🔧 Task 1: Simple Calculator (Using Switch and Arithmetic Expressions)

Description:
Build a calculator that takes two numbers and an operator as input from the user and performs the corresponding operation using a `switch` statement.

Requirements:

- Use `switch` to handle `+`, `-`, `*`, `/` operations
- Use `if-else` to check for division by zero
- Display the result of the operation

```
#include <iostream>

using namespace std;

int main() {

    //Declare variables
    int a;
    int b;
    int operatorChoice;


    //Prompt user to enter two numbers
    cout << "Enter the first number: " << endl;
    cin >> a;

    cout << "Enter the second number: " << endl;
    cin >> b;

    //Display menu for user to choose an operation
    cout << "Enter your choice :" << endl;
    cout << "1. Addition" << endl;
    cout << "2. Subtraction" << endl;
    cout << "3. Multiplication" << endl;
    cout << "4. Division" << endl;

    cin >> operatorChoice;



    //Swutch statement to perform the operation based on user choice
    switch(operatorChoice) {
        case   1:
```

```
            cout << "The sum is: " << a + b << endl;
            break;
        case   2:
            cout << "The difference is: " << a - b << endl;
            break;
        case   3:
            cout << "The product is: " << a * b << endl;
            break;
        case  4:
            if (b == 0){
                cout << "Not valid" << endl;
            } else {
            cout << "The quotient is: " << a / b << endl;
            break;
            }
        default:
            cout << "You've entered an invalid choice. Please select from the
menu" << endl;
            break;

    }


    return 0;
}
```

🦴 Task 2: Voting Eligibility Checker (If-Else + Logical Expressions)

Description:
Write a program that checks if a person is eligible to vote based on their age and nationality.

Requirements:

- Ask for age and nationality as input
- Use `if-else` to check:
    - Age must be 18 or older
    - Nationality must be "Zambian" (case-insensitive check optional)
- Use logical expressions (`&&` or `||`)

```cpp
#include <iostream>
using namespace std;

int main() {

    // Declare variables
    int age;
    string nationality;

    // Prompt user to enter their age and nationality
    cout << "Enter your age: " << endl;
    cin >> age;

    cout << "Enter your nationality: " << endl;
    cin >> nationality;

    // Check if the user is eligible to vote
    if (age >= 18 && nationality == "Zambian"){
        cout << "You are eligible to vote." << endl;
    } else {
        cout << "You are not eligible to vote." << endl;
    }


    return 0;
}
```

🔧 Task 3: Day Name Finder (Switch + While Loop)

Description:
Create a program that keeps asking the user to enter a number (1 to 7) and displays the day of the week using a `switch` statement. Repeat the process until the user enters 0.

Requirements:

- Use a `while` loop to continue prompting until `0` is entered
- Use a `switch` statement to print the correct day name
- Handle invalid numbers (e.g., 8, -1) using `default`

```cpp
#include <iostream>

using namespace std;

int main (){

    //Declare variables
    int day;
    int choice = 1;

    //Loop to allow user to enter day of the week multiple times
    while (choice == 1){

    //Prompt user to enter the day of the week
    cout << "Enter the day of the week (1-7): " << endl;
    cin >> day;

    //Switch statement to determine the day of the week based on user input
    switch(day) {
        case 1:
            cout << "Today is sunday" << endl;
            break;
        case 2:
            cout << "Today is monday" << endl;
            break;
        case 3:
            cout << "Today is tuesday" << endl;
            break;
        case 4:
            cout << "Today is wednesday" << endl;
            break;
        case 5:
            cout << "Today is thursday" << endl;
            break;
        case 6:
            cout << "Today is friday" << endl;
            break;
        case 7:
            cout << "Today is saturday" << endl;
            break;
        default:
            cout << "You've entered an invalid choice. Please select from the
menu" << endl;
            break;
    }
```

```
    //Prompt user to continue or exit
    cout << "Do you want to continue? Enter 1 for YES and 0 for NO" << endl;
    cin >>  choice;

    }


    return 0;
}
```