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In [2]: print("Welcome to Fizz Buzz!")
print("Enter a number to play and type 'q' to quit\n")

while True:
    user_input = input("Enter a number to play and type 'q' to quit: ")

    if user_input.lower() == 'q':
        print("Game Over. Thanks for playing!")
        break

    if not user_input.isdigit():
        print("Please enter a valid number.")
        continue

    num = int(user_input)

    if num % 3 == 0 and num % 5 == 0:
        print("Fizz Buzz")
    elif num % 3 == 0:
        print("Fizz")
    elif num % 5 == 0:
        print("Buzz")
    else:
        print(num)
```

```
Welcome to Fizz Buzz!
Enter a number to play and type 'q' to quit

Fizz
Fizz
47
Game Over. Thanks for playing!
```

```
In [4]: 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)
]

print("Welcome to Movie Budget Analyzer!")
add_count = int(input("How many movies do you want to add? (Enter 0 if none): "))

for i in range(add_count):
    name = input(f"Enter name of movie {i+1}: ")
    budget = int(input(f"Enter budget of '{name}': "))
    movies.append((name, budget))

total_budget = sum(budget for _, budget in movies)
average_budget = total_budget / len(movies)
print(f"\nAverage movie budget: ${average_budget:,.0f}")
```

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print("\nMovies with budgets higher than average:")
above_avg_movies = []
for name, budget in movies:
    if budget > average_budget:
        difference = budget - average_budget
        print(f"- {name}: ${budget:,.0f} (which is ${difference:,.0f} above average)
        above_avg_movies.append(name)

print(f"\n Number of movies above average: {len(above_avg_movies)}")
```

Welcome to Movie Budget Analyzer!

Average movie budget: \$323,350,000

Movies with budgets higher than average:

- Pirates of the Caribbean: On Stranger Tides: \$379,000,000 (which is \$55,650,000 above average)
- Avengers: Age of Ultron: \$365,000,000 (which is \$41,650,000 above average)
- Avengers: Endgame: \$356,000,000 (which is \$32,650,000 above average)
- 2: \$850,000,000 (which is \$526,650,000 above average)
- dhoom 4: \$975,000,000 (which is \$651,650,000 above average)

Number of movies above average: 5

In []: