



## Series 0

### (pre-requisites)

- 1) Both the project and the practical work will be carried out using C/C++ under Windows and Linux. On Windows, we will use **Microsoft Visual Studio 2017 (Community Edition)** as development environment.
  - a. Make sure to have a version of Microsoft Visual Studio 2017 Community Edition installed on your computer: you are eligible for getting a free copy either online or via your MSDNAA account.
  - b. Create a new solution and write a simple 64 bit console application. Get familiar with the IDE, including the debugging tools (adding breakpoints, step-by-step execution, check variable states, etc.).
  - c. Identify which files are used to store the project settings so that you can easily copy/backup your solution without including temporary and unnecessary files (e.g., when working with SVN/GIT).
- 2) On Linux, we will use **CodeBlocks**.
  - a. Install CodeBlocks. On Ubuntu, you can easily get it through the official software repository.
  - b. Write a simple console application, as done before.
  - c. Identify which files are used by CodeBlocks to store the solution and project settings.
- 3) Consider just one of the two IDEs. Add a simple class (with its own .h and .cpp files) to compute the sum of two numbers.
  - a. Port your code to the other IDE by making sure to use **exactly** the same source files. You should have two different projects (Visual Studio and CodeBlocks) compiling one same source code.
  - b. **[Optional:]** download and compile *cbp2make*: a command-line tool that allows converting a CodeBlocks project into a makefile.
  - c. **[Optional:]** put everything under SVN or GIT to simplify the migration from one operating system to the other, and vice versa. Make sure that the line feed/carriage return characters are automatically managed by the versioning software. For SVN under Windows, we suggest using the TortoiseSVN client.