

This is a simple command-line calculator program written in C that allows the user to perform addition, subtraction, multiplication, or division on two numbers. The program begins by displaying a menu with four numbered options, where the user selects an operation by entering a number from 1 to 4. It then prompts the user to input two floating-point numbers, which are stored in the variables `num1` and `num2`. A `switch` statement is used to determine which operation to perform based on the user's menu selection. In the addition case, the program calculates `num1 + num2` and displays the result. In the subtraction case, it calculates `num1 - num2`. In the multiplication case, it calculates `num1 * num2`. In the division case, it calculates `num1 / num2` and displays the result without checking for division by zero. If the user enters an invalid menu choice, a default case outputs an error message prompting them to enter a valid option between 1 and 4. The result of each calculation is printed to two decimal places. This program demonstrates basic C programming concepts such as input/output handling, variables, floating-point arithmetic, and control flow using the `switch` statement. Potential improvements could include adding error handling for division by zero, implementing a loop to allow multiple calculations without restarting the program, and refactoring the code into separate functions for each operation to improve modularity.