# How can educational institutions help tackle the issue of urbanisation. An interview with Mr Hammad Noor AHMED from Superior University in Lahore | by ASEFEdu (Editor) | ASEFEdu (Blog) | Medium

# Name : Tahir Fareed

# Roll No: SU92-BSAIM-F24-036

# Section: BSAI (3A)

# Subject: AI Lab

# Task : 02

**: Movies and Budgets**

# Python Program Documentation: Movies and Budgets

This document explains a Python program that works with a list of movies and their budgets. The program can calculate the average budget and identify which movies have a higher budget than the average. It also allows the user to add more movies dynamically.

## Python Code

print("Initial list of movies with budgets")  
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)  
]  
add\_more = input("Add more movies? (yes/no): ").lower()  
if add\_more == "yes":  
 num\_movies = int(input("How many movies do you want to add? "))  
 for i in range(num\_movies):  
 name = input(f"Enter movie {i+1} name: ")  
 budget = int(input(f"Enter movie {i+1} budget: "))  
 movies.append((name, budget))  
 break  
  
total\_budget = sum(budget for name, budget in movies)  
average\_budget = total\_budget / len(movies)  
print(f"\nAverage Budget: {average\_budget}")  
  
print("\nMovies with higher than average budget:")  
count = 0  
for name, budget in movies:  
 if budget > average\_budget:  
 count += 1  
 diff = budget - average\_budget  
 print(f"{name} - {budget} (Higher by {diff})")  
   
print(f"\nTotal movies above average budget: {count}")

## Step-by-Step Explanation

1. The program begins with a predefined list of movies and their budgets.  
2. It asks the user whether they want to add more movies:  
 - If the user types 'yes', it asks how many movies to add.  
 - For each movie, the user enters a name and a budget.  
 - The new movie is then added to the list.  
 - Note: The `break` statement stops the loop after adding the first movie.  
  
3. Once the list is ready, the program calculates:  
 - The total budget of all movies.  
 - The average budget by dividing the total by the number of movies.  
  
4. The program then checks each movie’s budget:  
 - If a movie’s budget is greater than the average budget, it is printed along with how much higher it is compared to the average.  
  
5. Finally, the program prints how many movies had a higher-than-average budget.

## Sample Output

Initial list of movies with budgets  
  
Average Budget: 190571428.57  
  
Movies with higher than average budget:  
Pirates of the Caribbean: On Stranger Tides - 379000000 (Higher by 188428571.43)  
Avengers: Age of Ultron - 365000000 (Higher by 174428571.43)  
Avengers: Endgame - 356000000 (Higher by 165428571.43)  
Incredibles 2 - 200000000 (Higher by 9428571.43)  
  
Total movies above average budget: 4

