Task 02 Simple Calculator

#include <iostream>

using namespace std;

// Function prototypes

float add(float x, float y);

float subtract(float x, float y);

float multiply(float x, float y);

float divide(float x, float y);

int main() {

char choice;

float num1, num2;

while (true) {

cout << "Select operation: " << endl;

cout << "1. Addition" << endl;

cout << "2. Subtraction" << endl;

cout << "3. Multiplication" << endl;

cout << "4. Division" << endl;

cin >> choice;

if (choice == '1' || choice == '2' || choice == '3' || choice == '4') {

cout << "Enter first number: ";

cin >> num1;

cout << "Enter second number: ";

cin >> num2;

switch (choice) {

case '1':

cout << num1 << " + " << num2 << " = " << add(num1, num2) << endl;

break;

case '2':

cout << num1 << " - " << num2 << " = " << subtract(num1, num2) << endl;

break;

case '3':

cout << num1 << " \* " << num2 << " = " << multiply(num1, num2) << endl;

break;

case '4':

if (num2 == 0) {

cout << "Error! Division by zero is not allowed." << endl;

} else {

cout << num1 << " / " << num2 << " = " << divide(num1, num2) << endl;

}

break;

}

cout << "Do you want to continue calculation (yes/no): ";

char next\_calculation;

cin >> next\_calculation;

if (next\_calculation == 'n') {

cout << "Exiting the calculator" << endl;

break;

}

} else {

cout << "Invalid Input" << endl;

}

}

return 0;

}

// Function definitions

float add(float x, float y) {

return x + y;

}

float subtract(float x, float y) {

return x - y;

}

float multiply(float x, float y) {

return x \* y;

}

float divide(float x, float y) {

if (y == 0) {

return 0; // In C++, return statement is not used for outputting text

} else {

return x / y;

}

}