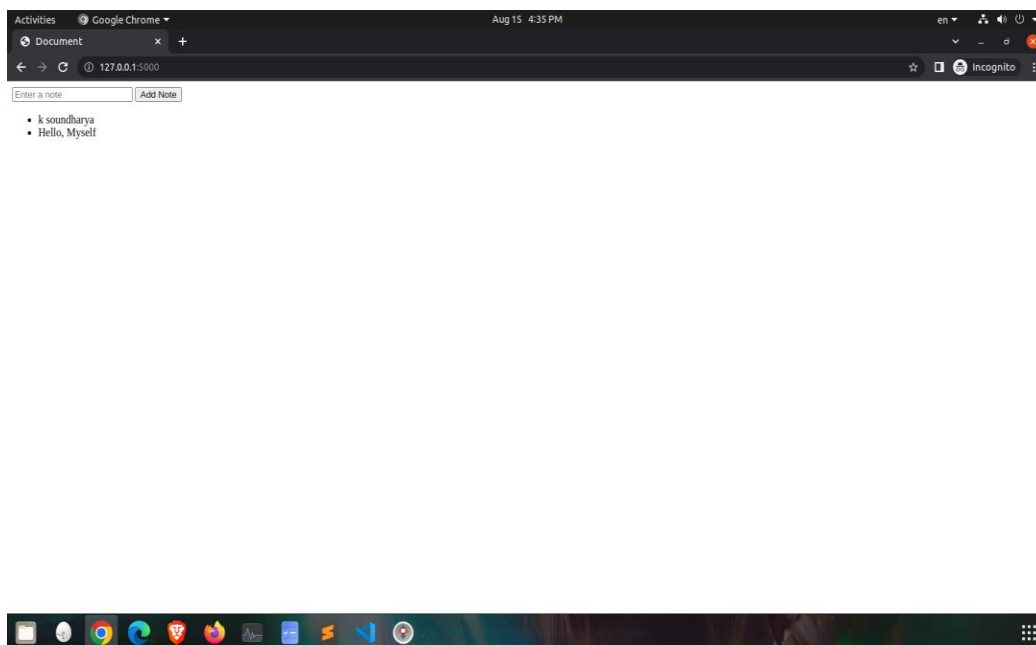
The screenshot shows the Visual Studio Code editor with a Python file named `app.py` open. The code defines a Flask application with a `notes` list and an `index` route. The `index` route handles both GET and POST requests. For POST requests, it retrieves the note from the form, appends it to the `notes` list, prints the list, and renders the `home.html` template. For GET requests, it simply renders the `home.html` template. The terminal at the bottom shows the application running on `127.0.0.1:5000` and displaying the output of the `print(notes)` statement: `['k soundharya']`.

```
1 notes = []
2
3
4
5
6
7
8 @app.route('/', methods=["GET", "POST"])
9 def index():
10     if request.method == 'POST':
11         note = request.form.get("note")
12         notes.append(note)
13         print(notes)
14         return render_template("home.html", notes=notes)
15     return render_template("home.html")
16
17
18 if __name__ == '__main__':
19     app.run(debug=True)
```

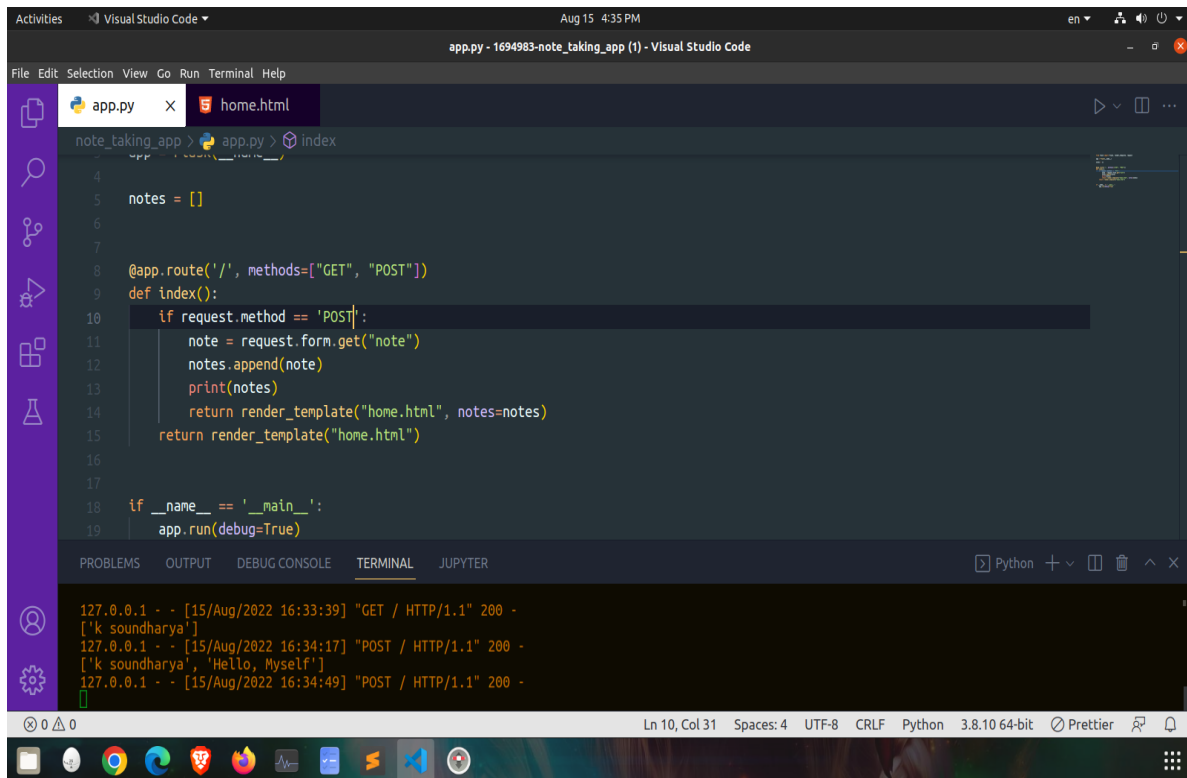
Terminal Output:

```
* Detected change in '/home/vetrysk/Documents/data science/Intership/Flask/1694983-note_taking_app (1)/note_taking_app/app.py', reloading
* Restarting with stat
* Debugger is active!
* Debugger PIN: 647-946-092
127.0.0.1 - - [15/Aug/2022 16:33:39] "GET / HTTP/1.1" 200 -
['k soundharya']
```

We can see in terminal the note entered is printed.



We can see notes is displayed in unordered list.



The screenshot shows the Visual Studio Code editor with a Python file named `app.py` open. The code is a simple Flask application that stores notes in a list. The terminal at the bottom shows the output of the application, including GET and POST requests and the resulting HTML response.

```
note_taking_app > app.py > index
4
5 notes = []
6
7
8 @app.route('/', methods=["GET", "POST"])
9 def index():
10     if request.method == 'POST':
11         note = request.form.get("note")
12         notes.append(note)
13         print(notes)
14         return render_template("home.html", notes=notes)
15     return render_template("home.html")
16
17
18 if __name__ == '__main__':
19     app.run(debug=True)
```

Terminal Output:

```
127.0.0.1 - - [15/Aug/2022 16:33:39] "GET / HTTP/1.1" 200 -
["k soundharya"]
127.0.0.1 - - [15/Aug/2022 16:34:17] "POST / HTTP/1.1" 200 -
["k soundharya", 'Hello, Myself']
127.0.0.1 - - [15/Aug/2022 16:34:49] "POST / HTTP/1.1" 200 -
```

We can see all notes entered are printed.

**Now, finally we can say all the bugs in application is resolved and successfully debugged the code.**