

Lab Task 2

Mini Project 1

How the Program Works:

The program iterates through each number from 1 to 100.

For each number:

If it is divisible by both 3 and 5, it prints "Fizz Buzz".

If it is divisible only by 3, it prints "Fizz".

If it is divisible only by 5, it prints "Buzz".

If it is divisible by neither 3 nor 5, it simply prints the number.



```
PROBLEMS OUTPUT DEBUG CONSOLE TERMINAL PORTS
76
77
Fizz
79
Buzz
Fizz
82
83
Fizz
Buzz
86
Fizz
88
89
Fizz Buzz
91
92
Fizz
94
Buzz
Fizz
97
98
Fizz
Buzz
PS C:\Users\Usman Ghan1\Desktop\myworld>
```

Activate Windows
Go to Settings to activate Windows.

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Mini Project 2

Explanation of the Code:

Movies Dataset:

Movie name (string)

Movie budget (integer)

Calculate_Average_budget Function:

This function calculates the average budget of all movies in the dataset.

It sums the budgets) and then divides by the number of movies using `len(movies)`.

Find_high_budget_movies Function:

This function checks for movies that have a budget greater than the average.

It creates a list of tuples, where each tuple contains the movie name and the difference between its budget and the average budget.

Display_high_budget_movies Function:

This function prints out each movie from the high-budget list along with how much its budget is above the average.

Add movies Function:

This function allows users to add more movies to the dataset.

The user is prompted to specify how many movies to add, and then for each movie, it asks for the movie's name and budget, which is appended to the `movies` list.

Main Function:

The main function orchestrates the program.

It first asks the user if they want to add more movies.

It then calculates the average budget, identifies high-budget movies, and displays them.

Finally, it prints the total number of movies that have a higher-than-average budget.

```
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PS C:\Users\Usman Ghani\Desktop\myworld> & "C:/Program Files/Python312/python.exe" "c:/Users/Usman Ghani/Desktop/myworld/AI_LAB_Task_2.py"
Do you want to add more movies? (yes/no): yes
How many movies would you like to add? 1
Enter movie name: Hum apke ha kun
Enter budget for 'Hum apke ha kun': 2000000

The average budget of the movies is: $166,937,500.00

Movies with a budget higher than the average:
Pirates of the Caribbean: On Stranger Tides: $212,062,500.0 more than the average
Avengers: Age of Ultron: $198,062,500.0 more than the average
Avengers: Endgame: $189,062,500.0 more than the average
Incredibles 2: $33,062,500.0 more than the average

Total number of movies with a higher-than-average budget: 4
PS C:\Users\Usman Ghani\Desktop\myworld> |
```

Activate Windows
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