

# Assignment 1:

## Task 1:

FizzBuzz game is a classic game to test your divisibility skills. Rules of the game are:

- Start with the number 1.
- Each player says the next number in sequence.
- If the number is divisible by 3, the player says "Fizz" instead.
- If the number is divisible by 5, the player says "Buzz" instead.
- If the number is divisible by both 3 and 5 (divisible by 15), the player says "Fizz Buzz."

The game continues until there are no more players remaining (pretend you're playing against yourself!).

## Bonus:

- Allow the user to specify the number of rounds to play.
  - Keep track of the current player's turn.
  - Add functionality to eliminate players who say the wrong thing

## Sample output:

```
1
2
Fizz
4
Buzz
Fizz
7
8
Fizz
Buzz
11
Fizz
13
14
Fizz Buzz
```

## Task 2:

Develop a program that calculates the movie ticket price based on the following criteria:

- **Age:**
  - Adult (18+): Full price (\$12)
  - Child (under 12): Discounted price (\$8)
  - Senior (65+): Discounted price (\$8)
- **Day of the week:**
  - Weekday (Monday-Friday, non-holidays): Standard price
  - Weekend (Saturday-Sunday): Increased price (1.2x standard)
  - Holiday (list of pre-defined holidays): Increased price (1.5x standard)

### Data Types:

- **Age:** Integer
- **Day of the week:** String (e.g., "Monday", "Tuesday", ...)
- **Holiday:** Boolean (True if it's a holiday, False otherwise)
- **Full price:** Float (\$12)
- **Discount:** Float (percentage discount for children and seniors)
- **Price multiplier:** Float (for weekend and holiday price adjustments)

### Steps:

- Define variables for the different data types mentioned above (age, day, holiday, prices, multipliers).
- Prompt the user to enter their age, day of the week, and a yes/no response indicating a holiday.
- Use a loop to prompt the user for input if you want to calculate prices for multiple people.
- Implement a nested structure using if, elif, and else statements to check for age, day of the week, and holiday status, and calculate the final price accordingly.
- Use the Boolean variable to represent holiday status.
- Display the calculated price clearly to the user.

### Input:

```
Age: 25
Day of the week: Tuesday
Is it a holiday (yes/no)? no
```

### Output:

```
The ticket price is $12.0.
```