Functions

C++ in QF I - a course by Paweł Sakowski

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Labs 03

Last time we learned:

- How to use `if`, `if else`, `else if` statements.
- How to use `while` and `for` loops.
- What are **operators**, and what properties they have.

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Today we will learn:

- How to use `switch` statement.
- What are functions.
- How to create your own functions.

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Special Event!

- Publishing all individually solved exercises from today labs grants +1 point at the exam and home taken project or -4 points from overall threshold (your choice).
- Deadline: start of the 5th labs.
- Start a discussion at Moodle and publish all your functions in one .cpp file.
- Write short program that runs and tests all those functions. The program must compile.

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Examples:

1. Write a program that asks user for the number of the month, then states what season should it be. For simplicity take rough assumptions.
2. Write a function, that do not return anything, but prints something on the screen. Test it.
3. Write a function, that returns min of two values. Test it.
4. Write a function, that calculate min of three values. Call it the same, as in previous example. Test them both.
5. Write a function, that changes the value of a variable. Test it.

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Exercises:

1. Write a function that will return price of zero-coupon bond. The function should take three arguments: time to maturity, yield to maturity of a bond and its face value.
2. Write a function that will return price of a coupon bond. The functions should take five arguments: time to maturity, coupon yield, number of coupons per year, yield to maturity and face value of the bond.
3. Write a function that will return present value of annuity with constant payments at the end of each month.
4. Write a universal function that will return present value of annuity with constant payments either at the end or at the beginning of each period (day, week, month or year). Ask the user to provide values of arguments and pass this values into the function.

Thank you!

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