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http://localhost:8888/notebooks/Desktop%20Fedap%20programs%20Fgitipynb

jupyter git Last Checkpoint: 25 minutes ago

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JupyterLab Python 3 (ipykernel)

```
break
else:
    print("⚠ Invalid choice. Try again.")

menu()
```

Enter choice: 1  
Enter ID: 2  
Enter Name: Karthik  
Enter Age: 19  
Enter Course: Computers  
Enter Marks: 96  
✅ Student added successfully!

==== Student Database ====

1. Add Student
2. Delete Student
3. Search Student
4. Filter Students
5. Top-K Students
6. Exit

Enter choice: 1

[ ]:

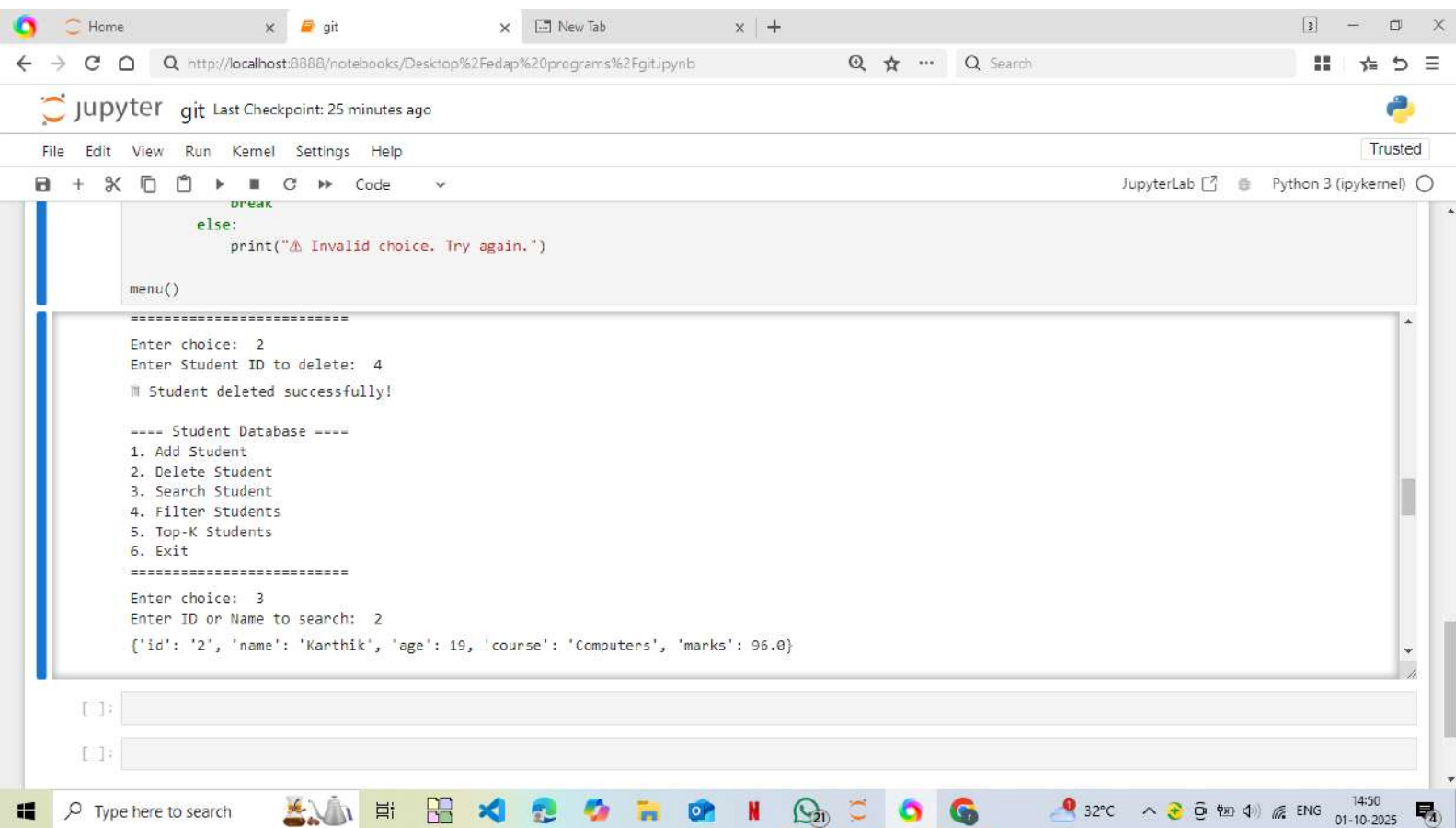
[ ]:

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JupyterLab Python 3 (ipykernel)

```
break
else:
    print("⚠ Invalid choice. Try again.")

menu()
```

---- Student Database ----

1. Add Student
2. Delete Student
3. Search Student
4. Filter Students
5. Top-K Students
6. Exit

=====

Enter choice: 4

Filter Options:

1. By Course
2. By Minimum Marks

Enter choice: 1

Enter course name: Computers

```
{ 'id': '1', 'name': 'Revathi', 'age': 19, 'course': 'Computers', 'marks': 89.0 }
{ 'id': '2', 'name': 'Karthik', 'age': 19, 'course': 'Computers', 'marks': 96.0 }
```

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JupyterLab Python 3 (ipykernel)

```
break
else:
    print("⚠ Invalid choice. Try again.")

menu()
```

Filter Options:

1. By Course
2. By Minimum Marks

Enter choice: 2  
Enter minimum marks: 85

```
{'id': '1', 'name': 'Revathi', 'age': 19, 'course': 'Computers', 'marks': 89.0}
{'id': '2', 'name': 'Karthik', 'age': 19, 'course': 'Computers', 'marks': 96.0}
{'id': '3', 'name': 'Kishna', 'age': 19, 'course': 'Electronics', 'marks': 93.0}
```

==== Student Database ====

1. Add Student
2. Delete Student
3. Search Student
4. Filter Students
5. Top-K Students
6. Exit

=====

[ ]:

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Type here to search

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The screenshot displays a JupyterLab environment with a Python 3 (ipykernel) session. The code in the editor defines a function `menu()` that interacts with the user to manage a student database. The program has been executed, and the output is visible in the console.

```

def menu():
    while True:
        print("\n=====")
        print("1. Add Student")
        print("2. Delete Student")
        print("3. Search Student")
        print("4. Filter Students")
        print("5. Top-K Students")
        print("6. Exit")
        print("=====")
        choice = input("Enter choice: ")
        if choice == '1':
            add_student()
        elif choice == '2':
            delete_student()
        elif choice == '3':
            search_student()
        elif choice == '4':
            filter_students()
        elif choice == '5':
            top_k_students()
        elif choice == '6':
            print("Exiting... Goodbye!")
            break
        else:
            print("Invalid choice. Try again.")
    menu()

menu()

```

The output of the program execution is as follows:

```

Enter choice: 5
Enter K value: 3
🏆 Top 3 Students:
1. Karthik (Marks: 90.0)
2. Krishna (Marks: 93.0)
3. Revathi (Marks: 89.0)

==== Student Database ====
1. Add Student
2. Delete Student
3. Search Student
4. Filter Students
5. Top-K Students
6. Exit
=====
Enter choice: 6
👋 Exiting... Goodbye!

```