PROJECT REPORT

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MOVIE RECOMMENDATION BASED ON GENRE

OBJECTIVE

The objective of this program is to give movie recommendations based on selected genre . Results will be given based on predefined list in csv file.

Approach

The approach is to recommend movies based on a predefined list stored in python code .
No separate file is used all of the information is stored in one code

TOOLS AND TECHNOLOGY USED

Language-Python

PROJECT DESCRIPTION

User enters a genre and then the program filters the list to give outputs based on selected genre.

Structure

Title	Genre
Pretty Woman	Romance
Interstellar	Sci-fi
Avengers	Action
About Time	Romcom

IMPLEMENTATION

One single file is used to do this.

Steps to implement

1. User input is taken
2. That input is genre
3. List of movies of that particular genre is displayed

PYTHON -INPUT

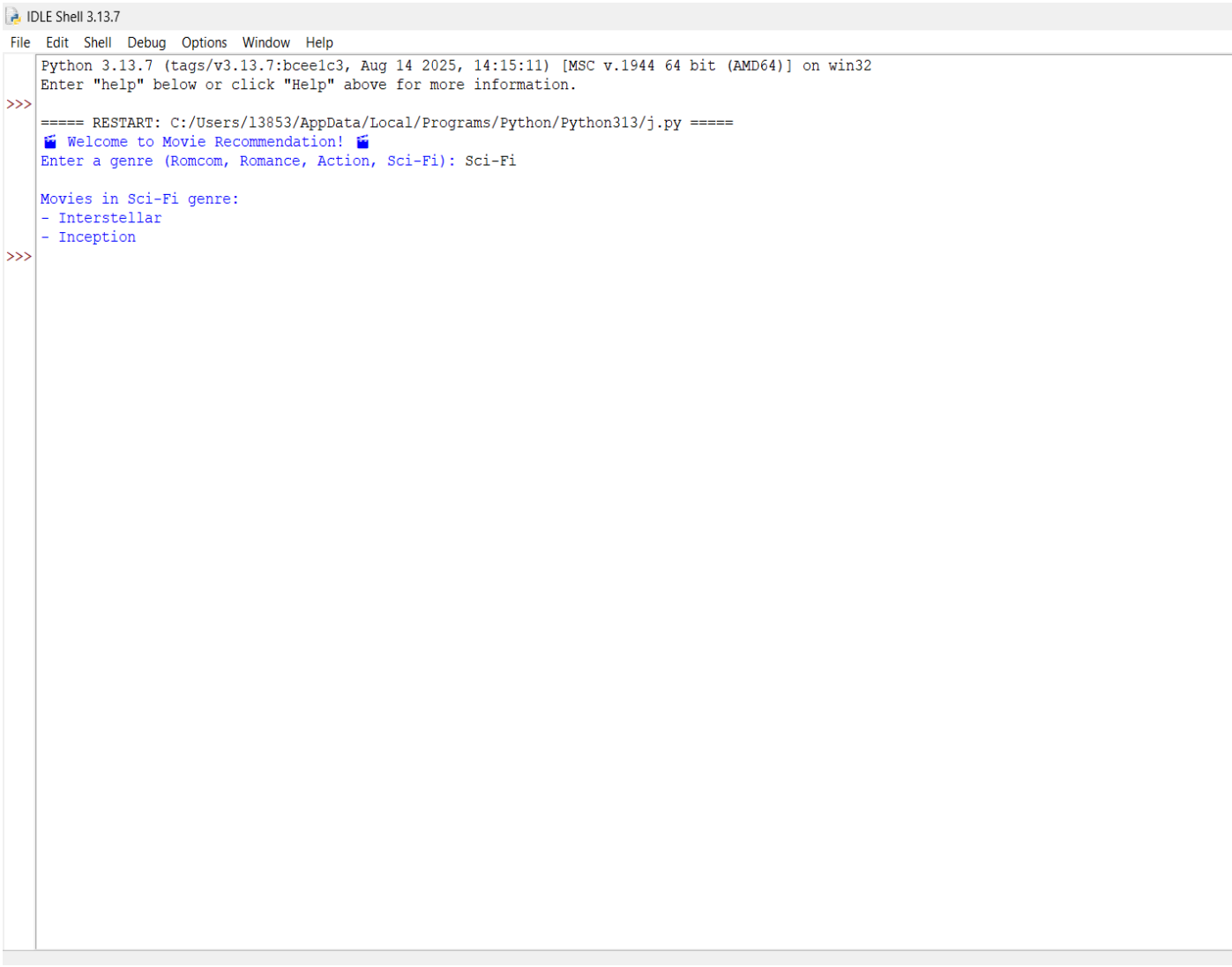
k.py - C:/Users/l3853/AppData/Local/Programs/Python/Python313/k.py (3.13.7)

File Edit Format Run Options Window Help

```
# Movie Recommendation Project - Single File Version

# Movie data (like CSV but in code)
movies = [
    {"title": "Pretty Woman", "genre": "Romcom"},
    {"title": "About Time", "genre": "Romcom"},
    {"title": "Titanic", "genre": "Romance"},
    {"title": "The Notebook", "genre": "Romance"},
    {"title": "Avengers: Endgame", "genre": "Action"},
    {"title": "John Wick", "genre": "Action"},
    {"title": "Interstellar", "genre": "Sci-Fi"},
    {"title": "Inception", "genre": "Sci-Fi"}
]

# Welcome message
print("🎬 Welcome to Movie Recommendation! 🎬")

# Ask user for a genre
genre_input = input("Enter a genre (Romcom, Romance, Action, Sci-Fi): ").strip()

# Filter movies by genre
recommended = [movie['title'] for movie in movies if movie['genre'].lower() == genre_input.lower()]

# Display results
if recommended:
    print(f"\nMovies in {genre_input} genre:")
    for movie in recommended:
        print(f"- {movie}")
else:
    print(f"Sorry! No movies found for the genre '{genre_input}'.")
```

Result

PYTHON- OUTPUT



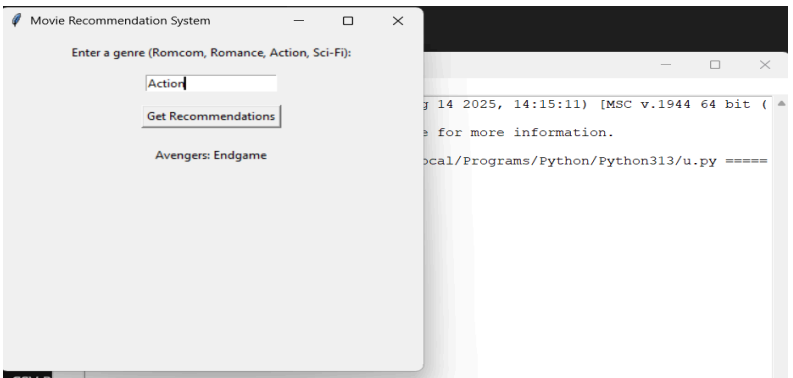
GUI CODE INPUT

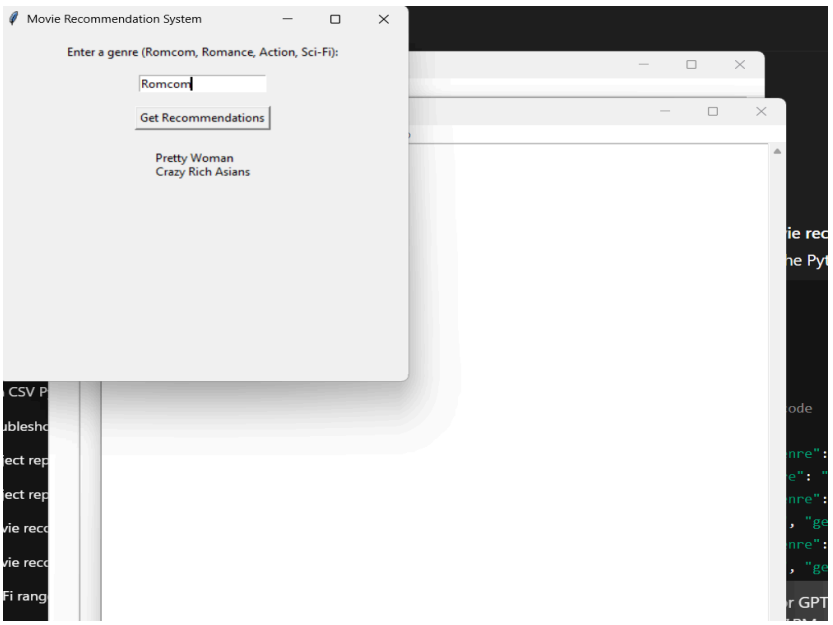
u.py - C:/Users/I3853/AppData/Local/Programs/Python/Python313/u.py (3.13.7)

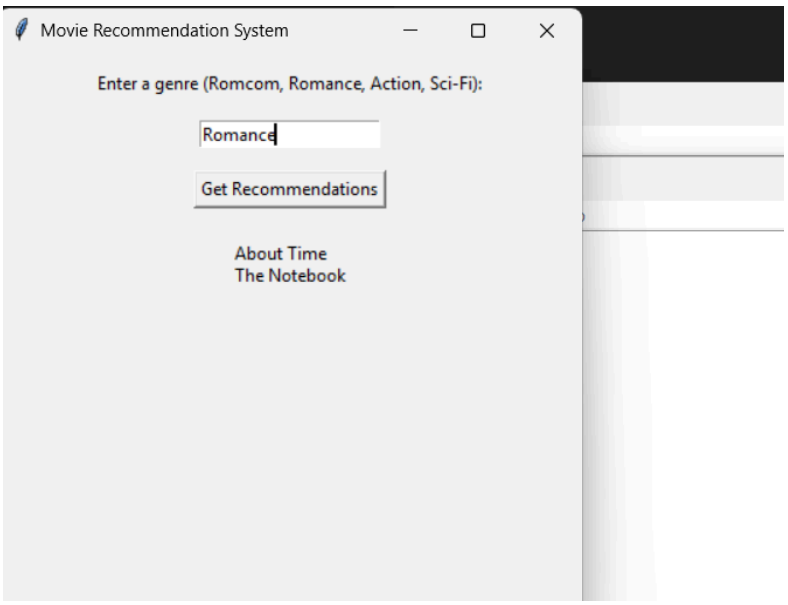
File Edit Format Run Options Window Help

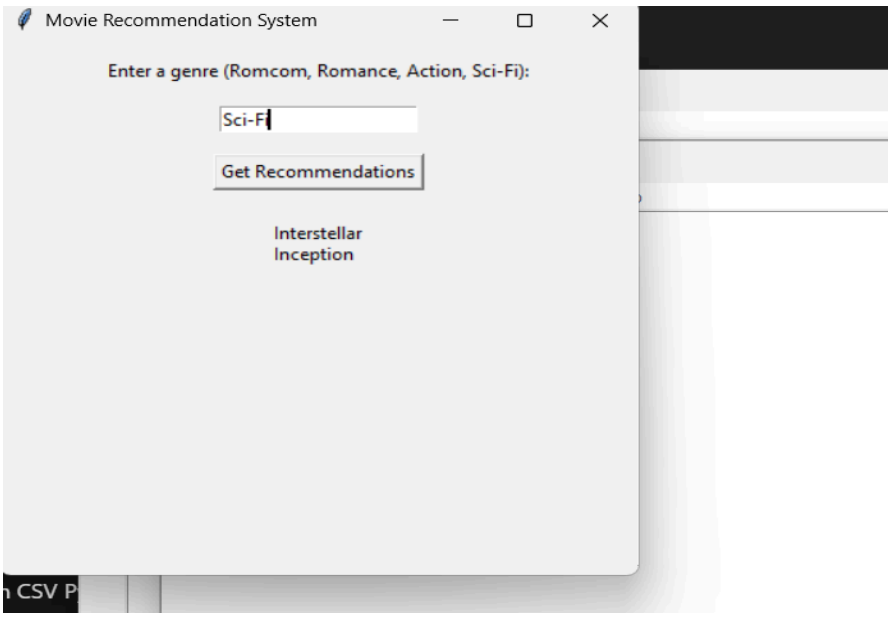
```
import tkinter as tk
from tkinter import messagebox

# Movie data stoured directly in code
movies = [
    {"title": "Pretty Woman", "genre": "Romcom"},
    {"title": "About Time", "genre": "Romance"},
    {"title": "The Notebook", "genre": "Romance"},
    {"title": "Avengers: Endgame", "genre": "Action"},
    {"title": "Interstellar", "genre": "Sci-Fi"},
    {"title": "Crazy Rich Asians", "genre": "Romcom"},
    {"title": "Inception", "genre": "Sci-Fi"},
]

# Function to get recommendations
def recommend_movies():
    genre_input = genre_entry.get().strip()
    recommended = [movie['title'] for movie in movies if movie['genre'].lower() == genre_input.lower()]

    if recommended:
        result_text = "\n".join(recommended)
    else:
        result_text = "No movies found for this genre."

    result_label.config(text=result_text)

# Create GUI window
root = tk.Tk()
root.title("Movie Recommendation System")
root.geometry("400x400")

# GUI Widgets
tk.Label(root, text="Enter a genre (Romcom, Romance, Action, Sci-Fi):").pack(pady=10)
genre_entry = tk.Entry(root)
genre_entry.pack(pady=5)

tk.Button(root, text="Get Recommendations", command=recommend_movies).pack(pady=10)

result_label = tk.Label(root, text="", justify="left")
result_label.pack(pady=10)

root.mainloop()
```

Result
GUI CODE OUTPUT




Movie Recommendation System
Enter a genre (Romcom, Romance, Action, Sci-Fi):
Romcom
Get Recommendations
Pretty Woman
Crazy Rich Asians


Movie Recommendation System
Enter a genre (Romcom, Romance, Action, Sci-Fi):
Romance
Get Recommendations
About Time
The Notebook



Analysis

This project shows how simply things can run by only using one single input code.
It uses simple code and filters and gives results.

Strengths
1.Very convenient to run
2.One single file to run entire program
3.Results are displayed instantly

Future Enhancements
1.Much better GUI interface
2.User rating option
3.Ability to store memory of users choice of movies
4.Adding variety of categories , the maximum possible

CONCLUSION

This movie recommendation project is simple yet useful, user friendly. It helps user to filter movies easily.