AI Lab Task 2

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**Roll num = 006**

**Average Film Budget**

## Objective

Write a Python program that:  
1) Calculates the average budget of all movies.  
2) Prints each movie with a budget higher than the average and how much higher it is.  
3) Prints how many movies spent more than the average.  
Bonus: Let the user add new movies (name and budget) before the calculations.

## Given Movie Dataset

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 Movies from the User

We ask the user how many movies they want to add.

new\_movies = int(input("How many movies would you like to add? "))  
  
for i in range(new\_movies):  
 name = input(f"Enter the name of movie {i+1}: ")  
 budget = int(input(f"Enter the budget of '{name}': "))  
 movies.append((name, budget)) # add as a tuple

## Calculate the Average Budget

We add all budgets and divide by the number of movies.

total\_budget = 0  
for movie in movies:  
 total\_budget += movie[1] # movie[1] is the budget  
  
average\_budget = total\_budget / len(movies)

## Print Movies Above the Average

We loop through the movies and check if a movie's budget is greater than the average

average\_count = 0  
  
for name, budget in movies:  
 if budget > average\_budget:  
 average\_count += 1  
 difference = budget - average\_budget  
 print(f"{name} had a budget ${difference:} above average.")

## Count How Many Movies Are Above the Average

We keep a counter (above\_average\_count) and print it at the end.

print(f" Number of movies with above-average budgets: {average\_count}")

**Output**

The average movie budget is: $1707937500.0

Bumble bee had a budget $10622062500.0 above average.

Number of movies with above-average budgets: 1