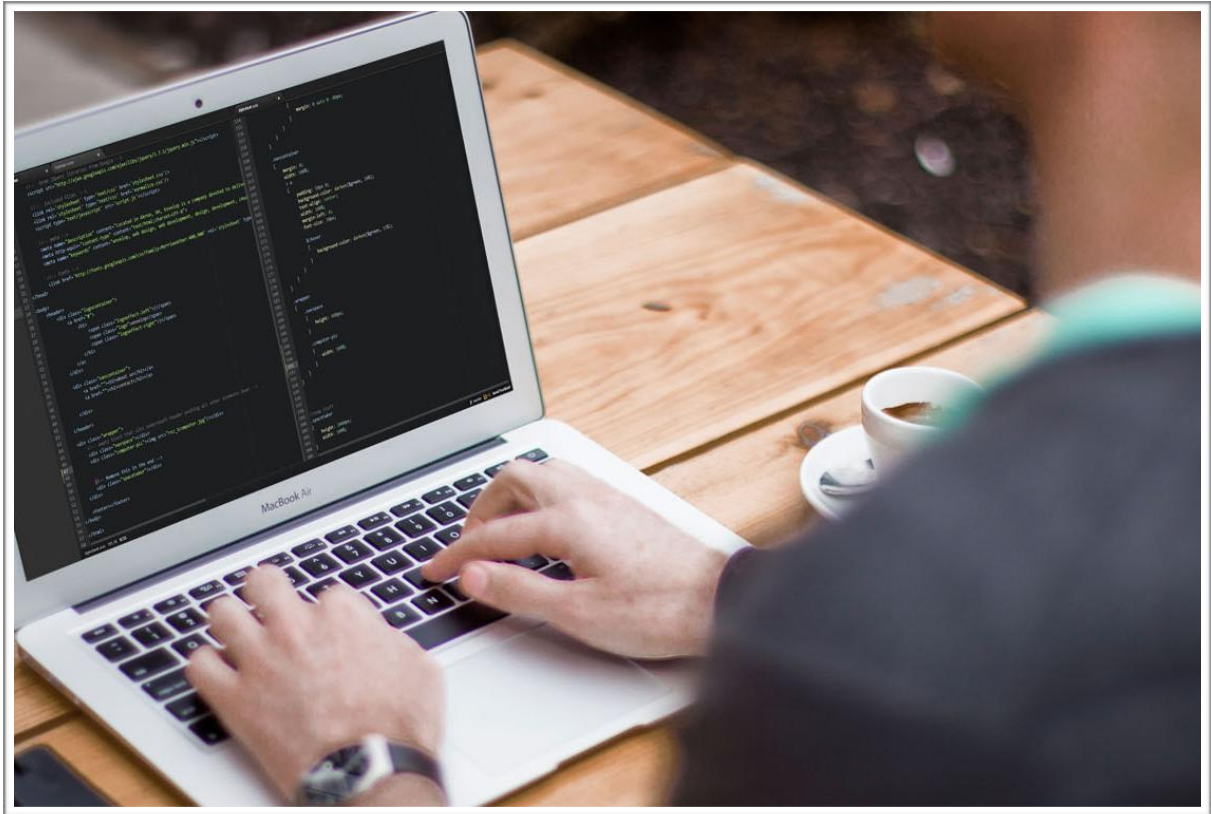


# Codenza C/C++ Guide



Codenza Development Team

Fall 2017

# Codenza C/C++ Guide



## Beginner User

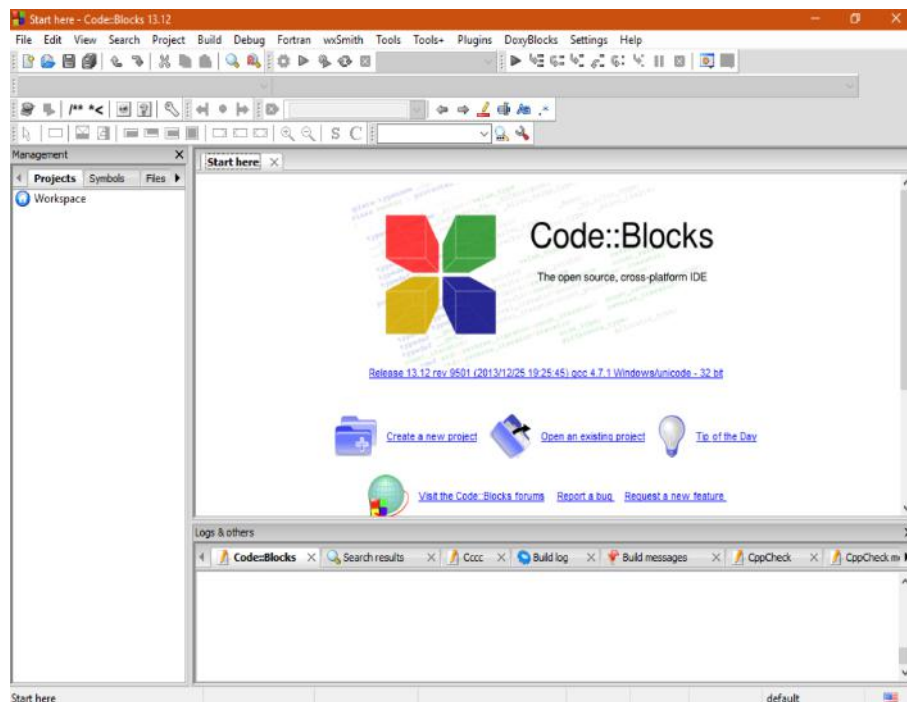
Code::Blocks IDE: -

Download and install the Code::Blocks IDE from the link below.

<http://www.codeblocks.org/downloads/26>

Supports Windows, Linux and Mac OS and other OS's as well.

One thing to note here is that you need to configure a compiling and debugging environment yourself if it is not present in your system, but if present during installation times it will auto-detect it for sure. Also, you can configure it to use a range of such compilers and debuggers too.



System Requirements: -

Windows – 7 / 8 / 8.1 / 10

Linux

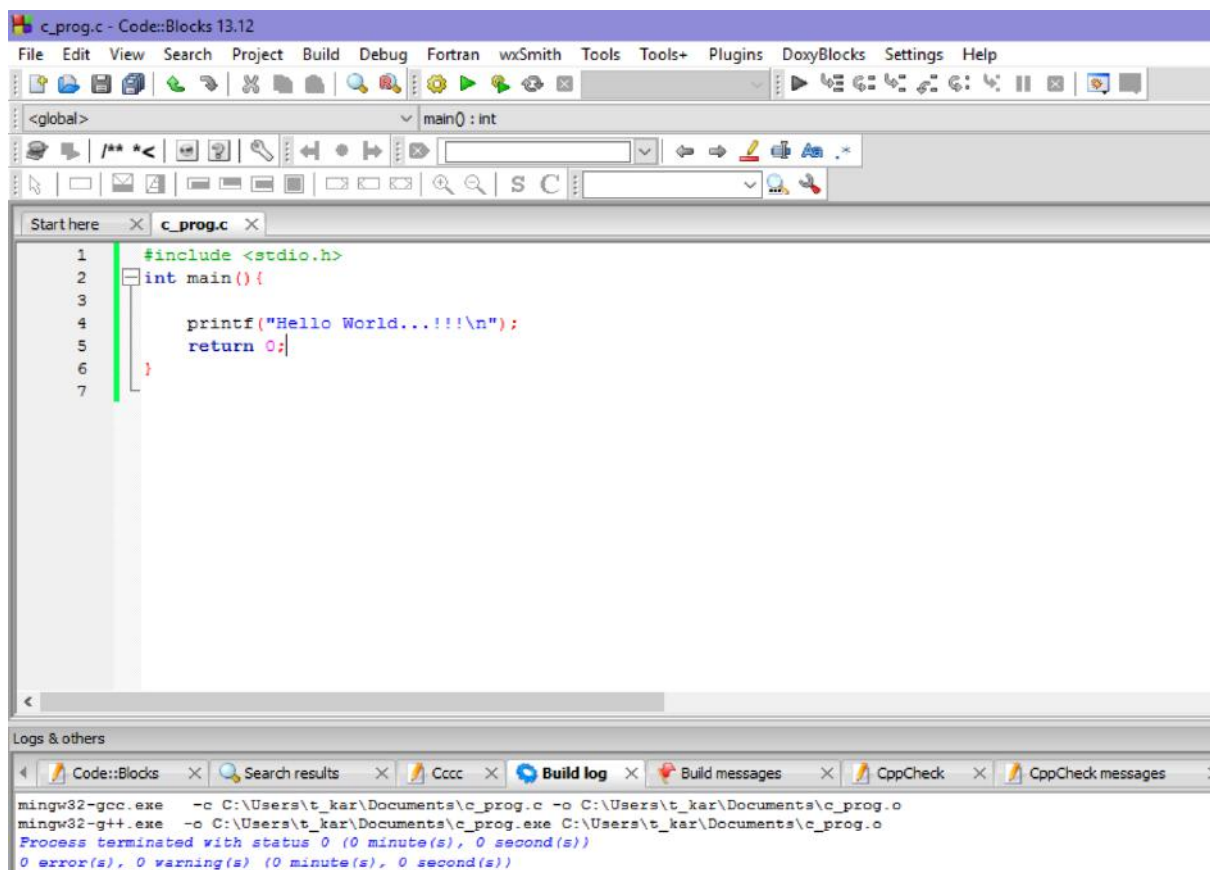
Mac OS

List of popular Compilers and debuggers that can be used: -

1. MinGW.
2. Visual C++.
3. Cygwin.

Next configure the compiler options by going to **Settings -> Compilers -> Selected Debugger -> Toolchain's Executables -> Compiler's Installation Directory**. If installed after Code::Blocks installation, it will detect it automatically by default.

Building and Executing the Program: -



The screenshot shows the Code::Blocks IDE interface. The main editor window displays a C program named 'c\_prog.c' with the following code:

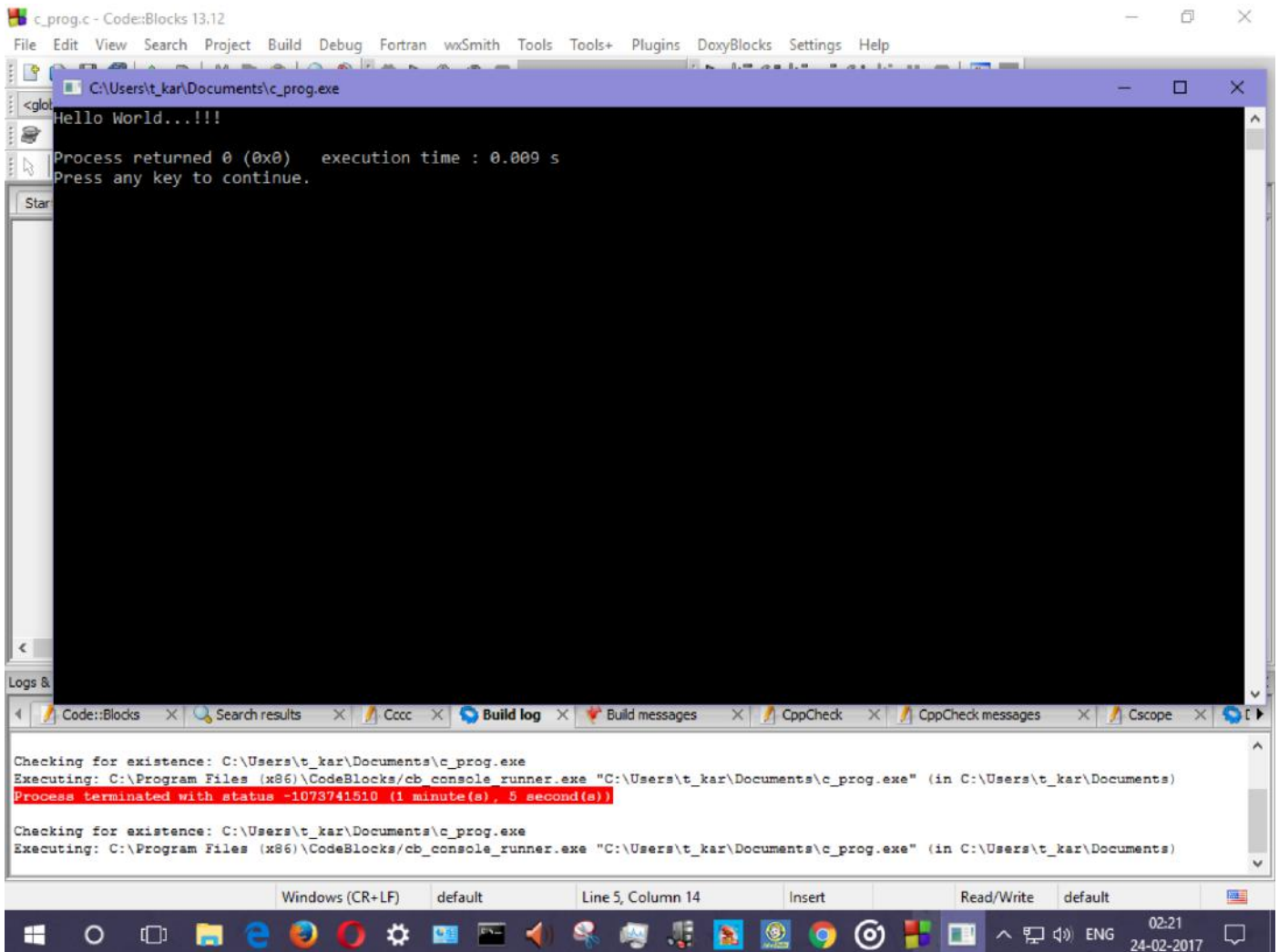
```
1 #include <stdio.h>
2 int main(){
3
4     printf("Hello World...!!!\n");
5     return 0;
6 }
7
```

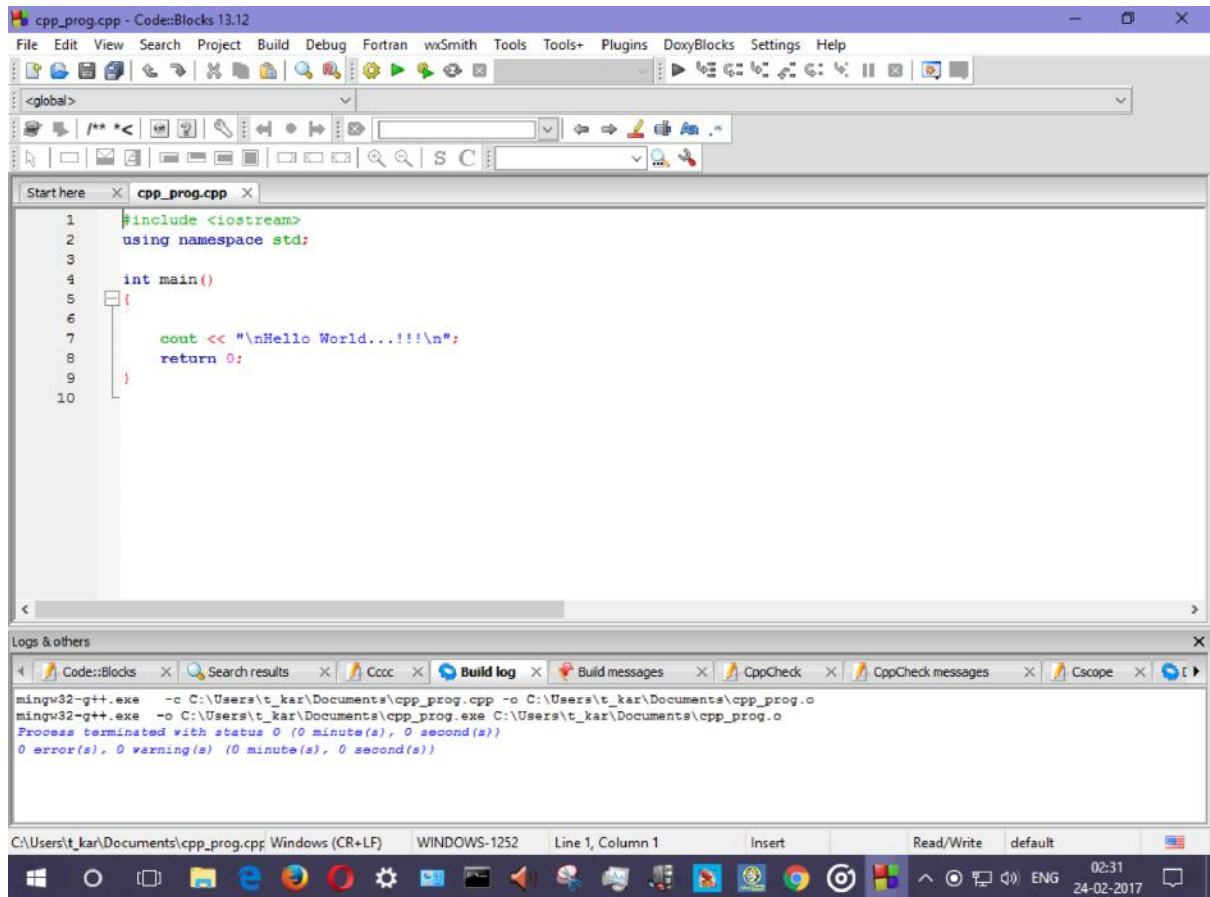
The 'Logs & others' panel at the bottom shows the build process:

```
mingw32-gcc.exe -c C:\Users\t_kar\Documents\c_prog.c -o C:\Users\t_kar\Documents\c_prog.o
mingw32-g++.exe -o C:\Users\t_kar\Documents\c_prog.exe C:\Users\t_kar\Documents\c_prog.o
Process terminated with status 0 (0 minute(s), 0 second(s))
0 error(s), 0 warning(s) (0 minute(s), 0 second(s))
```

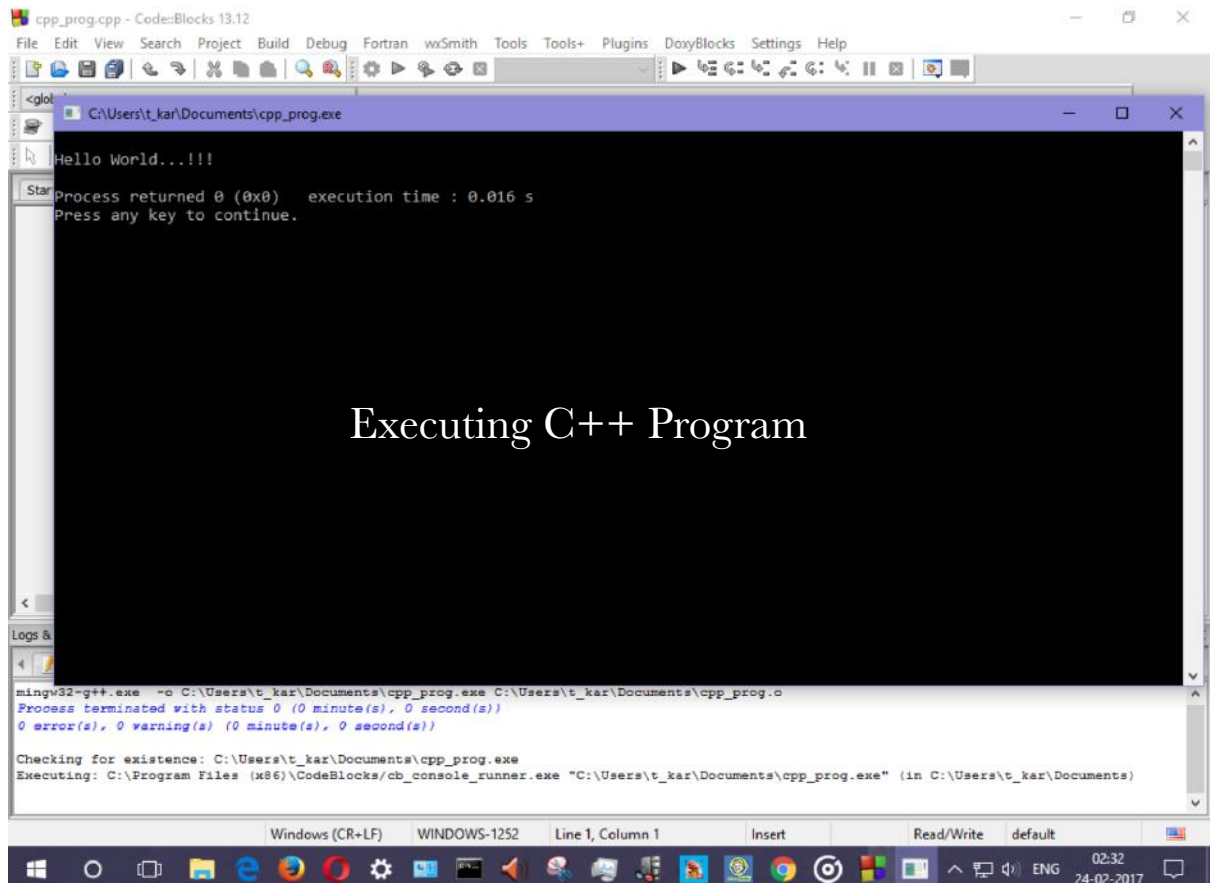
## Building C Program

## Executing C Program





## Building C++ Program



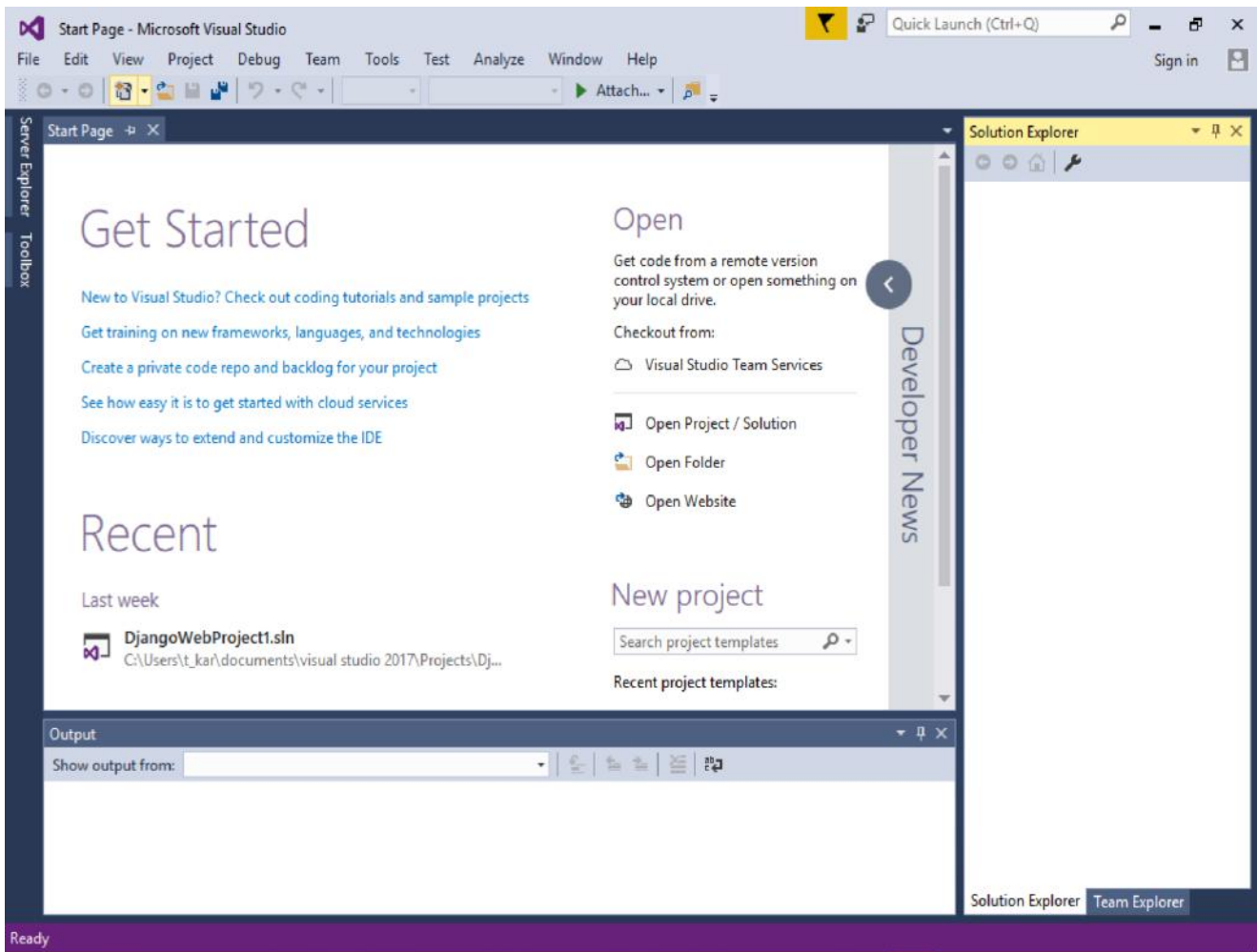
Note: - Sometimes Code::Blocks saves C++ files as C files, in that case check for the file extension for necessary correction and to avoid unnecessary headache.

Visual Studio Community Edition: -

Download from the link below: -

<https://www.visualstudio.com/vs/visual-studio-express/>

Supports Windows and Mac OS (Preview). No need to configure anything and just go coding after initial setup and you are fine.



System Requirements: - (More or less same for Visual Studio versions)

Windows - 7 SP1, Windows – 8.1, Windows – 10.

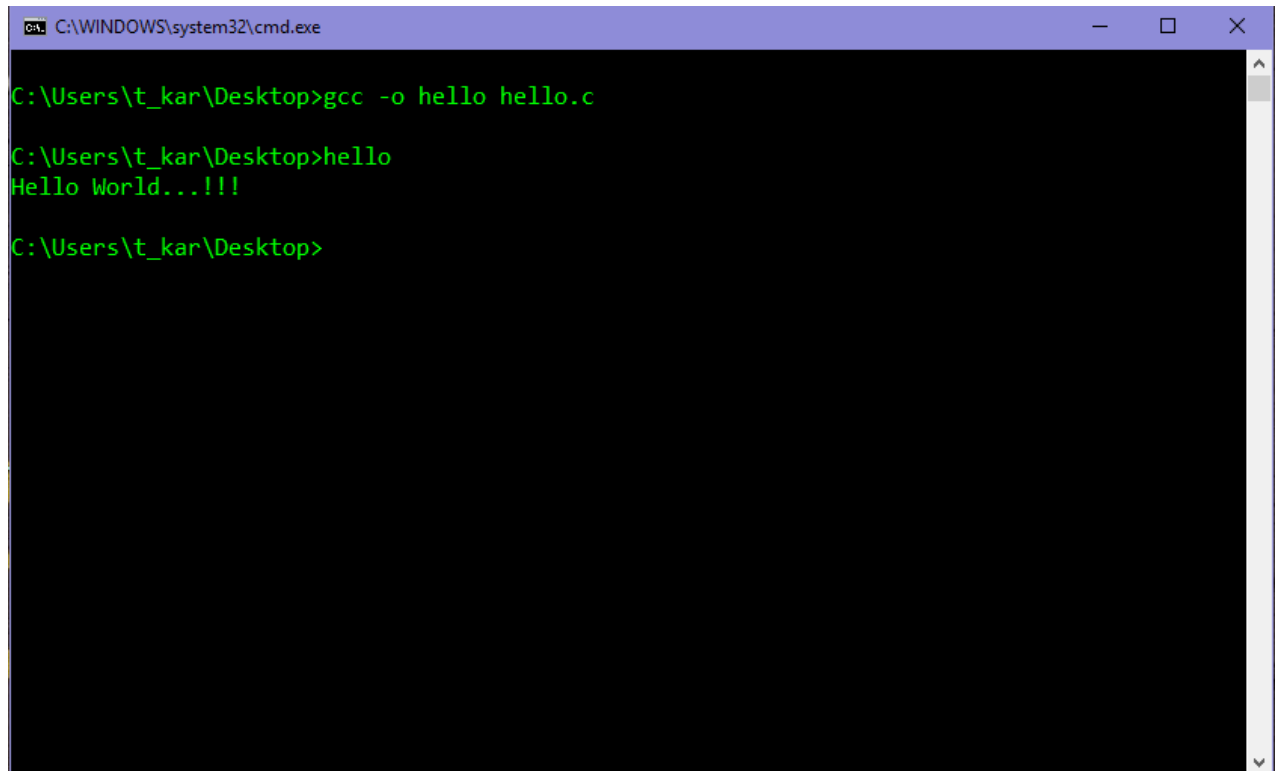
1.8GHz Dual Core Processor / better.

2GB RAM minimum / 4GB RAM recommended.

1GB ~ 40GB HDD space depending on feature installation.

# Expert User

Run using the command line

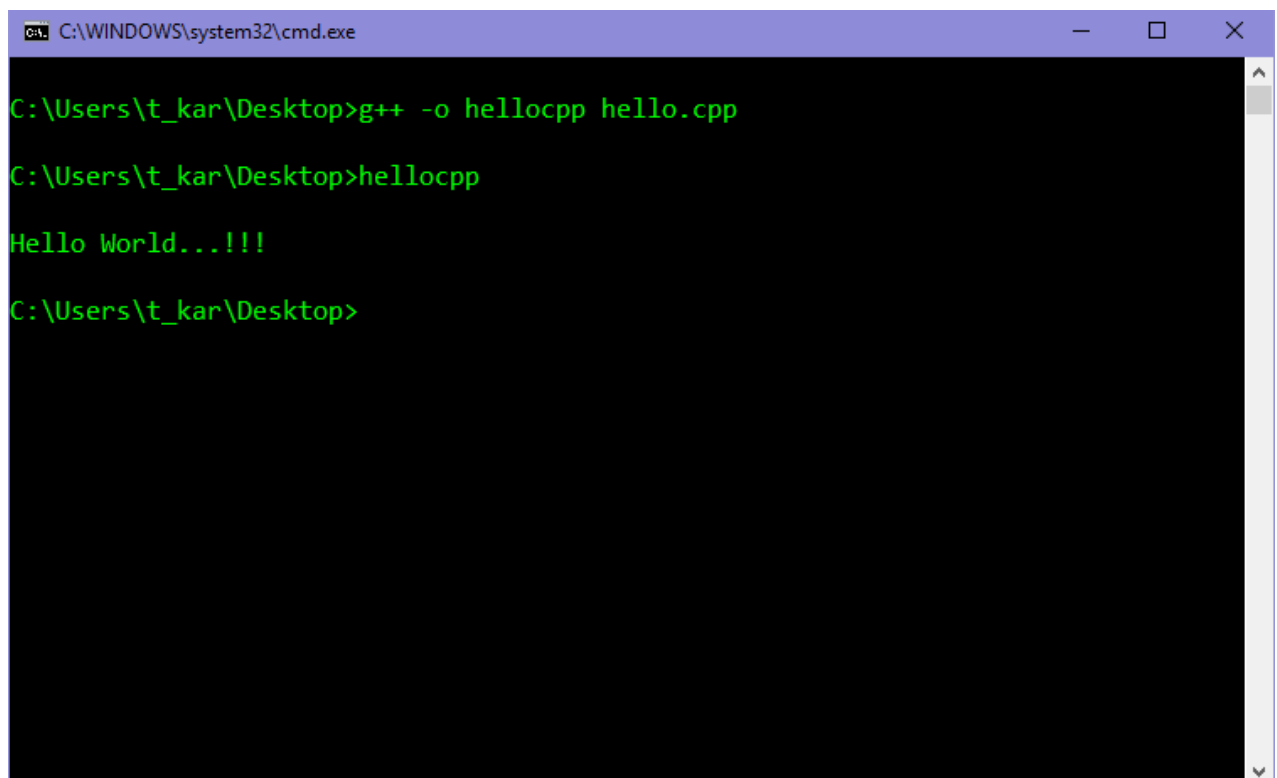


```
C:\WINDOWS\system32\cmd.exe

C:\Users\t_kar\Desktop>gcc -o hello hello.c

C:\Users\t_kar\Desktop>hello
Hello World...!!!

C:\Users\t_kar\Desktop>
```



```
C:\WINDOWS\system32\cmd.exe

C:\Users\t_kar\Desktop>g++ -o hellocpp hello.cpp

C:\Users\t_kar\Desktop>hellocpp
Hello World...!!!

C:\Users\t_kar\Desktop>
```