

Using CodeBlocks

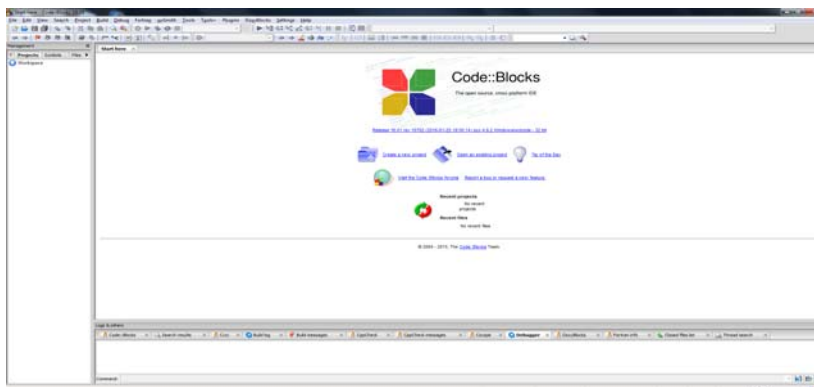
Introduction to Codeblocks for lab sessions

CodeBlocks version in lab: 16.01

CodeBlocks current version: 17.12 (Requires to do some setting for debugger)

Basic creation of new project for coding

1. Launch CodeBlocks



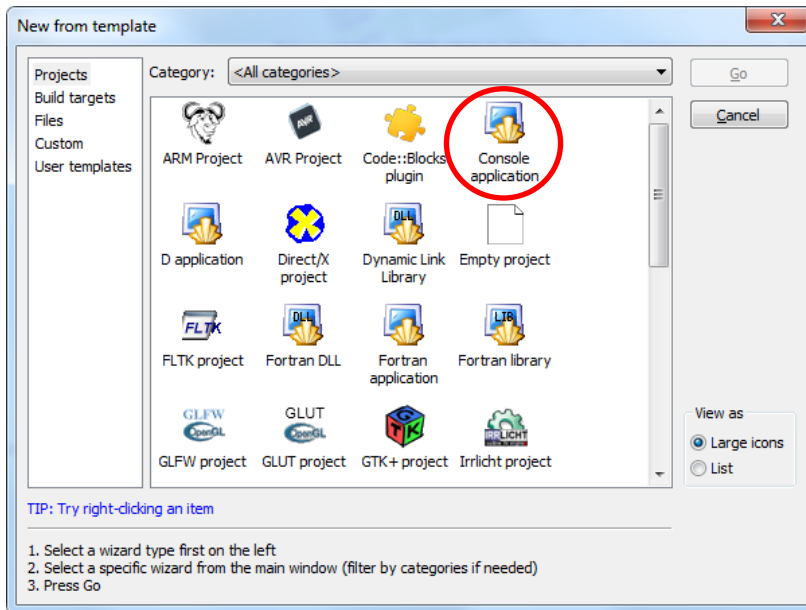
2. Create a new project

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

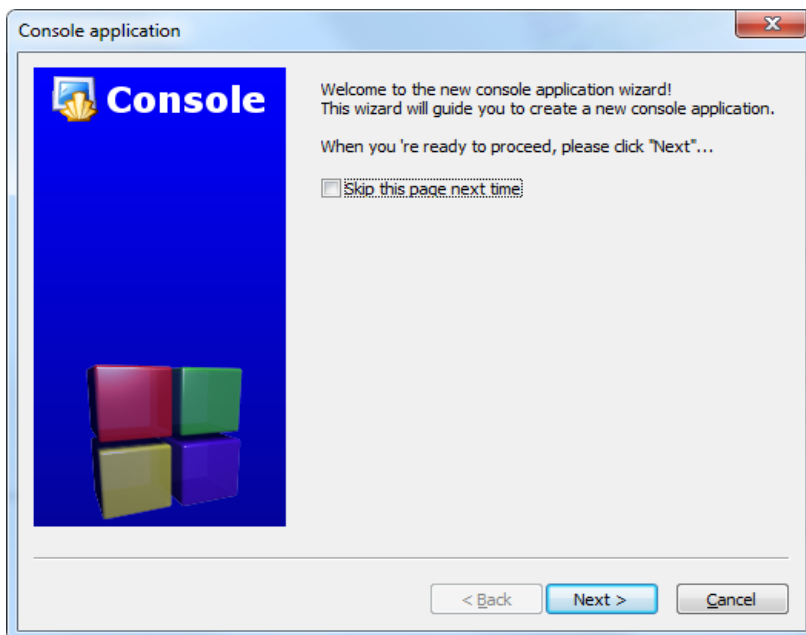


- Go to **File->New->Project...**

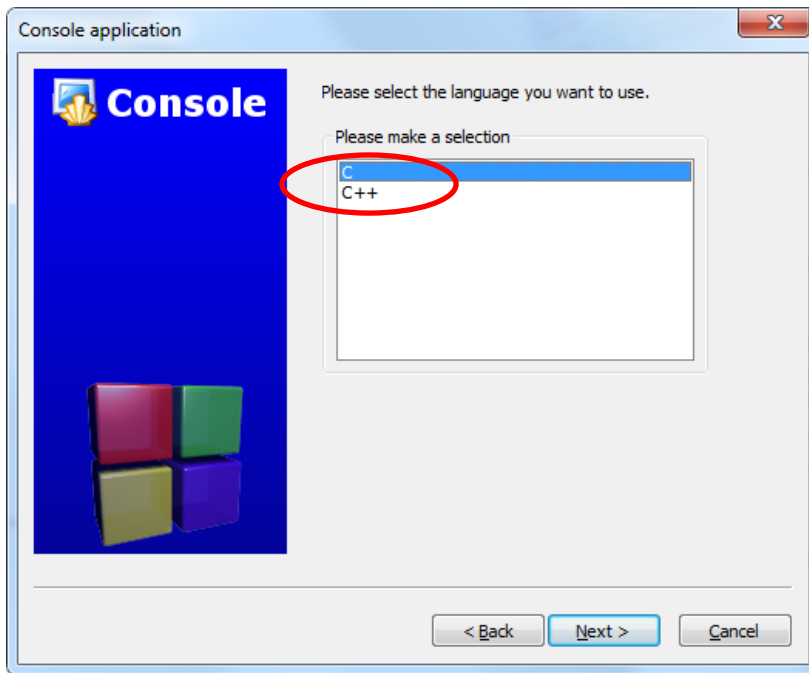
3. Select **Console Application**



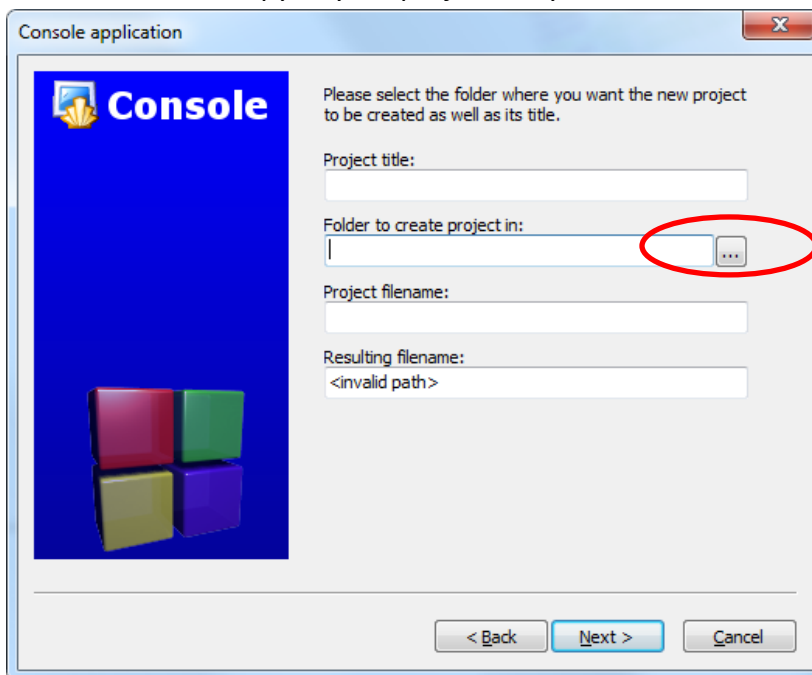
4. Click **Next**



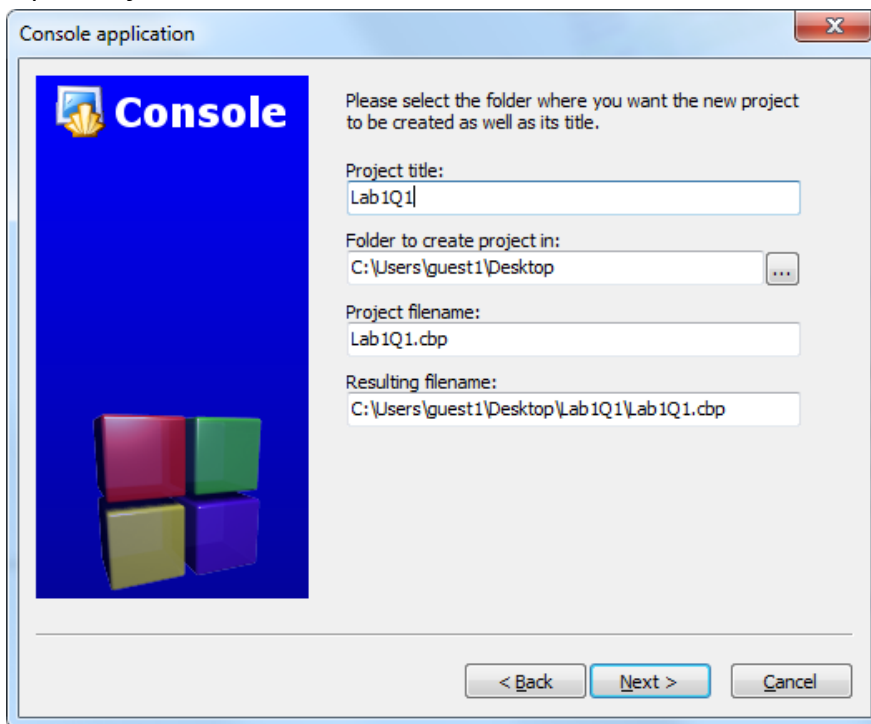
5. Select **C** as the language



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**



The screenshot shows the 'Console application' wizard window. On the left is a blue sidebar with the 'Console' logo and a 3D cube graphic. The main area has a light gray background with the text: 'Please select the folder where you want the new project to be created as well as its title.' Below this are four input fields: 'Project title:' with 'Lab1Q1', 'Folder to create project in:' with 'C:\Users\guest1\Desktop' and a browse button, 'Project filename:' with 'Lab1Q1.cbp', and 'Resulting filename:' with 'C:\Users\guest1\Desktop\Lab1Q1\Lab1Q1.cbp'. At the bottom are three buttons: '< Back', 'Next >', and 'Cancel'.

Console application

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

Project title:
Lab1Q1

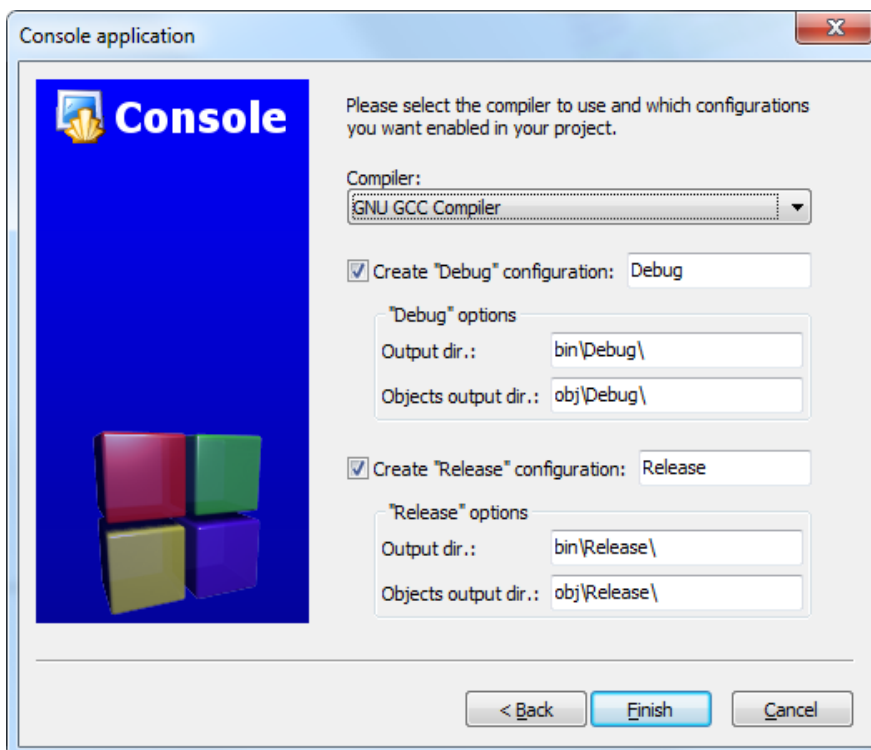
Folder to create project in:
C:\Users\guest1\Desktop

Project filename:
Lab1Q1.cbp

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

< Back Next > Cancel

8. Click **Finish**



The screenshot shows the 'Console application' wizard window at the 'Finish' step. The sidebar is the same. The main area has the text: 'Please select the compiler to use and which configurations you want enabled in your project.' Below this is a 'Compiler:' dropdown menu set to 'GNU GCC Compiler'. There are two checked checkboxes: 'Create "Debug" configuration:' and 'Create "Release" configuration:'. Each has a sub-section for options. The 'Debug' options are 'Output dir.: bin\Debug\' and 'Objects output dir.: obj\Debug\' (both in text boxes). The 'Release' options are 'Output dir.: bin\Release\' and 'Objects output dir.: obj\Release\' (both in text boxes). At the bottom are three buttons: '< Back', 'Finish', and 'Cancel'.

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

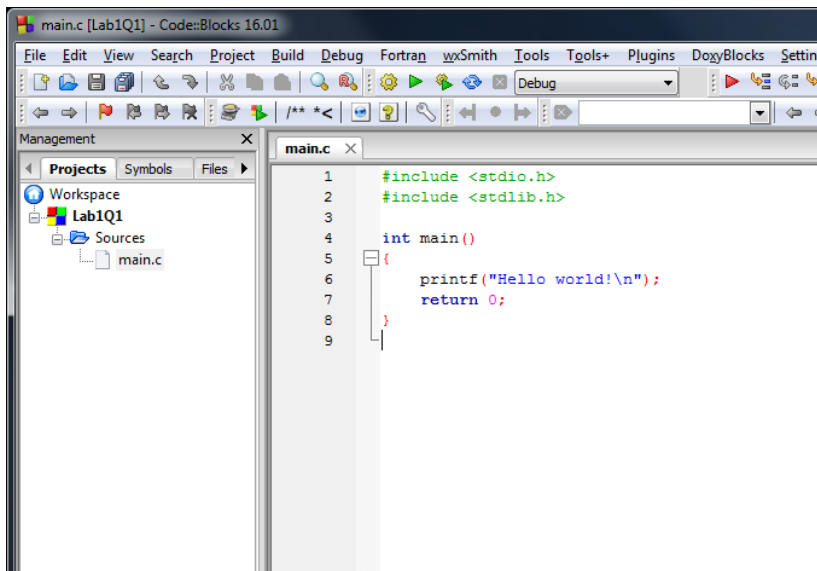
"Debug" options
Output dir.: bin\Debug\
Objects output dir.: obj\Debug\

☒ Create "Release" configuration: Release

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

< Back Finish Cancel

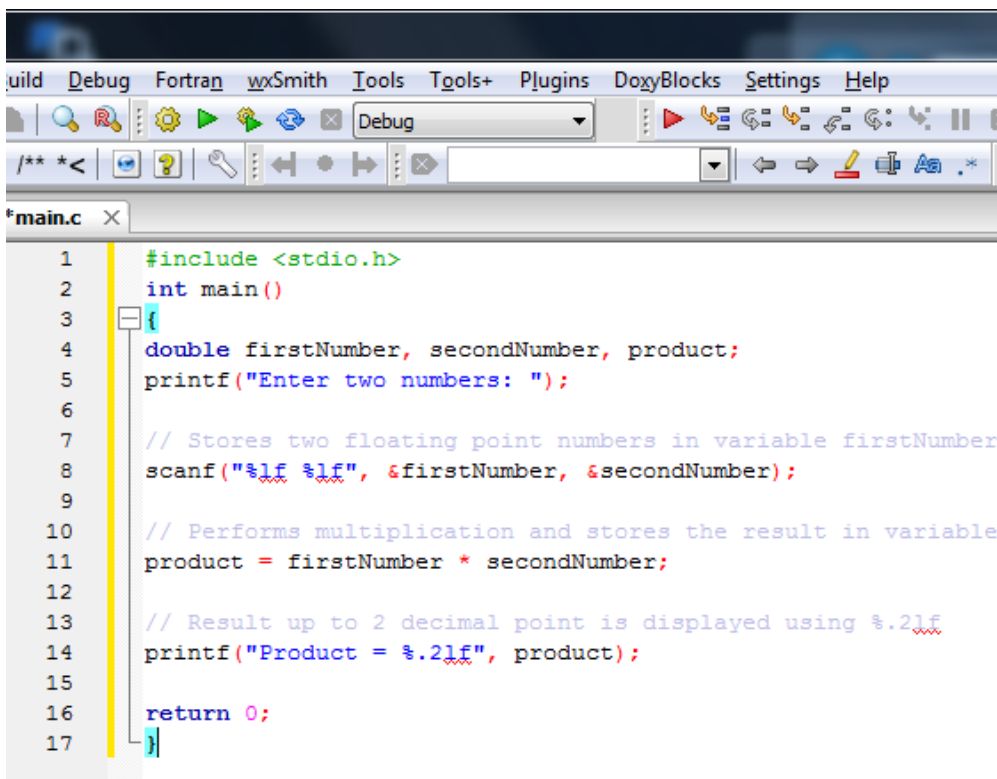
- At **Projects Tab->Workspace**, your project will be generated with a default **main.c** file



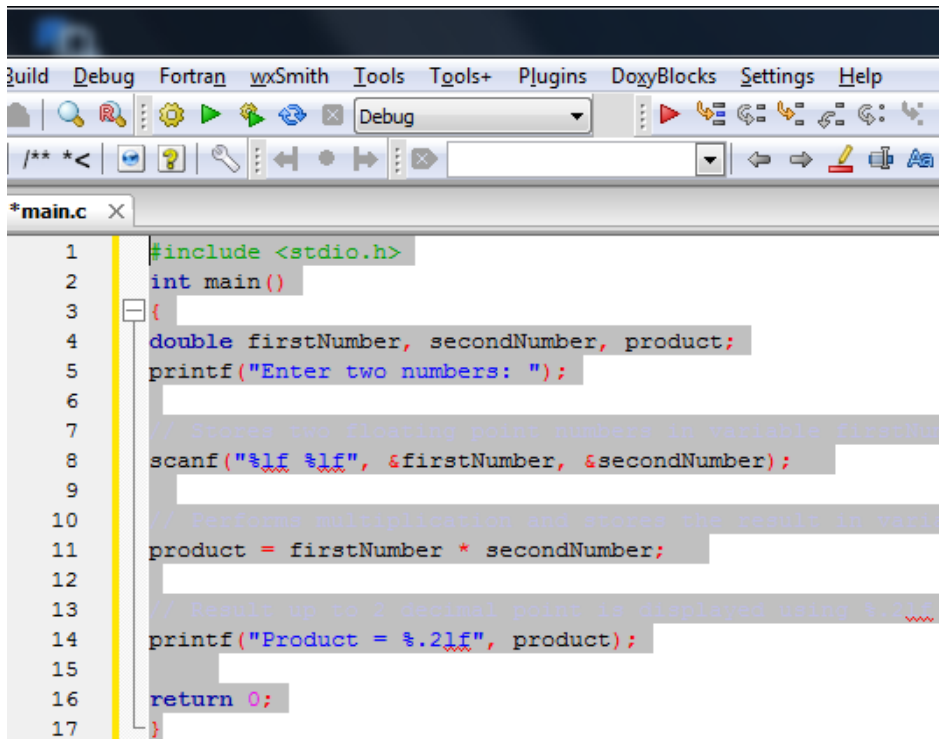
- You may begin your coding on the main.c file

Auto Styling of Code

- All the code in the column

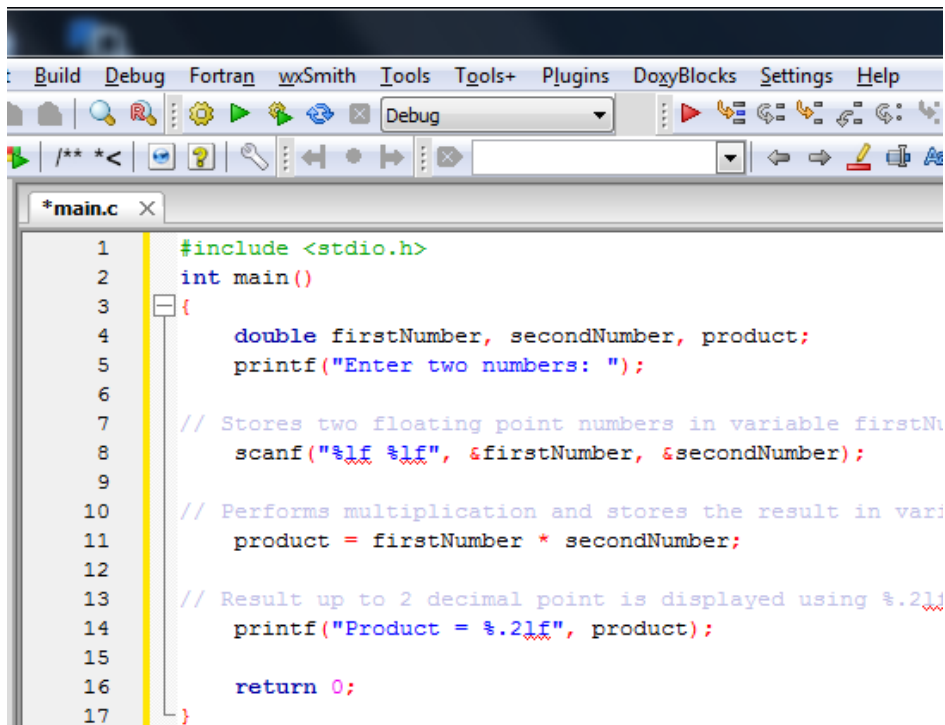


2. Press **Ctrl + a** to highlight all the code, **right Click** on the mouse and select **Format Use AStyle**



```
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 }
```

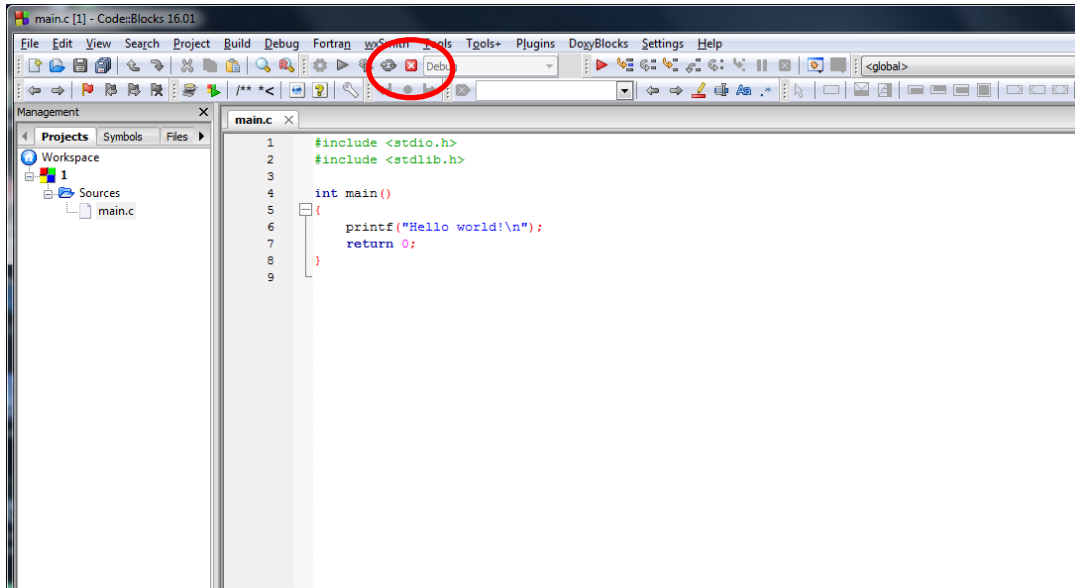
3. After formatting



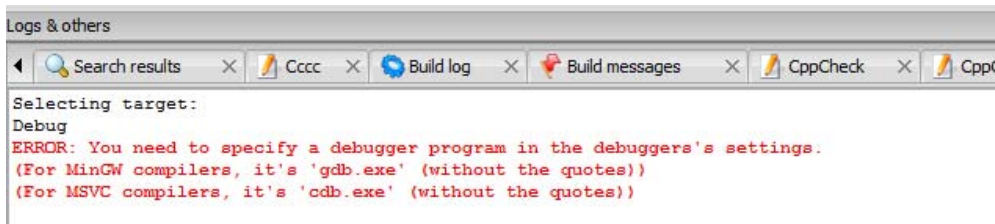
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CodeBlocks' Common Errors

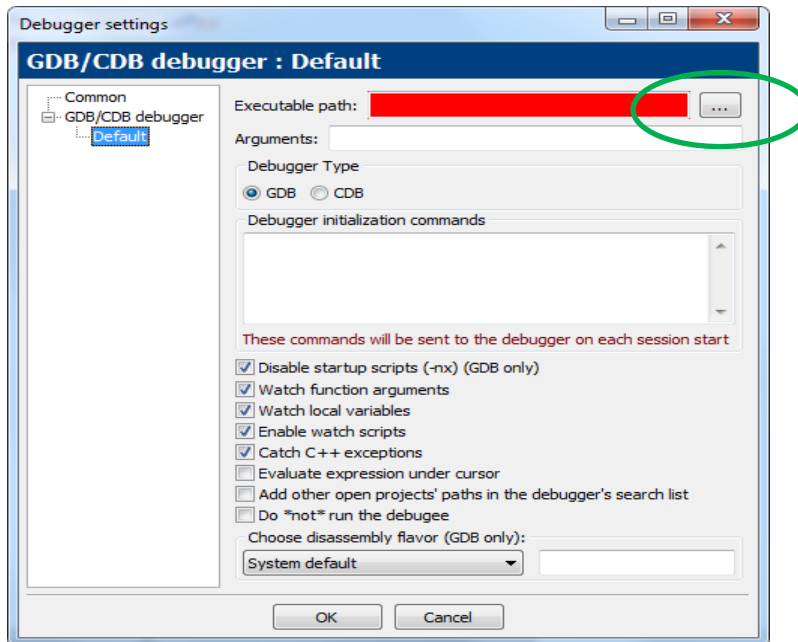
1. Codeblocks cannot build after pressing abort button on the toolbar
 - Save your project restart Codeblock
 - Do not use the abort button, close your console application directly to end



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**



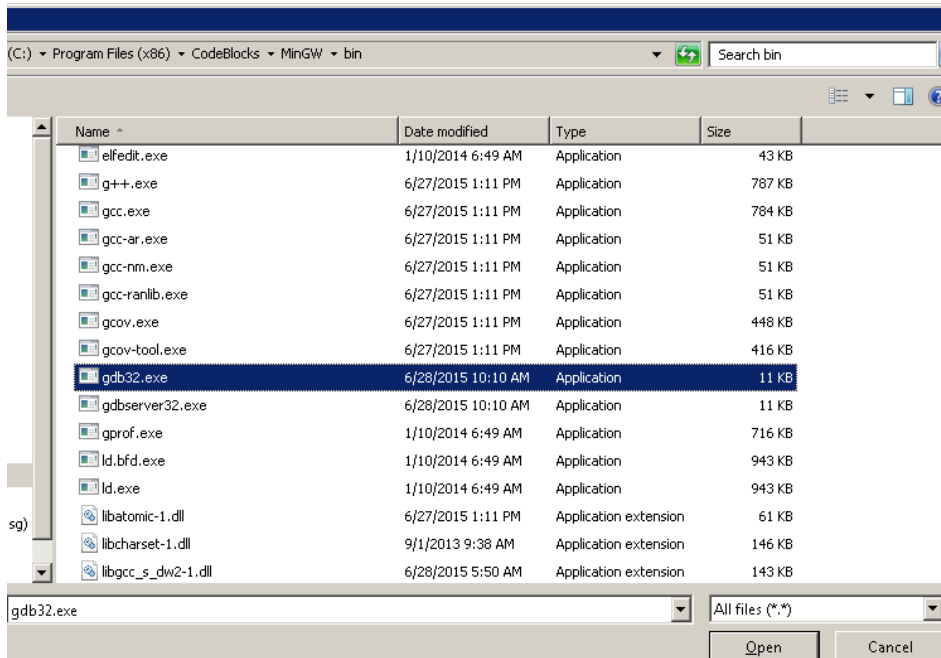
- Go to Settings->Debugger...->GDB/CDB debugger->Default->Executable path



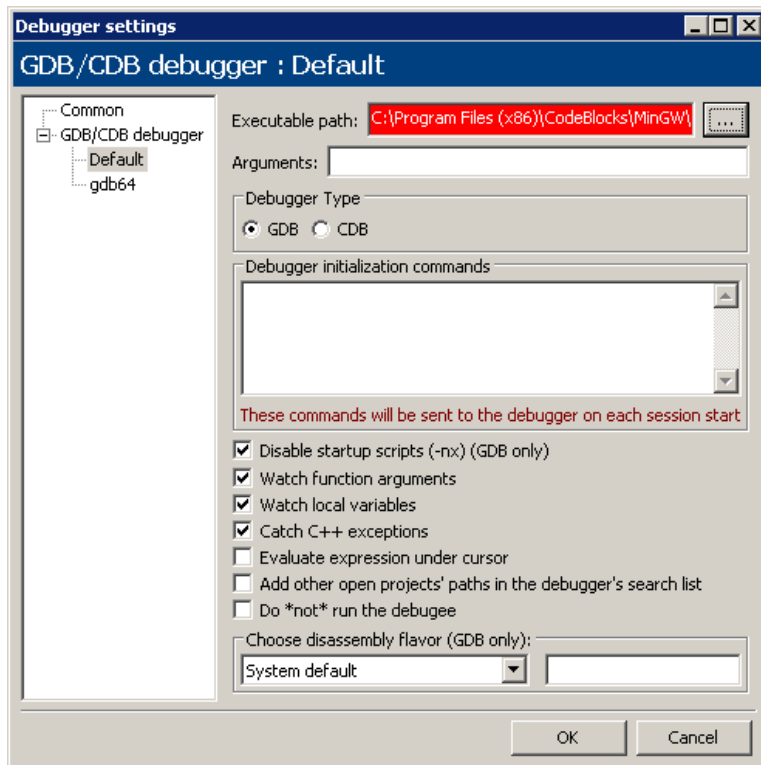
- Set the path for debugger pointing where Codeblocks is being installed.
For Example:

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

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



- Click **OK**



References

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