## Mini Project Explanation

### Part 1: Movie Budget Analysis

This part of the program allows the user to optionally add new movies along with their budgets. It then combines the new movies with a pre-defined movie list and performs budget analysis.

```
while True:
    try:
        start = int(input("Enter start of range: "))
        end = int(input("Enter end of range: "))
        break
    except ValueError:
        print("Invalid input! Please enter integer values.")


for i in range(start, end + 1):
    if i % 3 == 0 and i % 5 == 0:
        print("FizzBuzz")
    elif i % 3 == 0:
        print("Fizz")
    elif i % 5 == 0:
        print("Buzz")
    else:
        print(i)
```

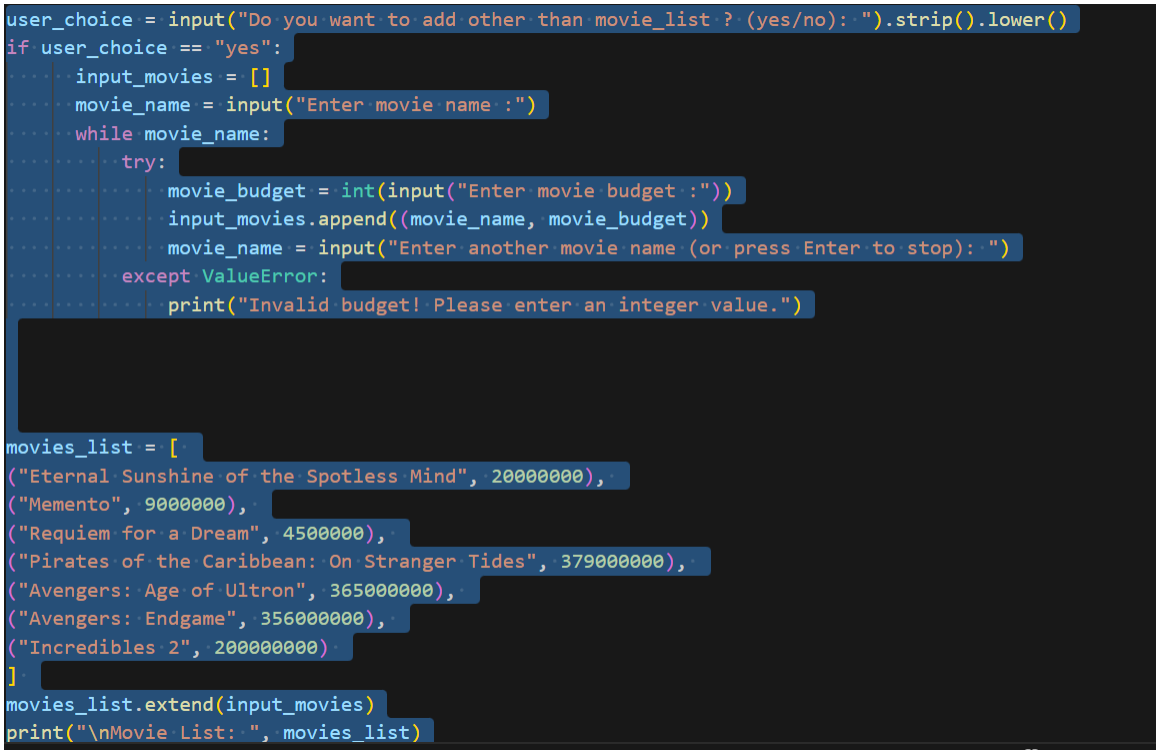
#### Code Explanation:

1. The program first asks the user if they want to add movies apart from the pre-defined list.
2. If 'yes', the user can input movie names and their budgets until they press Enter.
3. A predefined list of movies with budgets is created.

4. The newly added movies are combined with the predefined list using 'extend'.
5. The program calculates the total and average budget of all movies.
6. For each movie, the program compares its budget with the average budget and shows whether it's higher or lower than the average, along with the difference.
7. Finally, it counts and prints the number of movies with a budget higher than the average.

## Part 2: FizzBuzz Game

This part of the program implements the classic FizzBuzz problem.



```
user_choice = input("Do you want to add other than movie_list ? (yes/no): ").strip().lower()
if user_choice == "yes":
    input_movies = []
    movie_name = input("Enter movie name :")
    while movie_name:
        try:
            movie_budget = int(input("Enter movie budget :"))
            input_movies.append((movie_name, movie_budget))
            movie_name = input("Enter another movie name (or press Enter to stop): ")
        except ValueError:
            print("Invalid budget! Please enter an integer value.")



movies_list = [
("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)
]
movies_list.extend(input_movies)
print("\nMovie List: ", movies_list)
```

```
movies_list.extend(input_movies)
print("\nMovie List: ", movies_list)

def budgets(movies_list):
    total_budget = 0
    for movie in movies_list:
        total_budget += movie[1]
    return total_budget
average_budget = budgets(movies_list)/len(movies_list)

print("Total budget of all movies:", budgets(movies_list))
print("Average budget of all movies:", average_budget)

print("\nMovies with budget higher than average:")
def higher_than_avg(movies_list):
    for movie in movies_list:
        if movie[1] > average_budget :
            print(movie[0], " has budget higher than average budget by ", movie[1] - average_budget)
        else :
            print(movie[0], " has budget lower than average budget by ", average_budget - movie[1] )
higher_than_avg(movies_list)
print("\nNumber of movies with budget higher than average:", sum(1 for movie in movies_list if movie[1] > average_budget))
```

Pytho

### Code Explanation:

1. The program asks the user to input the start and end of a range.
2. It uses a loop to go through every number in the range.
3. If a number is divisible by both 3 and 5, it prints 'FizzBuzz'.
4. If a number is only divisible by 3, it prints 'Fizz'.
5. If a number is only divisible by 5, it prints 'Buzz'.
6. Otherwise, it simply prints the number itself.