

Huriya Rashid

Roll No: BSAI-067

# 1. What Is This Code About?

This code works with a dataset of movies and their budgets. It calculates the average budget and identifies high-budget films that exceed the calculated average.

# 2. How It Works

1. A predefined list of movies with their budgets is created.  
2. The user can add more movies by entering their name and budget.  
3. The total and average budget are calculated.  
4. The code finds all movies with a budget higher than the average.  
5. Finally, it prints the average budget, lists the high-budget films, and shows how many movies exceeded the average.

# 3. Concepts Used in the Code

- Lists and tuples for storing movie data  
- Loops (for iteration)  
- User input handling  
- Mathematical operations (sum, average)  
- List comprehensions for filtering  
- Conditional logic to identify high-budget films

# 4. Code

movies = [  
 ("Eternal Sunshine of the Spotless Mind", 20000000),  
 ("Memento", 9000000),  
 ("Requiem for a Dream", 4500000),  
 ("Pirates of the Caribbean: On Stranger Tides", 379000000),  
 ("Avengers: Age of Ultron", 365000000),  
 ("Avengers: Endgame", 356000000),  
 ("Incredibles 2", 200000000)  
]  
  
num = int(input("Number of movies you want to add? "))  
for i in range(num):  
 name = input("Enter movie name: ")  
 budget = int(input("Enter movie budget: "))  
 movies.append((name, budget))  
  
total\_budget = sum(movie[1] for movie in movies)  
average\_budget = total\_budget / len(movies)  
  
high\_budget = [(movie[0], movie[1] - average\_budget) for movie in movies if movie[1] > average\_budget]  
  
print(f"Average budget: {average\_budget:,.2f}")  
print("High budget films:")  
for film in high\_budget:  
 print(f"{film[0]} - {film[1]:,.2f} above average")  
print(f"Number of movies above average budget: {len(high\_budget)}")

https://github.com/Huriya903/movie