

Code::Blocks

Code::Blocks is a free cross-platform (works with Windows, Mac OS X and Linux) integrated development environment (IDE) for writing C++ programs. Code::Blocks' main page is at <https://www.codeblocks.org/>

This document describes how to install Code::Blocks and write your first C++ program using Code::Blocks.

1. Download Code::Blocks

For Windows, download Code::Blocks using this link

<https://sourceforge.net/projects/codeblocks/files/Binaries/20.03/Windows/codeblocks-20.03mingw-setup.exe>

For Mac, download Code::Blocks using this link

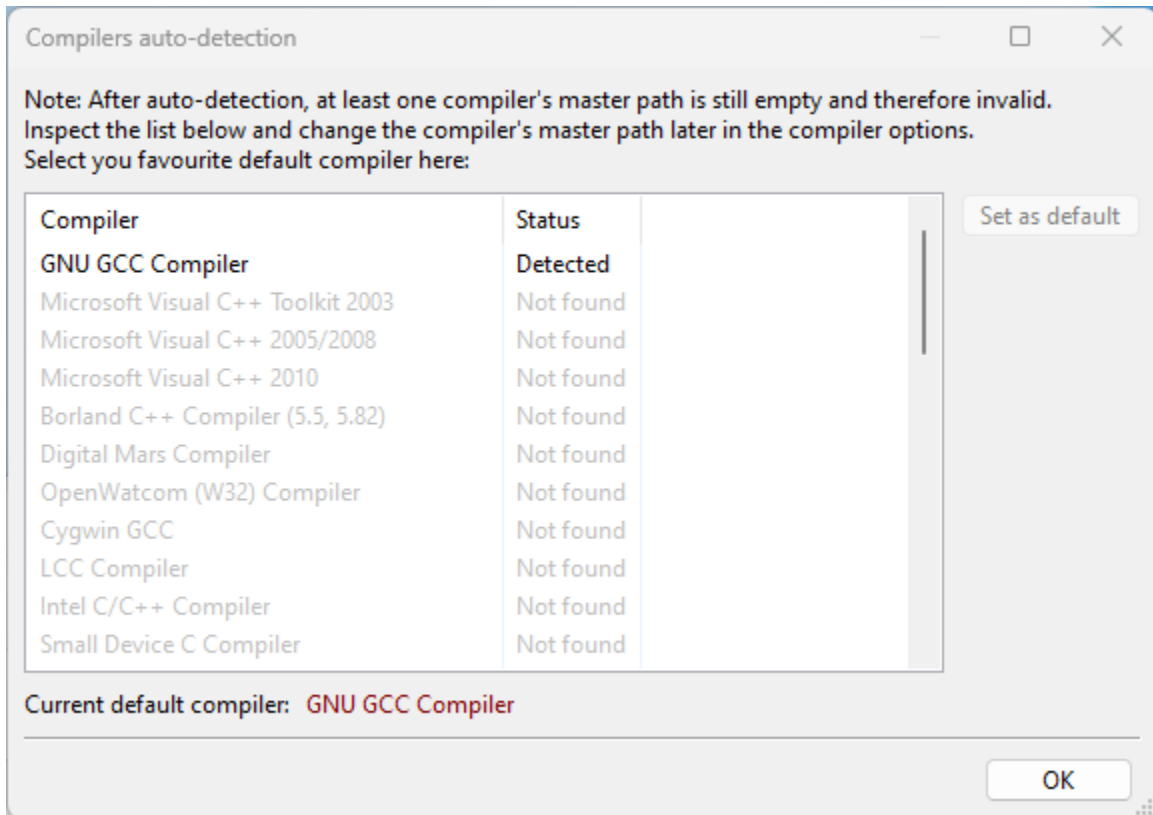
<https://sourceforge.net/projects/codeblocks/files/Binaries/13.12/MacOS/CodeBlocks-13.12-mac.zip>

2. Install Code::Blocks

For Windows

After the download, run the installation file **codeblocks-20.03mingw-setup.exe**. Accept all the defaults. It'll take about a minute or two.

After the installation, it will auto detect a C++ compiler that is already installed on your computer. It must find one or else it will not work.

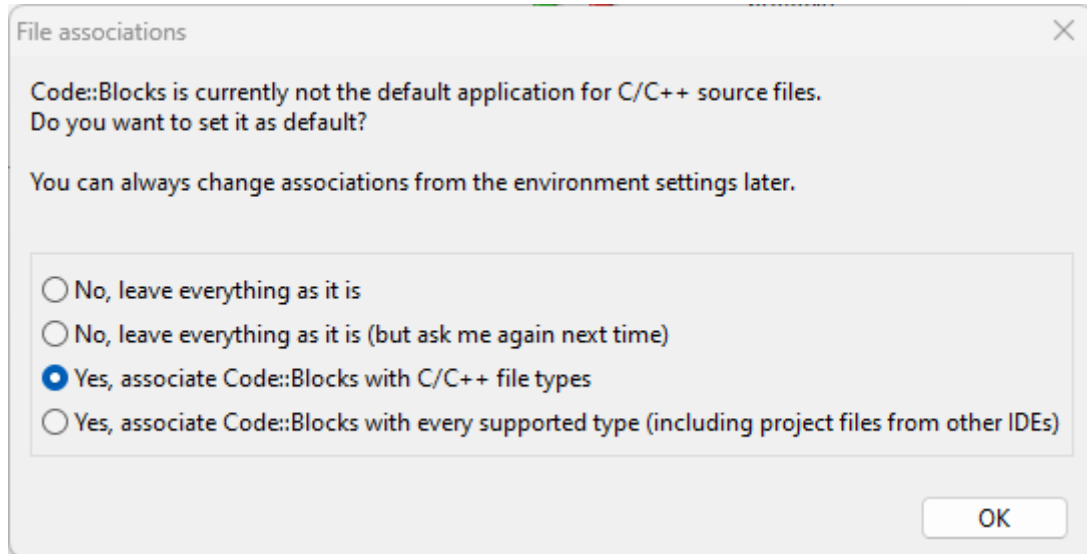


Click **OK**.

For Mac, drag the installation file **CodeBlocks-13.12-mac.zip** into your Applications folder.

3. *Run Code::Blocks*

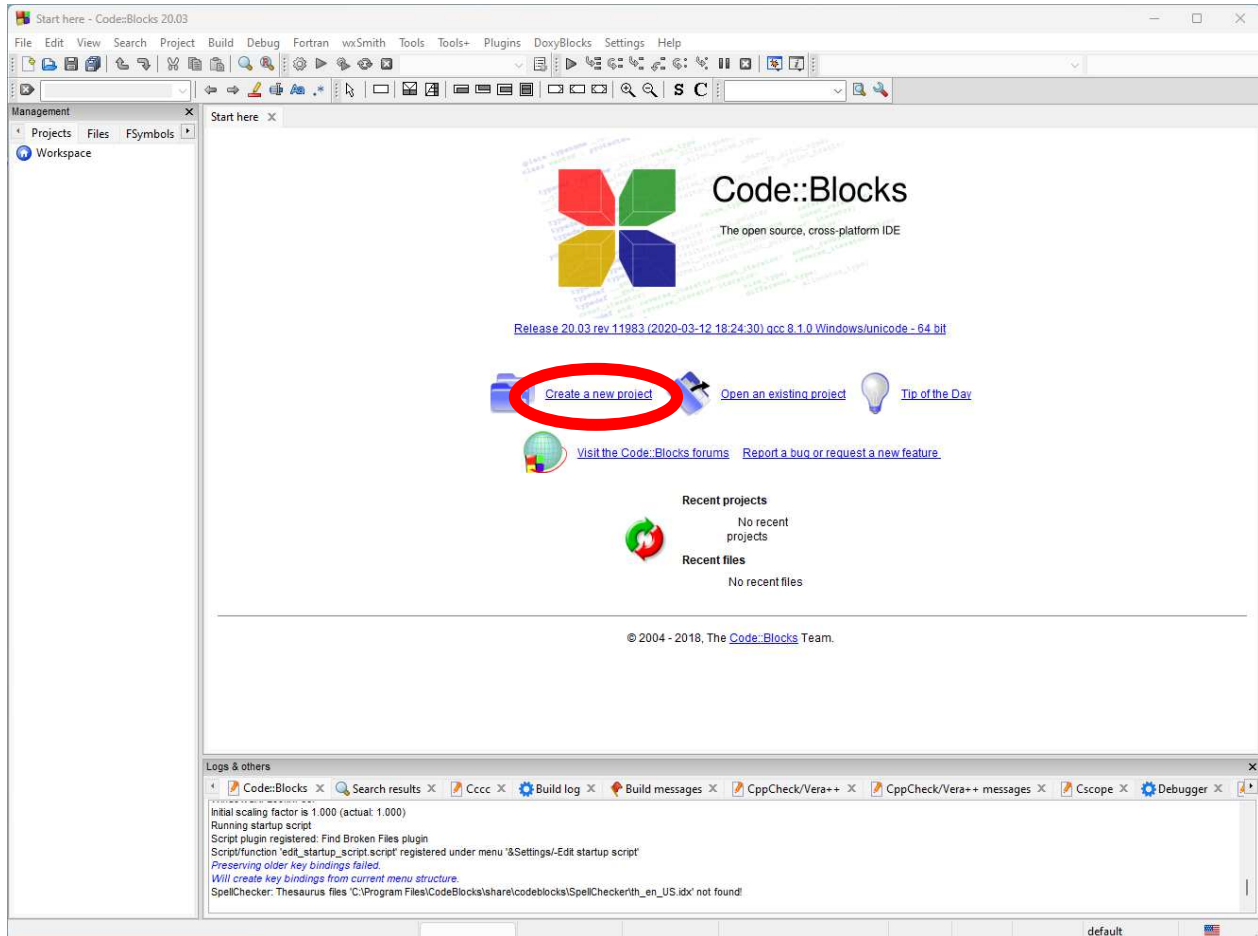
The first time you run Code::Blocks you might see this window



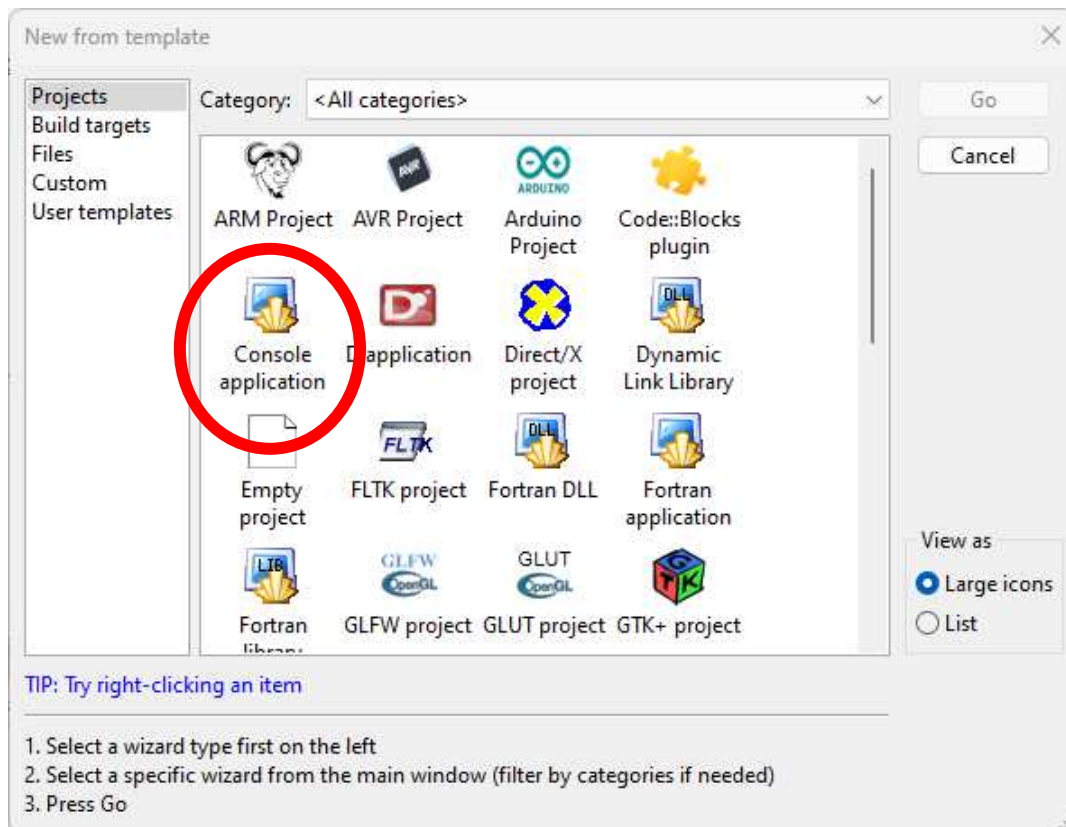
You can select to associate C++ files with Code::Blocks. Click **OK**.

4. Writing your first C++ program

In the main Code::Blocks window click **Create a new project**.



In the **New from template** window select the **Console application** icon and then click **Go**.



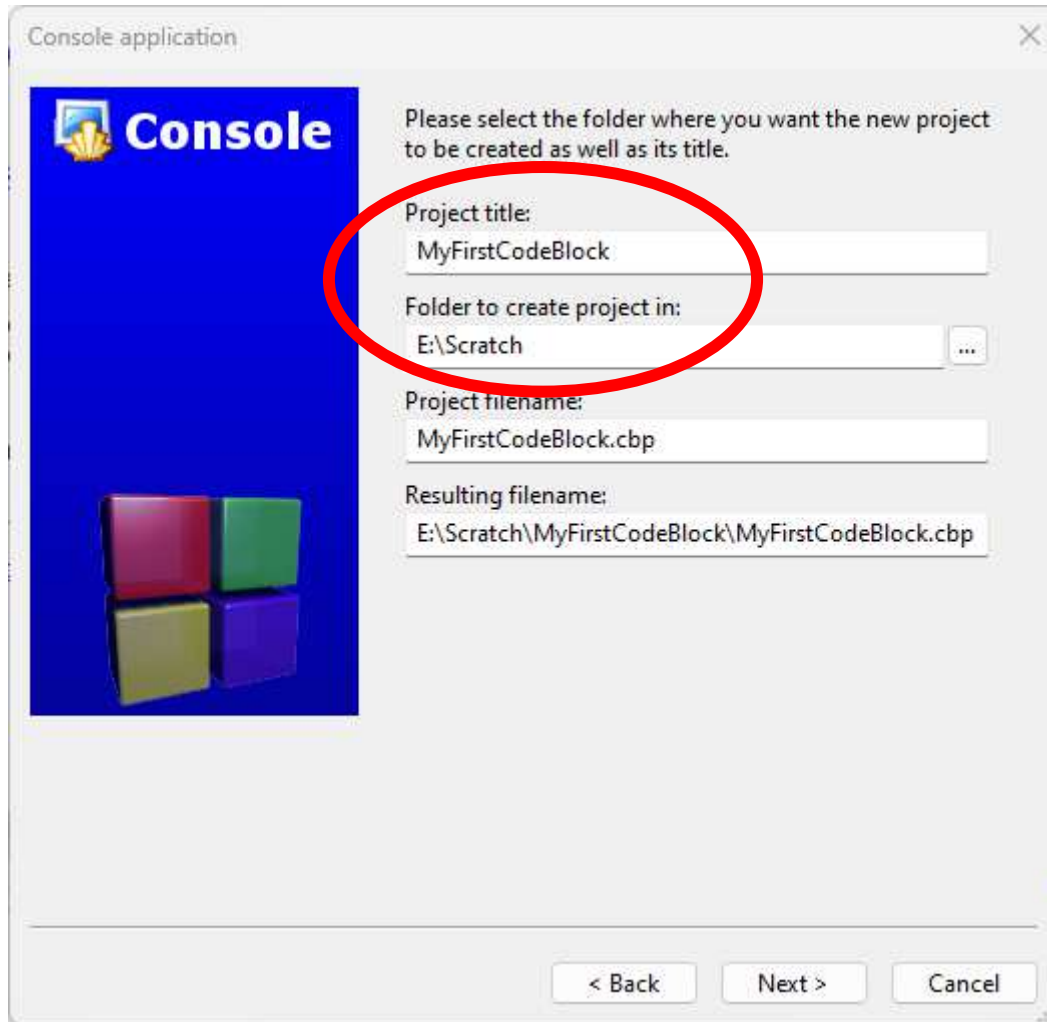
In the next window, you can check the **Skip this page next time** option and click **Next**.



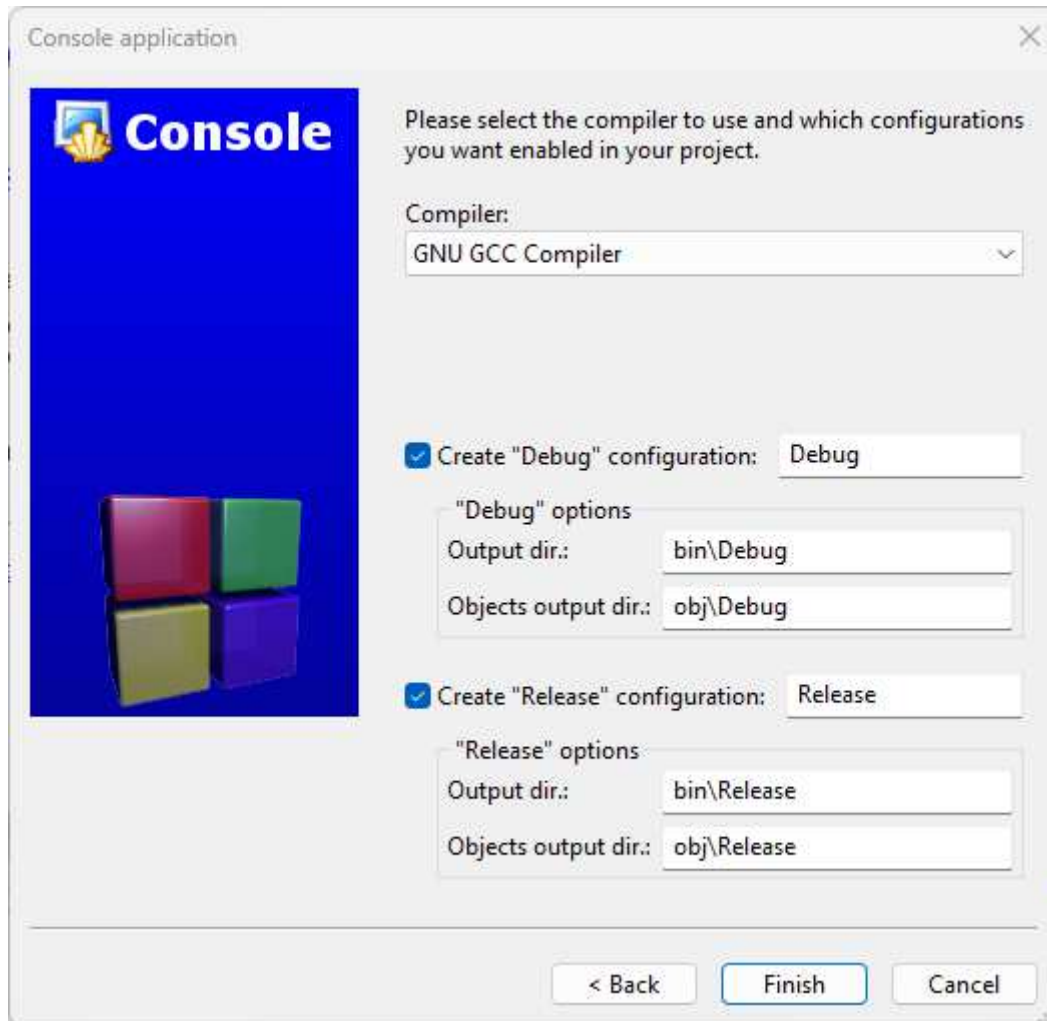
In the next window, make sure the **C++** option is selected and click **Next**.



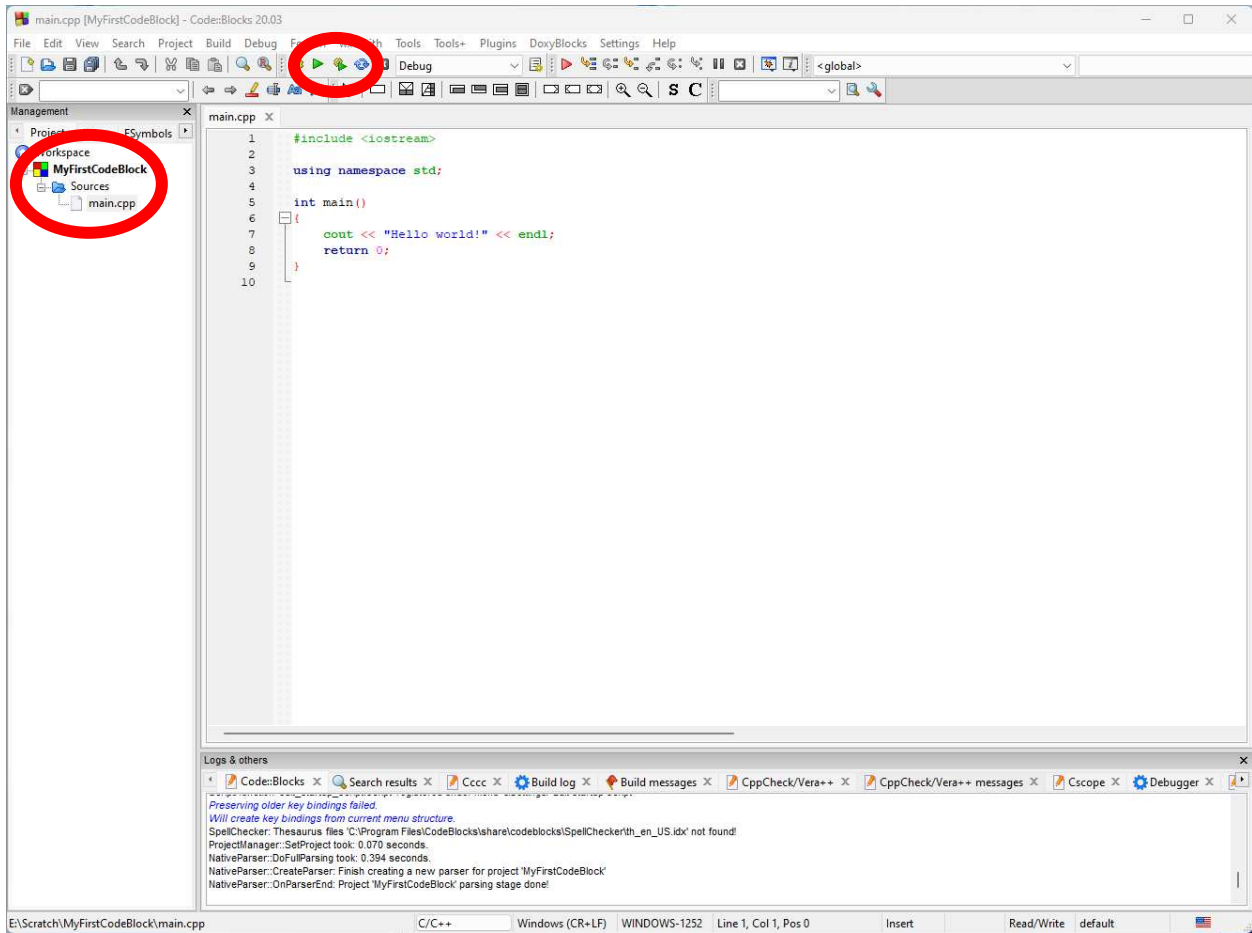
In the next window type in your project title and the location where you want to store the project, and then click **Next**. Don't change the last two fields. In the example below, the project title is **MyFirstCodeBlock** and I'm storing it on the **E:** drive under the **Scratch** directory.



In the next window just leave everything as it is and click **Finish**.



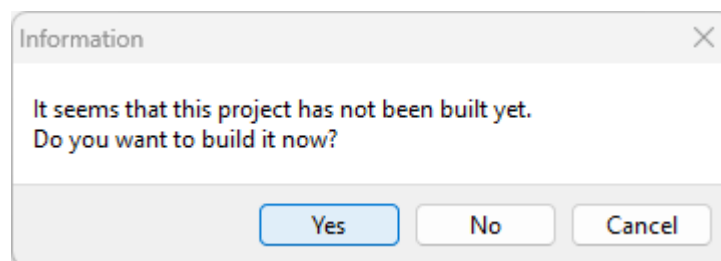
You will see this main workspace window. Open up the **Sources** folder and double-click on the **main.cpp** file. It will show the contents of the file on the right.



Click on the green/yellow  **Build and run** icon to build and run the program.

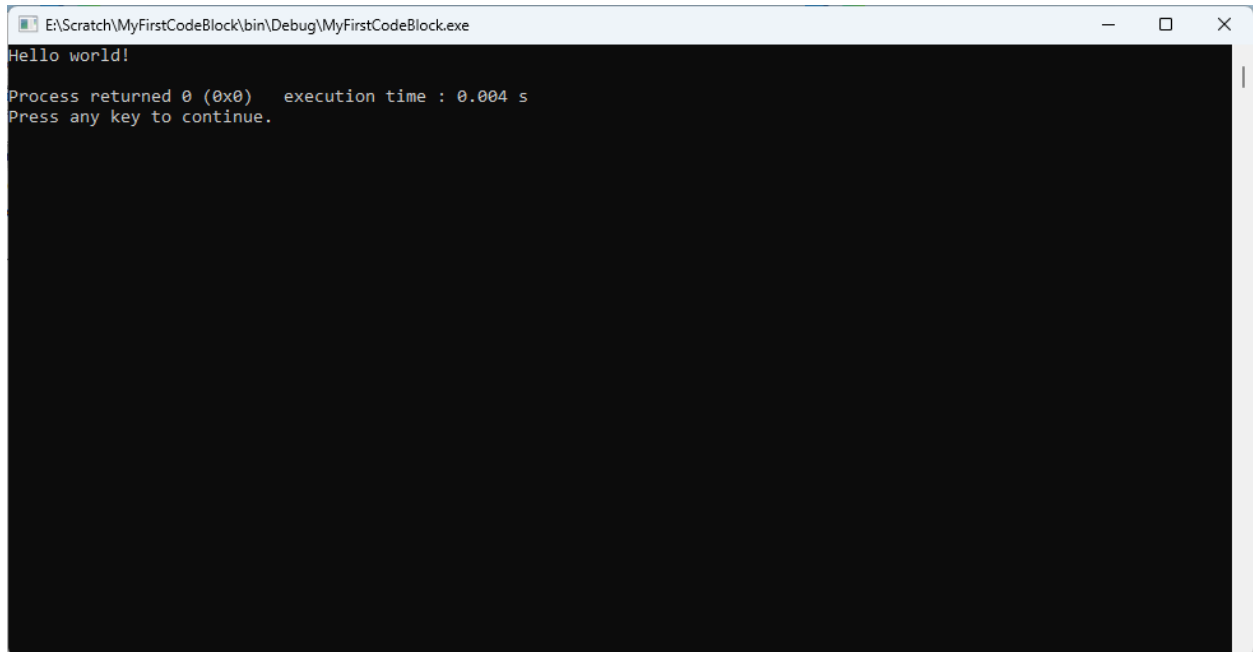
It is very important that each time after you have made changes to your program that you do a **build** before you run it otherwise, the run will not reflect your changes. In other words, the run command does not re-compile your program with the changes.

If you see the message then click **Yes** to build the program.



You can also access these commands from the menu under **Build**.

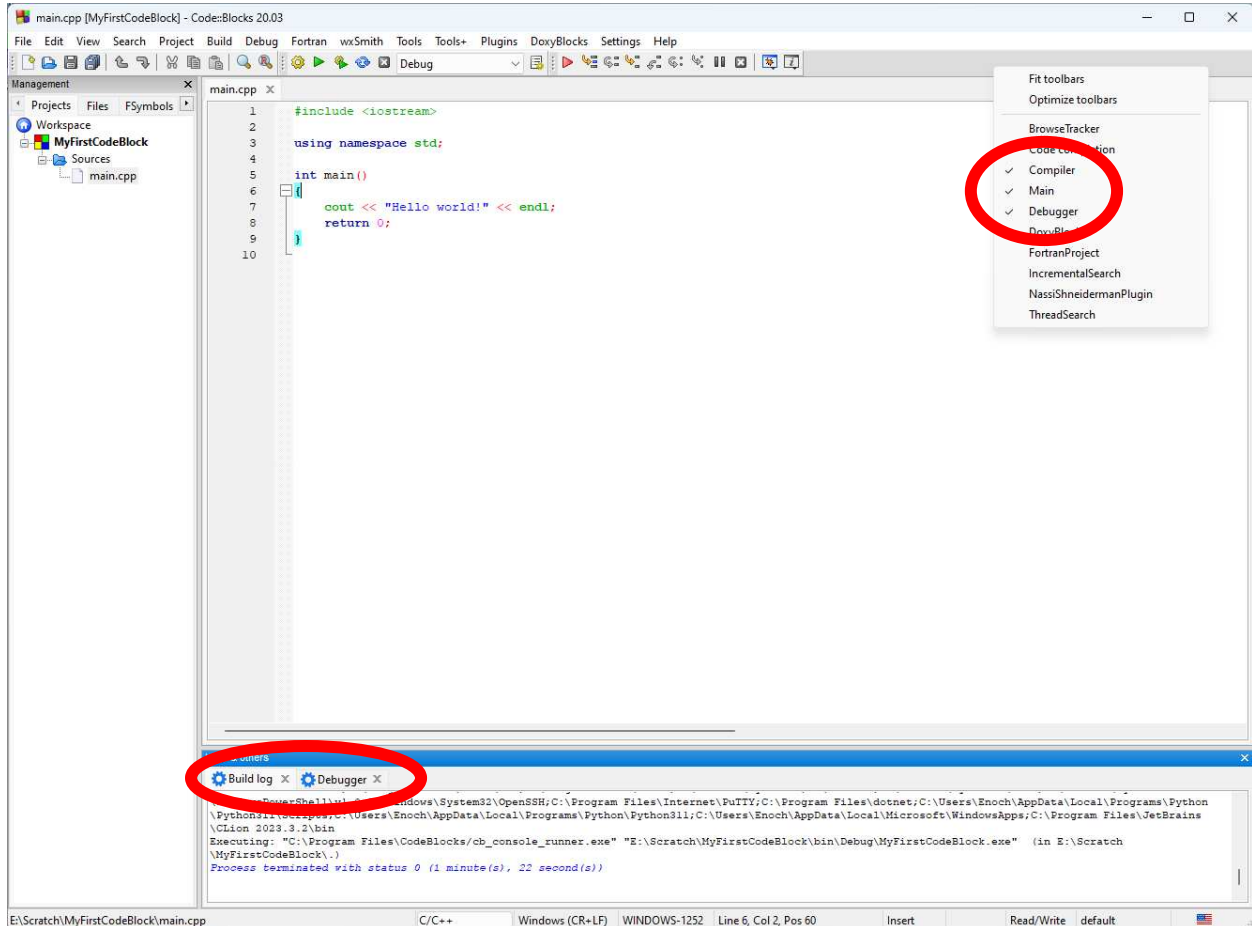
A console window will appear to display the outputs from your program. In this sample program, the words “Hello world!” are printed. Press any key to close this window.



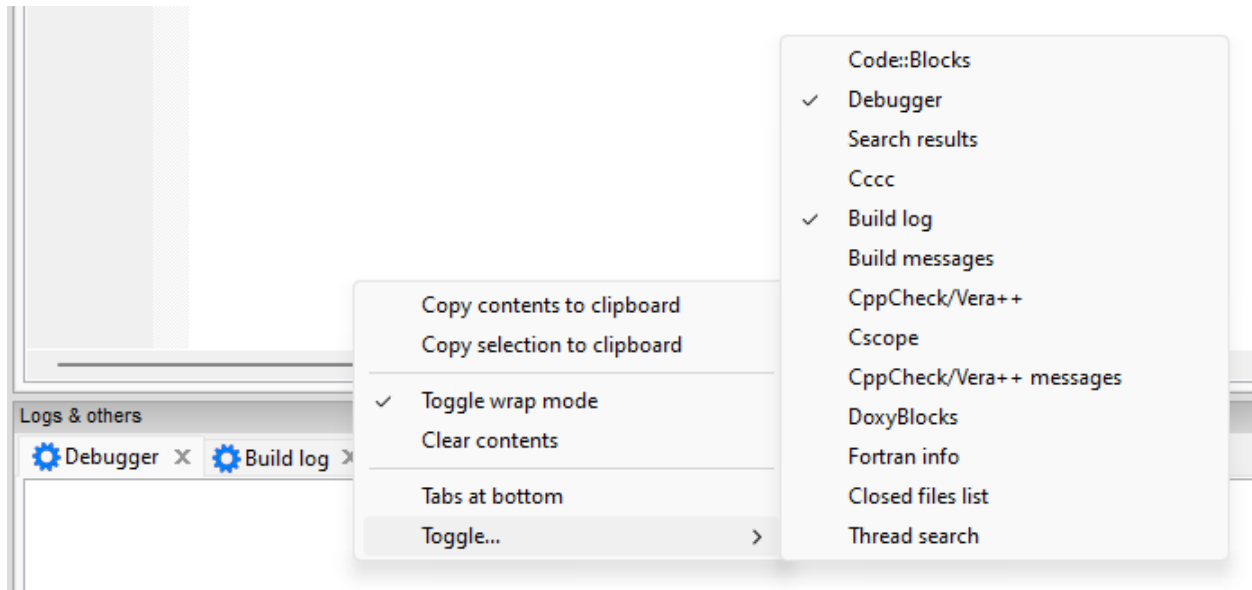
```
E:\Scratch\MyFirstCodeBlock\bin\Debug\MyFirstCodeBlock.exe
Hello world!
Process returned 0 (0x0)   execution time : 0.004 s
Press any key to continue.
```

5. Customizing the IDE toolbars

Code::Blocks contains many other tools that we will not use, so we can remove them from the IDE window. Right-click on the toolbar area. In the pop-up menu uncheck all items except for **Compiler**, **Main** and **Debugger**.



You can also remove several of the information windows at the bottom, such as Search results, Cccc, Build log, Build messages, CppCheck/Vera++, CppCheck/Vera++ messages, Cscope, DoxyBlocks, Fortran info, Closed files list and Thread search. To open the tabs back, right-click in the white area in the information window, select Toggle in the pop-up menu, then select whatever information window that you want.



6. Multiple files

To add another file to your project, click on the **New** icon and select **File...**

In the next window select whether you want a header file (.h) or a source file (.cpp).

In the next window type in the filename and the full path. It's easier if you just click on the ... icon and then just type in the filename. This way the full path will be automatically filled in for you.

Make sure you check the **Add file to active project** for both Debug and Release.

