

Using CodeBlocks

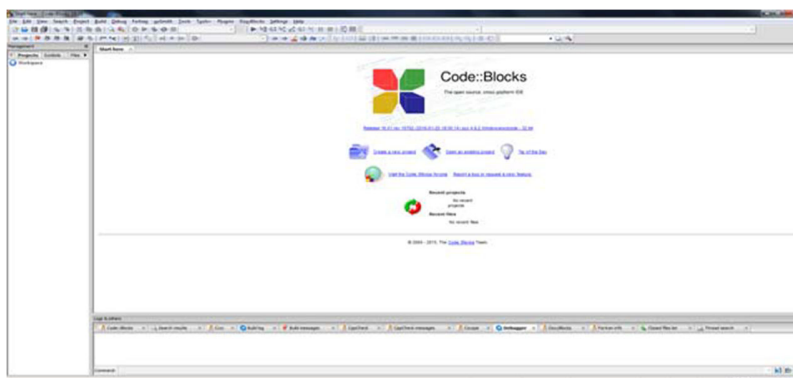
Introduction to Codeblocks for lab sessions

CodeBlocks version in lab: 16.01

CodeBlocks current version: 20.03 (Requires doing some setting for debugger)

Basic creation of new project for coding

1. Launch CodeBlocks



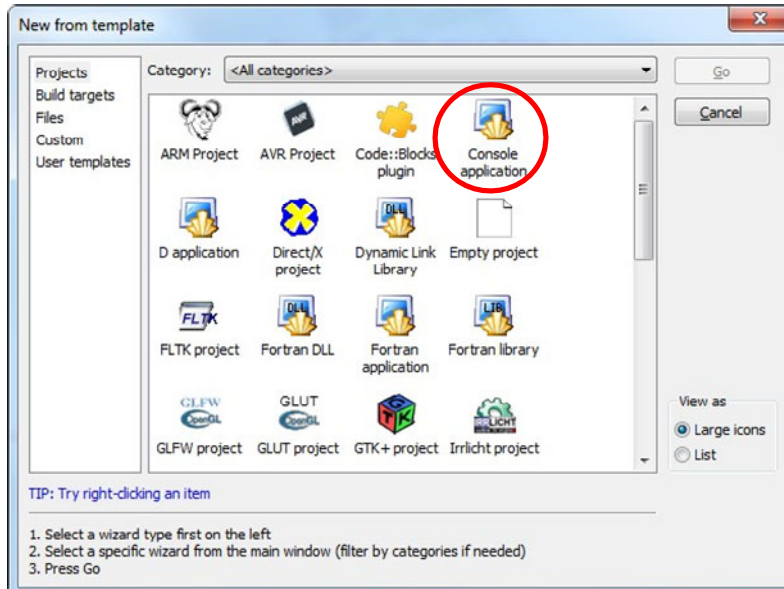
2. Create a new project

- Click on the **Create a new project** on the **Start here** Tab; or



- Go to **File->New->Project...**

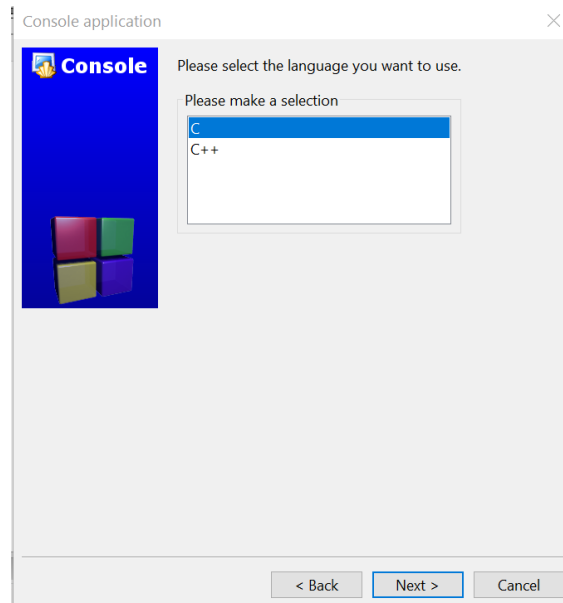
3. Select Console Application



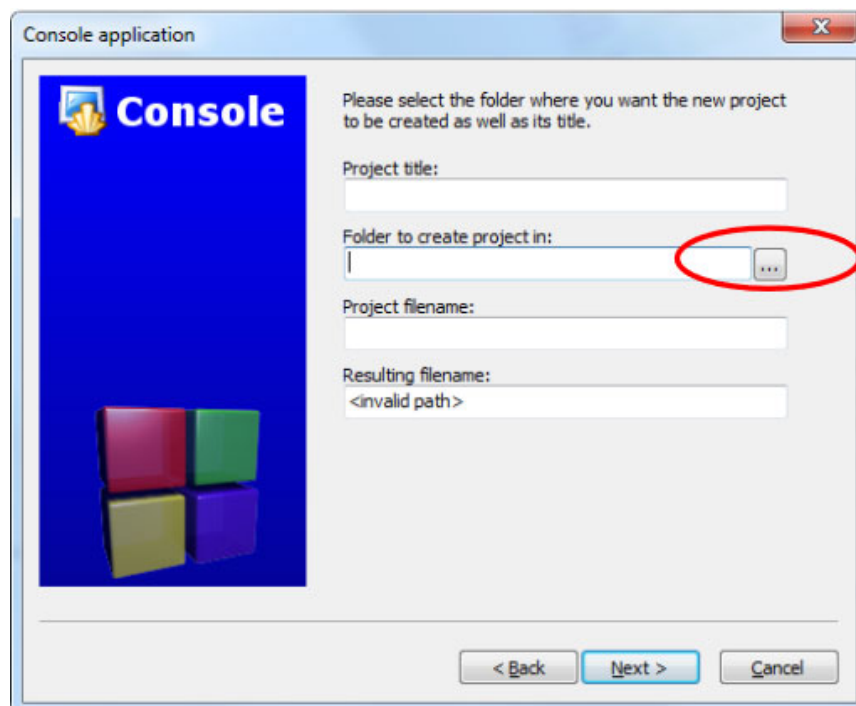
4. Click Next



5. Select C as the language



6. Set the path for your new project to the desktop **at Folder to create project in**
Do remember to copy to your projects to your thumb drive or network drive for backup.



7. Input **Project title** and click **Next**

Console application

Please select the folder where you want the new project to be created as well as its title.

Project title:
Lab1Q1

Folder to create project in:
C:\Users\guest1\Desktop ...

Project filename:
Lab1Q1.cbp

Resulting filename:
C:\Users\guest1\Desktop\Lab1Q1\Lab1Q1.cbp

< Back Next > Cancel

8. Click **Finish**

Console application

Please select the compiler to use and which configurations you want enabled in your project.

Compiler:
GNU GCC Compiler

☒ Create "Debug" configuration: Debug

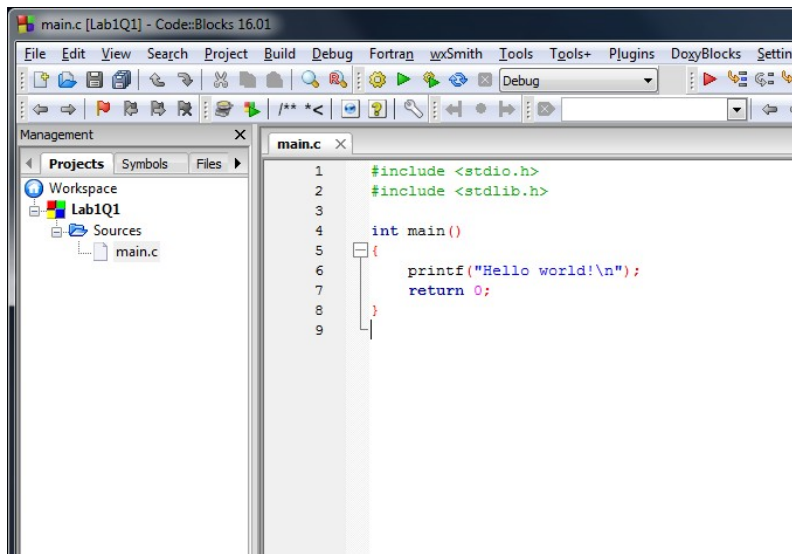
"Debug" options
Output dir.: bin\Debug\
Objects output dir.: obj\Debug\

☒ Create "Release" configuration: Release

"Release" options
Output dir.: bin\Release\
Objects output dir.: obj\Release\

< Back Finish Cancel

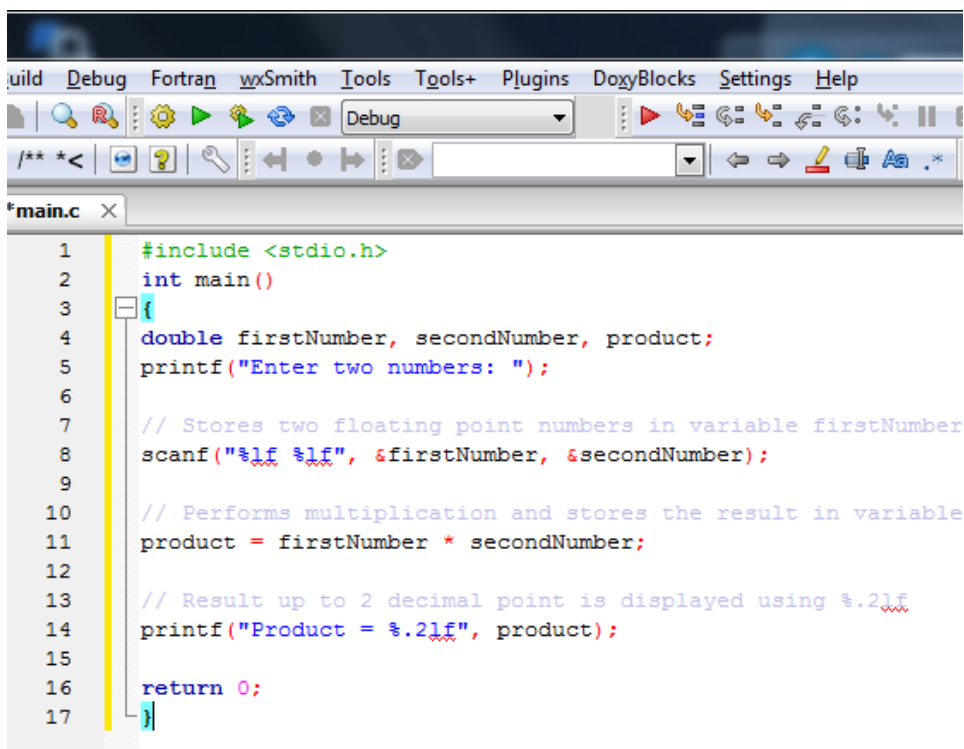
9. At **Projects Tab->Workspace**, your project will be generated with a default **main.c** file



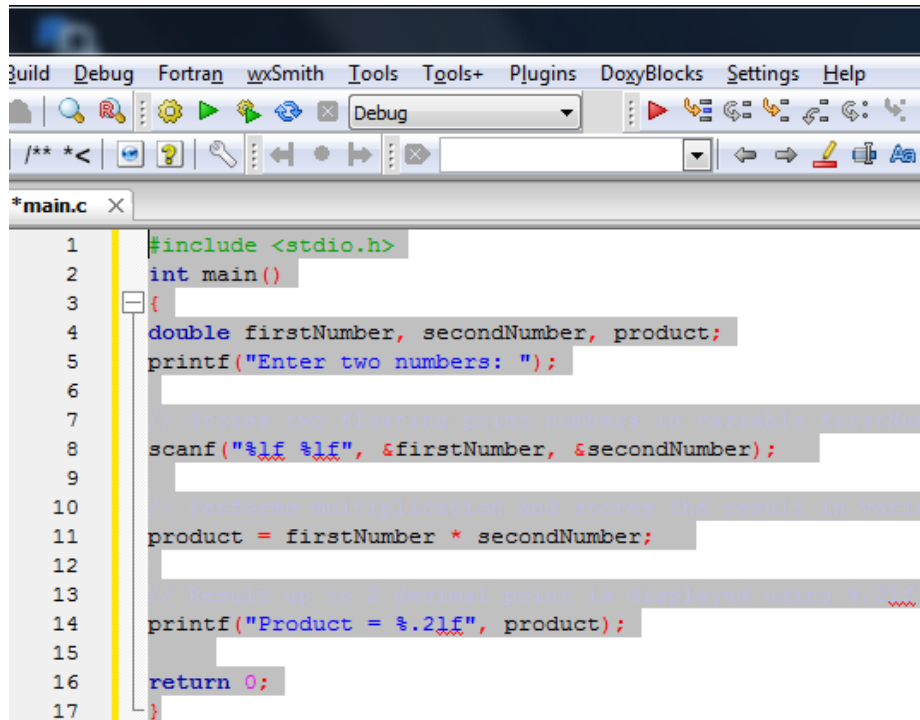
10. You may begin your coding on the main.c file

Auto Styling of Code

1. All the code in the column



2. Press **Ctrl + a** to highlight all the code, **right Click** on the mouse and select **Format Use AStyle**

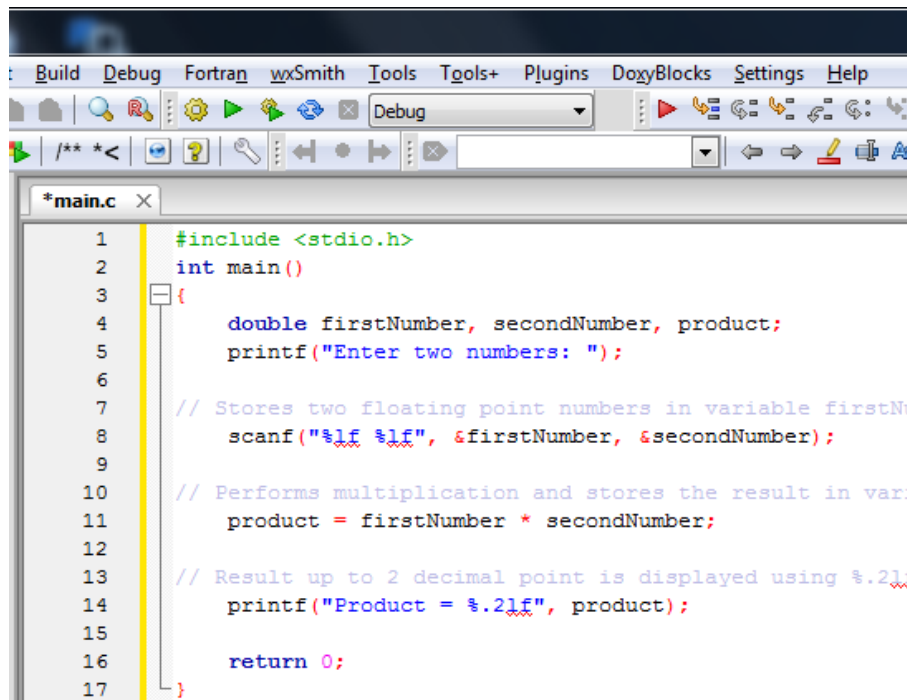


The screenshot shows a code editor window with a menu bar (Build, Debug, Fortran, wxSmith, Tools, Tools+, Plugins, DoxyBlocks, Settings, Help) and a toolbar. The file name is *main.c. The code is as follows:

```
1  #include <stdio.h>
2  int main()
3  {
4      double firstNumber, secondNumber, product;
5      printf("Enter two numbers: ");
6
7      // Stores two floating point numbers in variable firstNum
8      scanf("%lf %lf", &firstNumber, &secondNumber);
9
10     // Performs multiplication and stores the result in vari
11     product = firstNumber * secondNumber;
12
13     // Result up to 2 decimal point is displayed using %.2lf
14     printf("Product = %.2lf", product);
15
16     return 0;
17 }
```

The code is not formatted, with inconsistent indentation and line wrapping.

3. After formatting

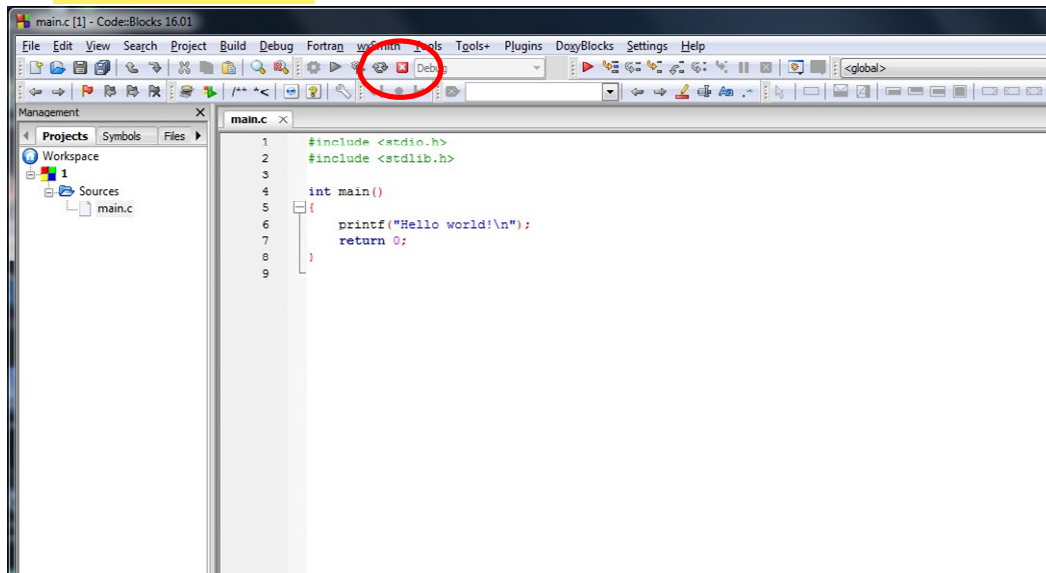


The screenshot shows the same code editor window after formatting the code. The code is now properly formatted with consistent indentation and line wrapping:

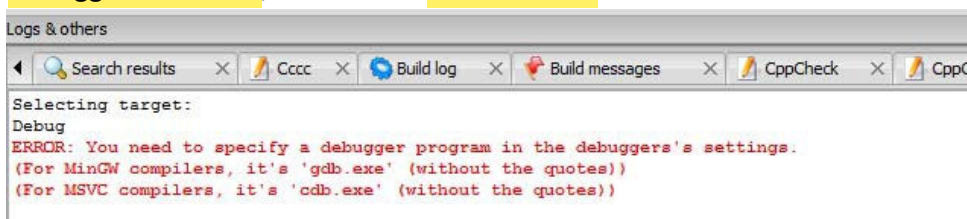
```
1  #include <stdio.h>
2  int main()
3  {
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CodeBlocks' Common Errors

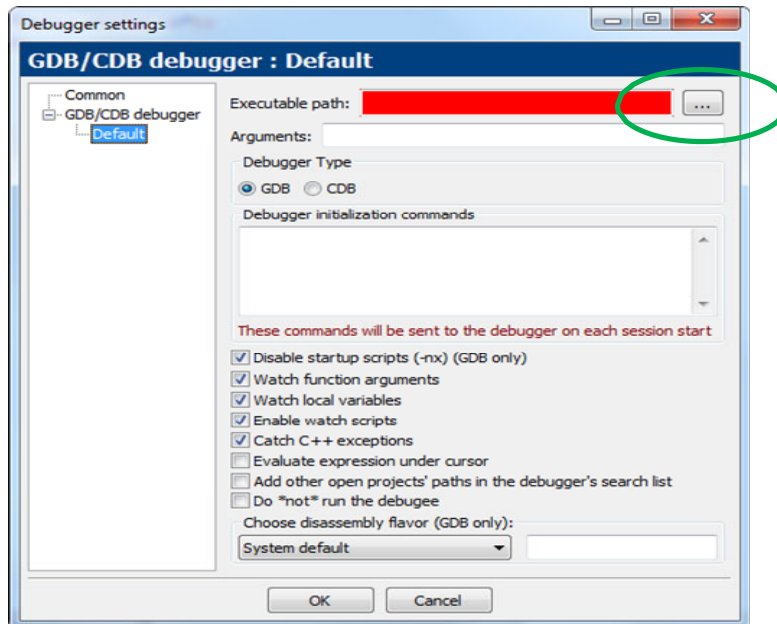
1. Codeblocks **cannot build** after pressing abort button on the toolbar
 - **Save** your project **restart** Codeblock
 - **Do not use the abort** button, close your console application directly to end



2. **No permission to overwrite the ".exe" file**
 - Go to the **Task Manager->Applications** (Windows 10: **Task Manager->Details**)
 - At **Tasks** end the project's ".exe"
3. **Cannot run debugger**
To use the debugger, you must **create a project for your code.**
4. **Debugger not found**, common in **version 17.12**



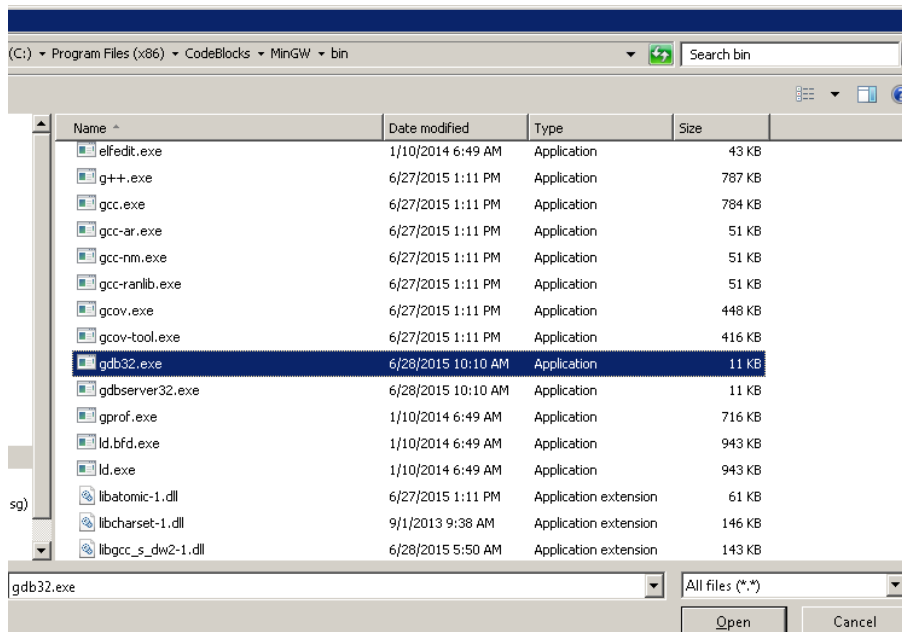
- Go to Settings->Debugger...->GDB/CDB debugger->Default->Executable path



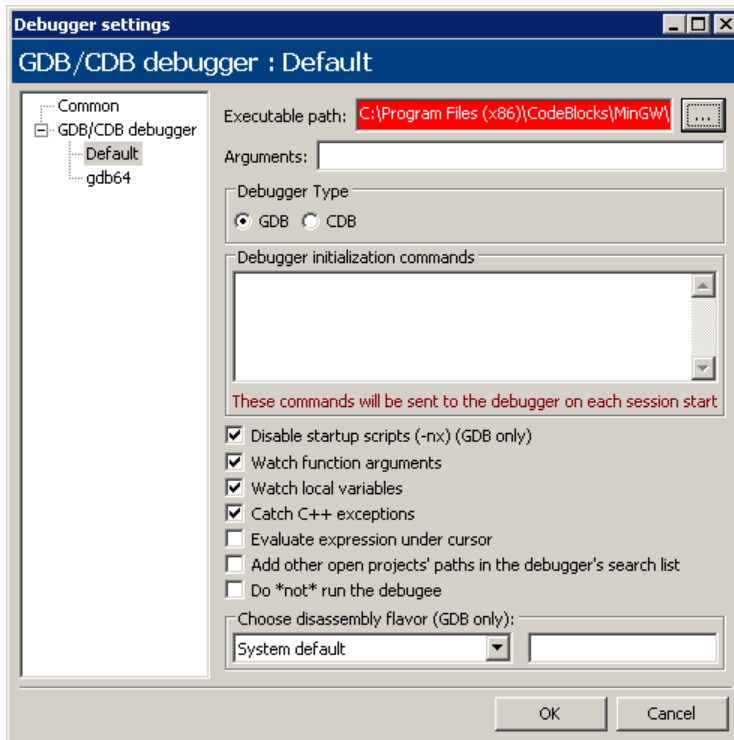
- Set the path for debugger pointing where Codeblocks is being installed.
For Example:

C:\Program Files (x86)\CodeBlocks\MinGW\bin

- Select the file **gdb** or **gdb32**
- Click **Open**



- Click **OK**



References

1. <http://www.codeblocks.org/downloads>