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**Roll# BSAIM-035**

**AI LAB TASKs**

**LAB TASK 2:**

MiniProject 1: Today's project is actually a very common interview question, which revolves around a childhood counting game called Fizz Buzz.

start = int(input("Enter the starting number: "))

end = int(input("Enter the ending number: "))

players = int(input("Enter the number of players: "))

print("\nWelcome to the Fizz Buzz Game!\n")

for number in range(start, end + 1):

player\_turn = (number - start) % players + 1

if number % 3 == 0 and number % 5 == 0:

print(f"Player {player\_turn}: Fizz Buzz")

elif number % 3 == 0:

print(f"Player {player\_turn}: Fizz")

elif number % 5 == 0:

print(f"Player {player\_turn}: Buzz")

else:

print(f"Player {player\_turn}: {number}")

print("\nGame Over!")

**Output**

**Enter the starting number: 2**

**Enter the ending number: 6**

**Enter the number of players: 4**

**Welcome to the Fizz Buzz Game!**

**Player 1: 2**

**Player 2: Fizz**

**Player 3: 4**

**Player 4: Buzz**

**Player 1: Fizz**

**Game Over!**

**Q.2** In particular we're going to finding the average budget of the films in our data set, and we're going to identify high budget films that exceed the average budget we calculate.

movies = [

("Pirates of the Caribbean: On Stranger Tides", 379000000),

("Avengers: Age of Ultron", 365000000),

("Avengers: Endgame", 356000000),

("Incredibles 2", 200000000)

]

num\_movies = int(input("How many movies would you like to add? "))

for \_ in range(num\_movies):

name = input("Enter movie name: ")

budget = int(input("Enter movie budget: "))

movies.append((name, budget))

total\_budget = sum(budget for \_, budget in movies)

average\_budget = total\_budget / len(movies)

print(f"\nThe average movie budget is: ${average\_budget:,.2f}\n")

high\_budget\_movies = [(name, budget) for name, budget in movies if budget > average\_budget]

for name, budget in high\_budget\_movies:

difference = budget - average\_budget

print(f"{name} exceeded the average budget by ${difference:,.2f}")

print(f"\nTotal movies with above-average budget: {len(high\_budget\_movies)}")

**OutPut**

**How many movies would you like to add? 2**

**Enter movie name: Knight RIders**

**Enter movie budget: 15**

**Enter movie name: Pirate of the carribeans**

**Enter movie budget: 20**

**The average movie budget is: $216,666,672.50**

**Pirates of the Caribbean: On Stranger Tides exceeded the average budget by $162,333,327.50**

**Avengers: Age of Ultron exceeded the average budget by $148,333,327.50**

**Avengers: Endgame exceeded the average budget by $139,333,327.50**

**Total movies with above-average budget: 3**