

Lab 2.5.1 A real and usable calculator

Objectives

Familiarize the student with:

- using the **switch** statement;
- and improve the student's skills in building interactive programs.

Scenario

Your task is to write a real, interactive, four-function calculator. Of course, you may add as many new functions as you want, but four basic operations (+ - * /) are a must. Moreover, we hope that your calculator will be smart enough not to be fooled by a division by 0. Be careful!

We want your program to display a menu that looks like this one:

```
MENU:
0 - exit
1 - addition
2 - subtraction
3 - multiplication
4 - division
Your choice?
```

Next, your program should read an **int** value representing the chosen option and act accordingly. If the option requires the execution of further operations, your program should read two double values, perform an operation and display the result. Then, your program should display a menu and... the story repeats until the user enters 0.

Hint: use a **switch** statement - you expected this, didn't you?

Test your program carefully using a wide range of data.