**🔧 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 ||)

#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

#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;

}