

Installing and Running Code::Blocks in Windows

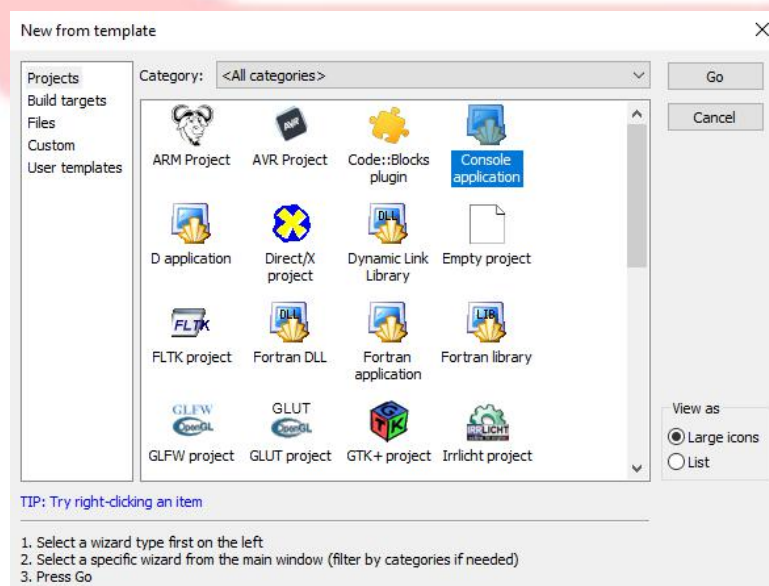
In Task 1A, we will be completing a programming exercise in C language using the Code::Blocks IDE. The following tutorial will explain how to install Code::Blocks on a windows machine and create and execute projects in windows.

Installing and Configuring Code::Blocks

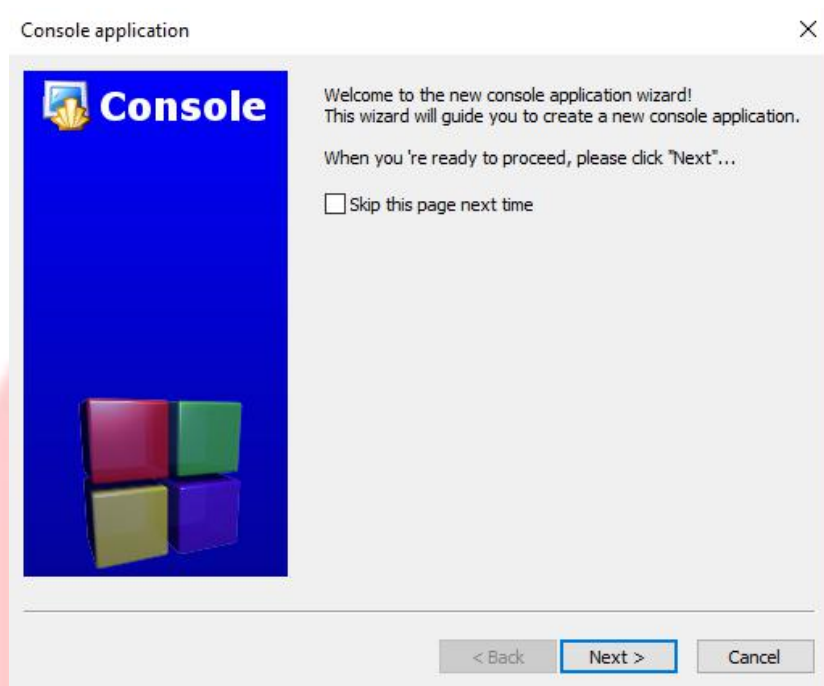
- 1) You can download the Code::Blocks setup using this [link](#).
- 2) Go to the given link and download the file named **codeblocks-16.01mingw-setup.exe**.
- 3) Once you have downloaded the setup, install it by running the .exe file.
- 4) After installation, open the Code::blocks software.
- 5) Go to Setting ---> Compiler. The compiler setting window will open.
- 6) Open the Toolchain executables tab.
- 7) Under the Compiler's installation directory, click on the button labeled Auto-detect which will automatically detect the compiler MinGW which was downloaded with the setup.
- 8) Click on OK. Code::Blocks is fully configured now.

Creating a New Project

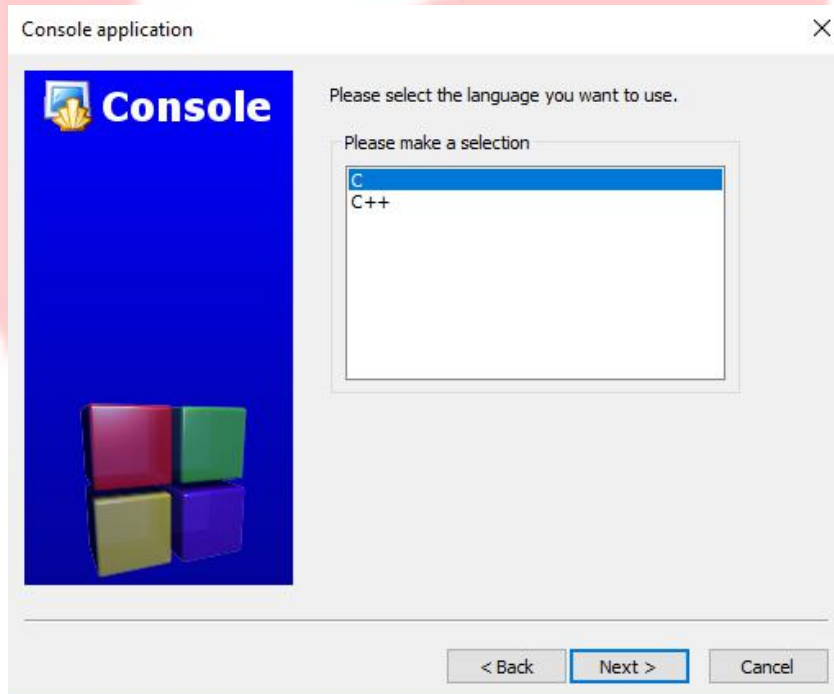
- 1) Go to File --> New --> Project. The New from Template window will open. Select Console application and click on Go.



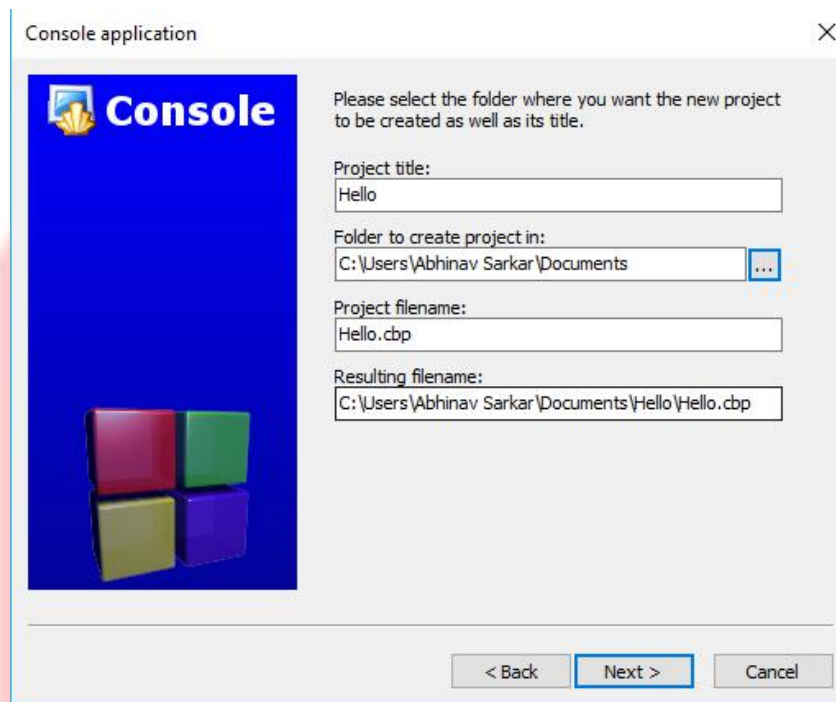
2) Click Next in the new window.



3) Select C in the next window and click Next.



- 4) In the next window, enter Name of project and the path to save the project file. Click Next.



Console application

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

Project title:
Hello

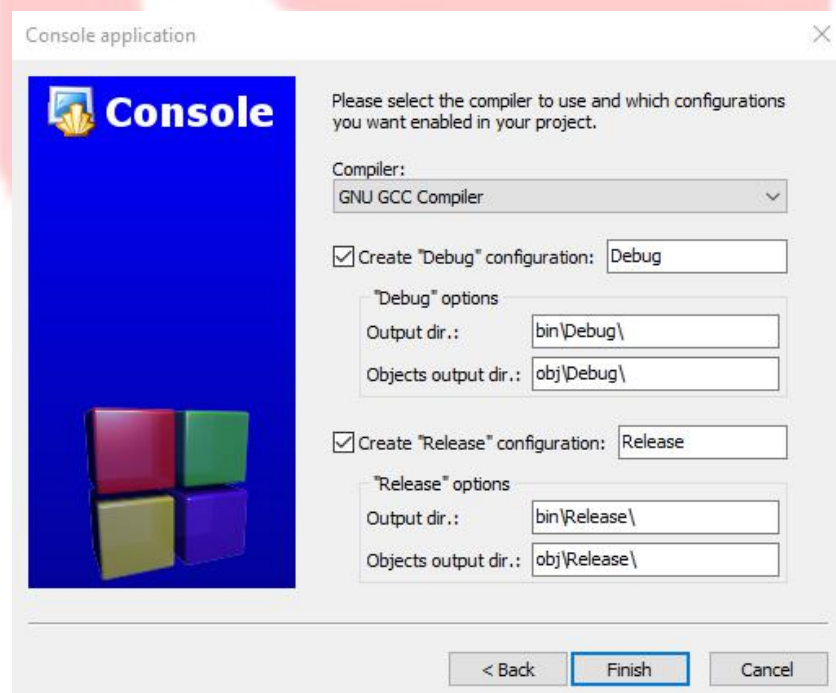
Folder to create project in:
C:\Users\Abhinav Sarkar\Documents

Project filename:
Hello.cbp

Resulting filename:
C:\Users\Abhinav Sarkar\Documents\Hello\Hello.cbp

< Back Next > Cancel

- 5) Finally Select GNU GCC compiler in the next window and 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

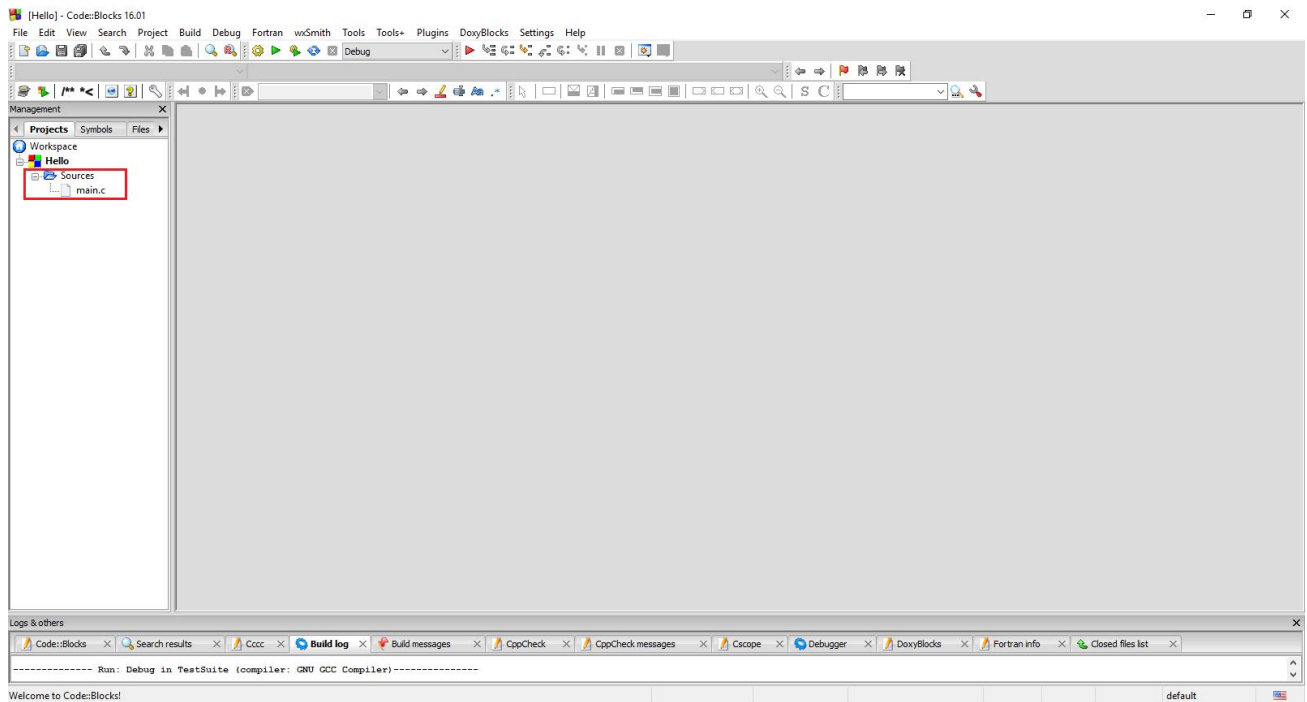
"Debug" options
Output dir.: bin\Debug\
Objects output dir.: obj\Debug\

☒ Create "Release" configuration: Release

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

< Back Finish Cancel

- 6) You should see the following kind of window. Click on Sources on the Left Side and then Double Click on main.c to open the file.

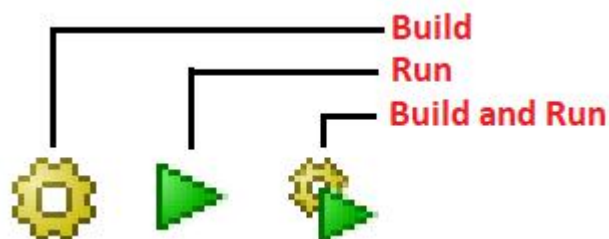


- 7) The default “Hello World” code will show up in main.c file

```
#include <stdio.h>
#include <stdlib.h>

int main()
{
    printf("Hello world!\n");
    return 0;
}
```

- 8) Above the code you will see the following three buttons:



- 9) Click on Build and Run. Your program will start building . Once build is completed, it will run and show you the following output window:

```

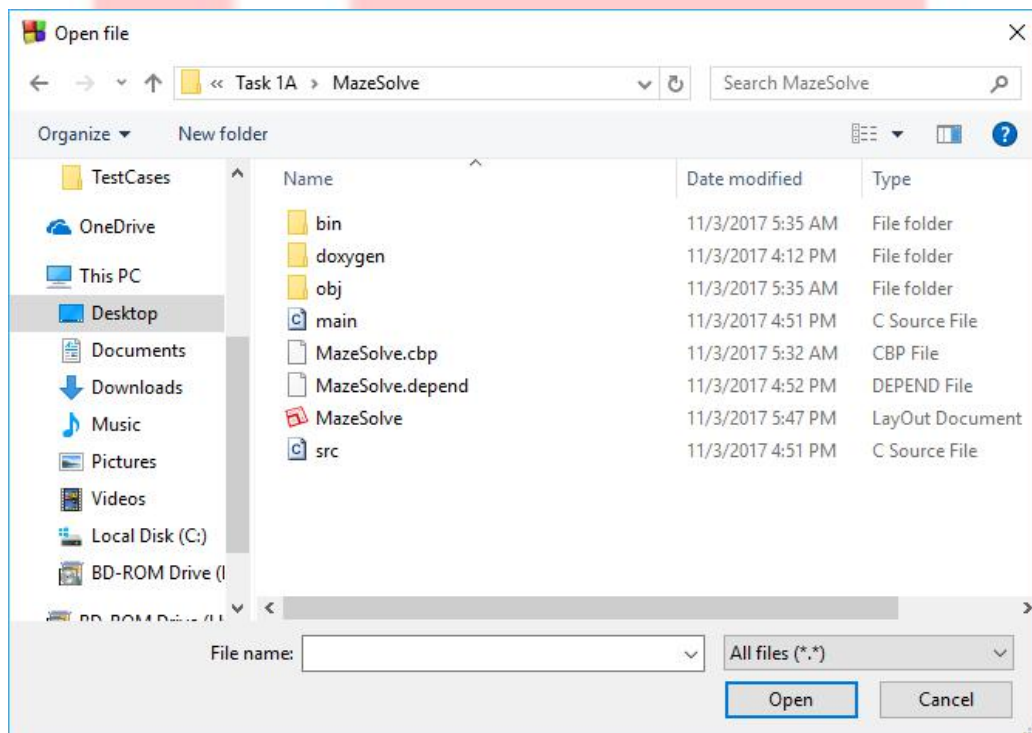
"C:\Users\Abhinav Sarkar\Documents\Hello\bin\Debug\Hello.exe"
Hello world!

Process returned 0 (0x0)   execution time : 0.059 s
Press any key to continue.
    
```

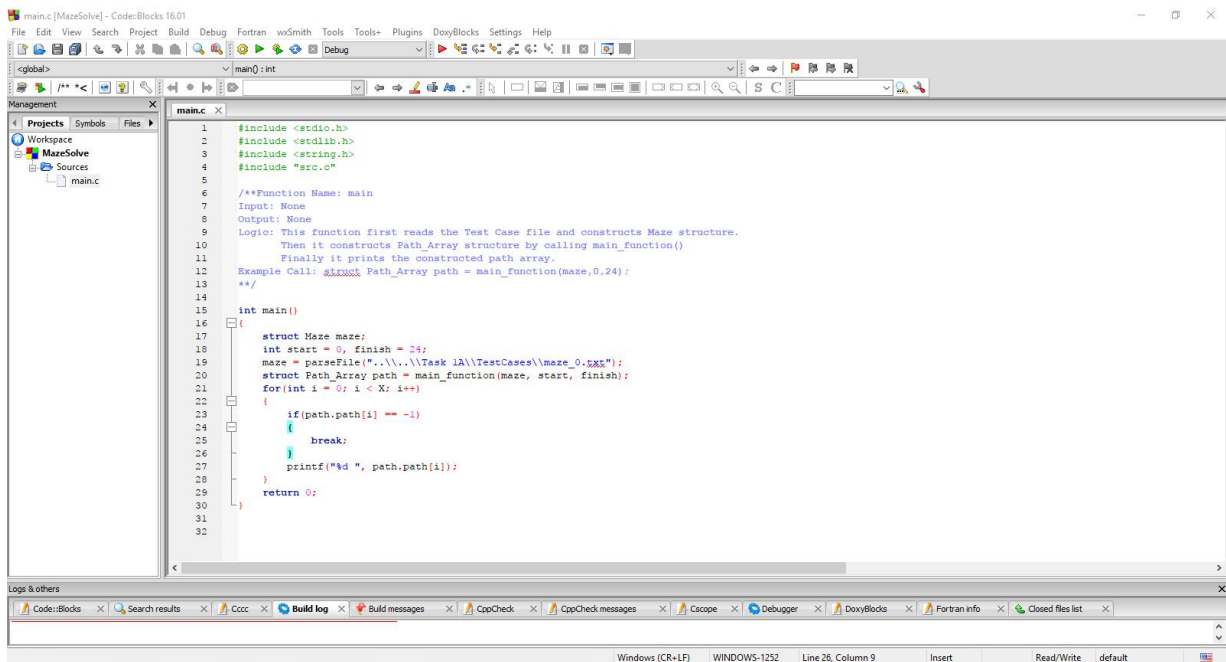
Congratulations. You have built and run your first Code::Blocks project.

Opening an Existing Project

- 1) Go to File --> Open. In the Open file window, browse to Task 1A/MazeSolve folder.



- 2) Select the MazeSolve.cbp file and click on Open. You should be able to see the following code:

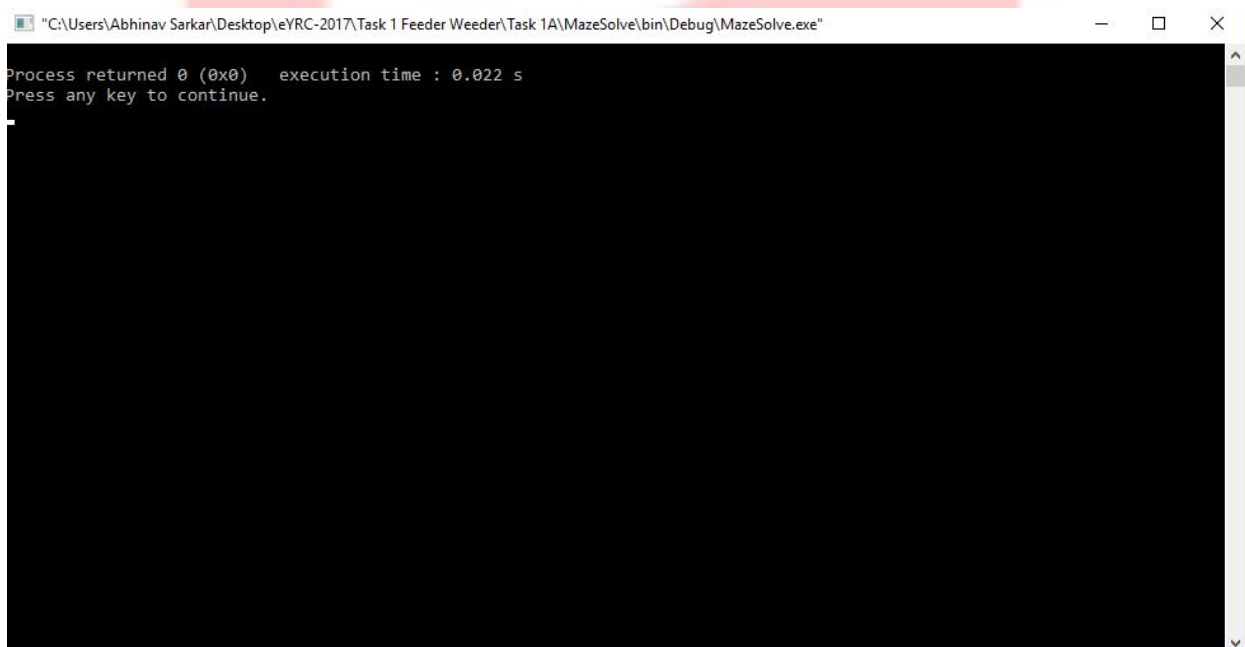


```

1  #include <stdio.h>
2  #include <stdlib.h>
3  #include <string.h>
4  #include "src.c"
5
6  /**Function Name: main
7   Input: None
8   Output: None
9   Logic: This function first reads the Test Case file and constructs Maze structure.
10  Then it constructs Path_Array structure by calling main_function()
11  Finally it prints the constructed path array.
12  Example Call: struct Path_Array path = main_function(maze,0,24);
13  */
14
15  int main()
16  {
17      struct Maze maze;
18      int start = 0, finish = 24;
19      maze = parseFile("../Task 1A\\TestCases\\maze_0.5.txt");
20      struct Path_Array path = main_function(maze, start, finish);
21      for(int i = 0; i < X; i++)
22      {
23          if(path.path[i] == -1)
24          {
25              break;
26          }
27          printf("%d ", path.path[i]);
28      }
29      return 0;
30  }
31
32

```

- 3) Click on Run to execute the program. The program should execute successfully.



```

"C:\Users\Abhinav Sarkar\Desktop\eyRC-2017\Task 1 Feeder Weeder\Task 1A\MazeSolve\bin\Debug\MazeSolve.exe"
Process returned 0 (0x0)   execution time : 0.022 s
Press any key to continue.

```