TP12-Enumeration

Lab's objectives:

- to practice with enumeration in C programming to create a new data type and its value
- Deadline: 6 days

Problem1: Days of the Week:
Define an enumeration type called `DaysOfWeek` to represent the days of the week (e.g., Monday, Tuesday, etc.). Write a program that asks the user for a day number (1 for Monday, 2 for Tuesday, etc.) and displays the corresponding day of the week. Repeat the program as an infinite loop so that the user can input different numbers to see different results.

Problem2: Months of the Year:
Create an enumeration type called `Months` to represent the months of the year. Write a program that takes a month number (1 for January, 2 for February, etc.) and displays the name of the month. Repeat the program as an infinite loop so that the user can input different numbers to see different results.

Problem3: Simple Calculator Operations:
Define an enumeration type called `Operation` to represent basic calculator operations (e.g., addition, subtraction, multiplication, division). Write a program that takes two numbers and an operation as input and performs the corresponding arithmetic operation. Repeat the program as an infinite loop so that the user can input different numbers to see different results.

Problem4: Student Grades:
Create an enumeration type called `Grade` to represent student grades (A, B, C, D, F). Write a program that prompts the user to enter a grade letter and displays a corresponding message (e.g., "Excellent" for A, "Very good" for B, "Good" for C, "So so" for D, "Fail" for F). Repeat the program as an infinite loop so that the user can input different numbers to see different results.

Problem5: Light Colors: Create an enumeration type called `TrafficLightColor` to represent the colors of a traffic light (Red, Yellow, Green). Write a program that simulates a traffic light, prompting the user for a light color and displaying the appropriate action (stop, prepare to stop, go). Repeat the program as an infinite loop so that the user can input different numbers to see different results.

Problem6: Shapes Enumeration:
Define an enumeration type called `Shape` to represent geometric shapes (Circle, Square, Triangle). Write a program that calculates the area or perimeter of a shape based on user input. Repeat the program as an infinite loop so that the user can input different numbers to see different results.