

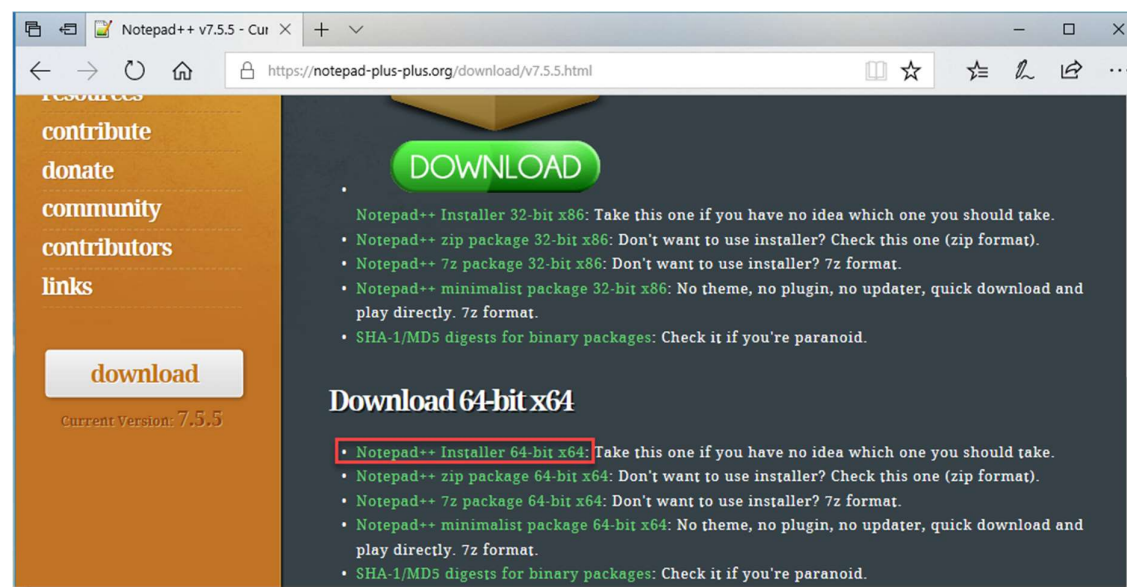
Vorkurs Informatik – C++ on Win10

1 C++ Compiler and Notepad ++ installation and usage

Step 1 – Download Notepad++

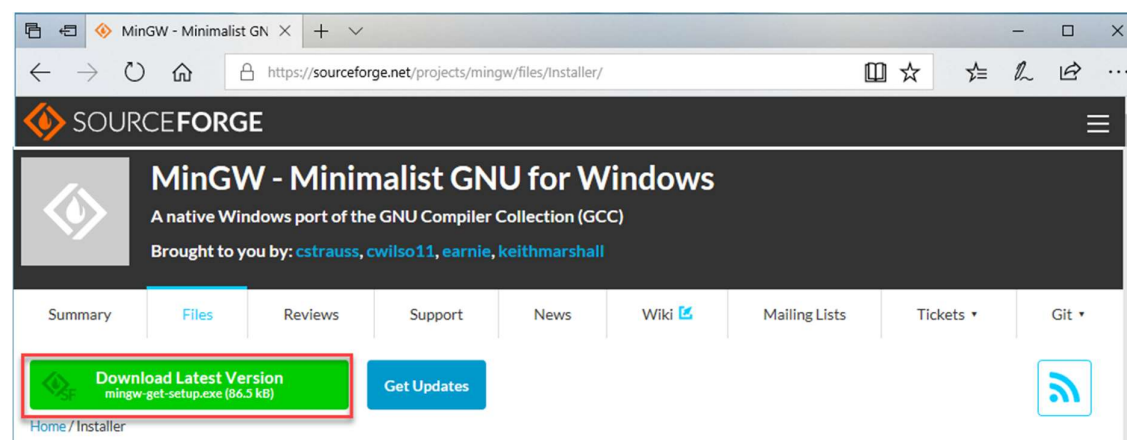
Use the Edge Browser to download the Notepad ++ Tool from:

<https://notepad-plus-plus.org/download/v7.5.5.html>



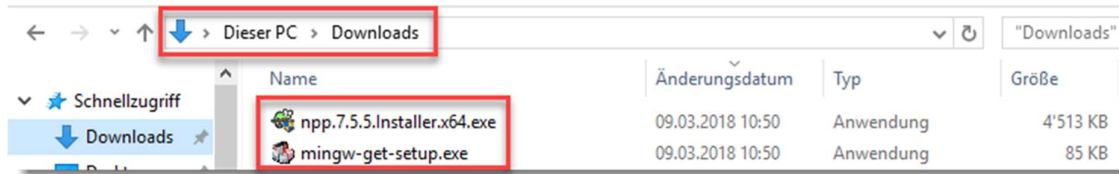
Step 2 – Download MinGW Installer

<https://sourceforge.net/projects/mingw/files/Installer/>



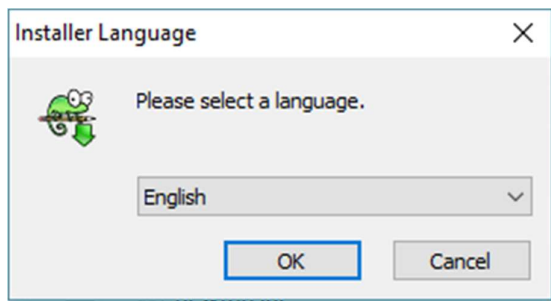
The two installers can now be found within the User Home Download folder:





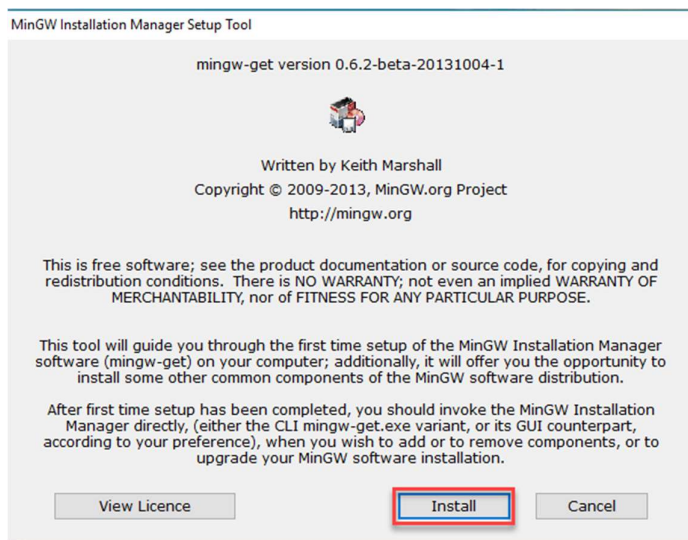
Step 3 – Install Notepad ++ with the Installer

Step through the installation (keep the default installation settings)



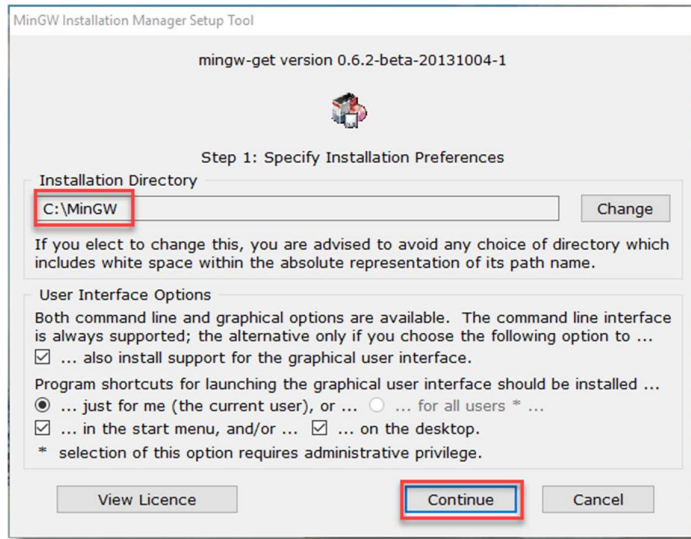
Step 4 – Install MinGW with the Installer

Click on “Install” to proceed:

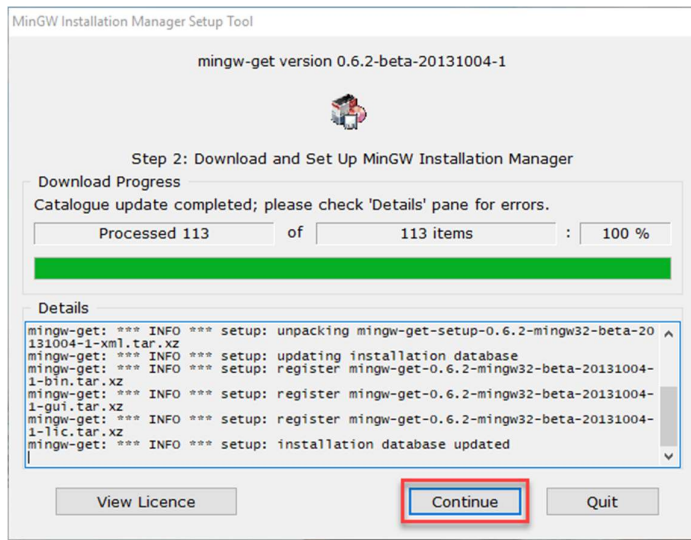


Keep the default installation Directory “C:\MinGW”

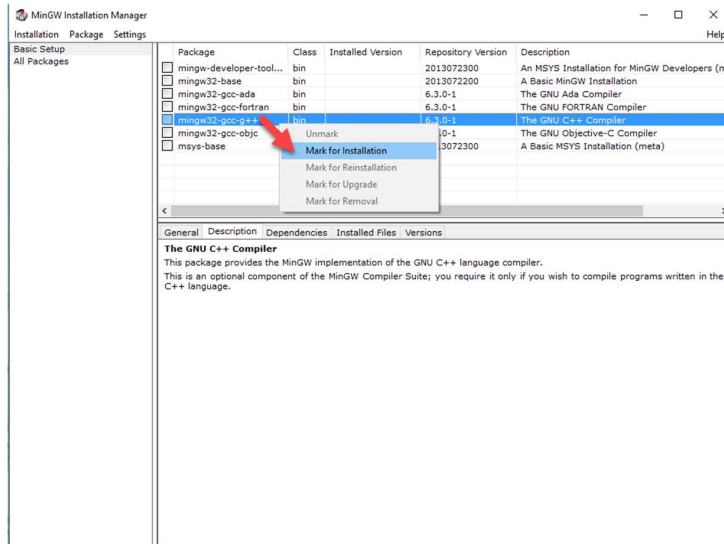




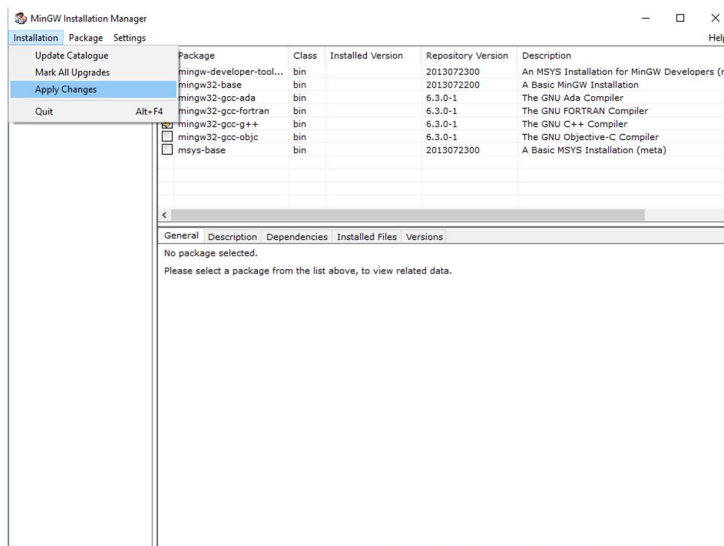
Some downloads will take place ... when finished click on "Continue" ...



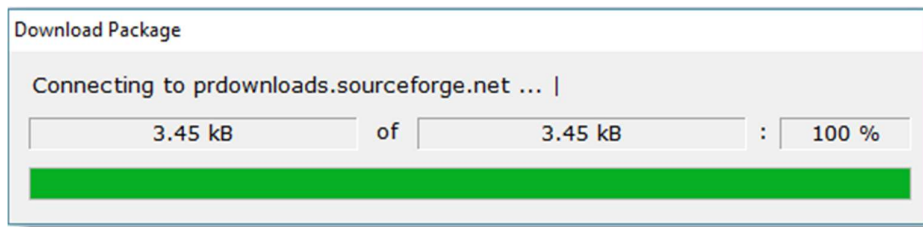
Next the feature selection pane appears – select the G++ Compiler by using the context menu option “Mark for Installation”:



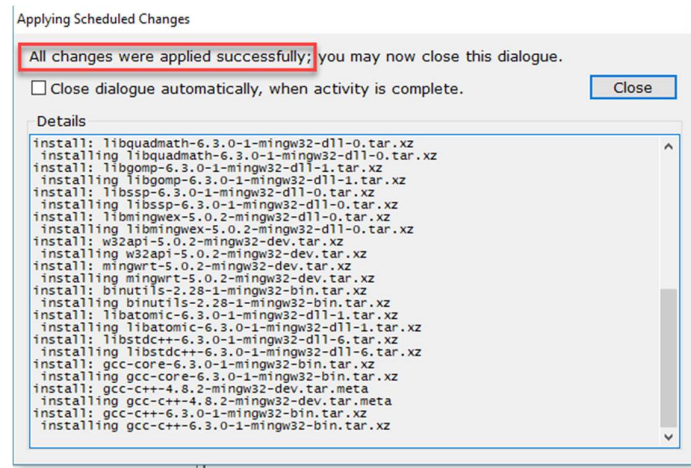
Complete and proceed with the selection ... for that purpose use the option “Apply Changes” from the “Installation” menu...



The installer downloads the selected items:



When done – the confirmation appears that all changes were applied successfully:

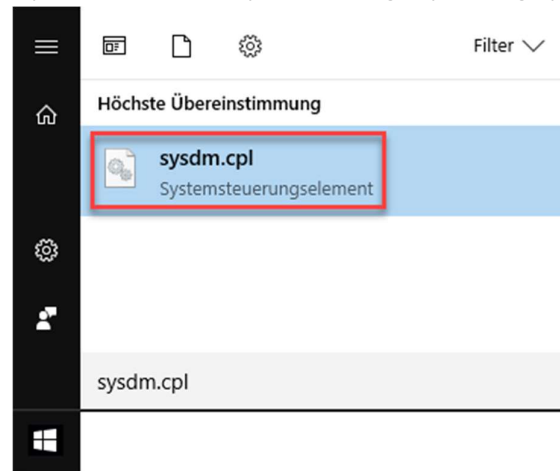


Close all panels of the installer that are visible to complete the installation activities.

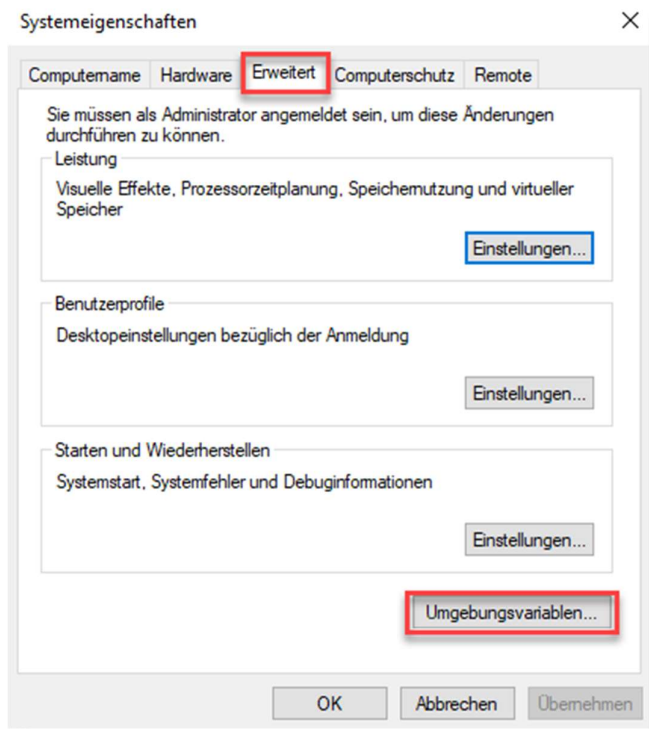
Step 5 – Extend Path System Variable:

In order to allow to access g++ (Gnu C++ Compiler) and notepad++ from any path in a console – it is recommended to alter the Path System Variable as followed:

Open the extended system settings by looking up “sysdm.cpl” ...

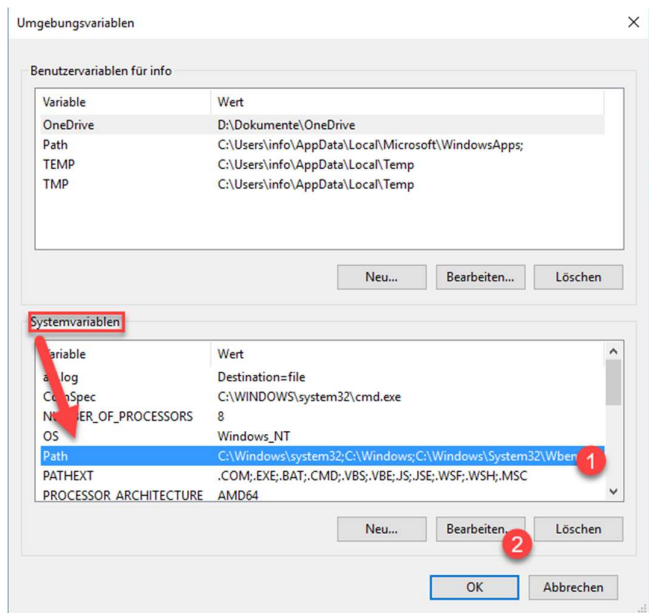


In the panel appearing swap to the tab “Advanced” – then hit the button “Environment Variables”...



In the popup panel perform the following two actions:

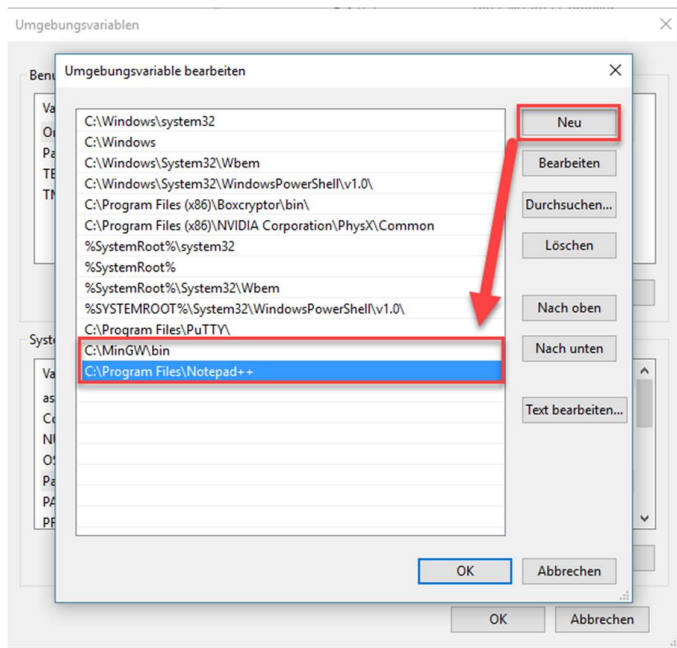
- 1- Select the item “Path” in the lower section with the caption: “System variables”
- 2- Click the button “Edit”



Another popup appears allowing to insert new properties to the Path System Variable...

Add the following two new items by using the button “New”:

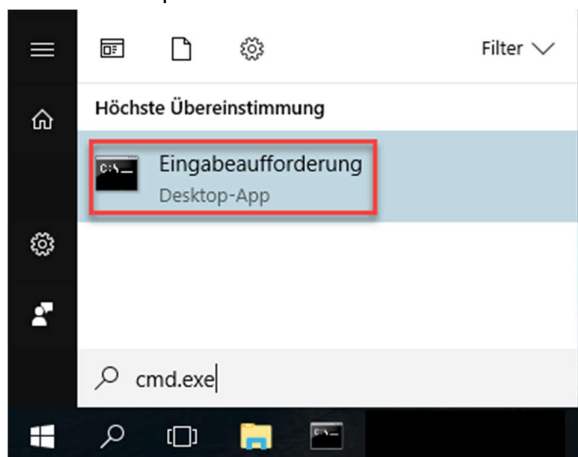
- C:\MinGW\bin
- C:\Program Files\Notepad++



When done – close all open panels with the button “OK”.

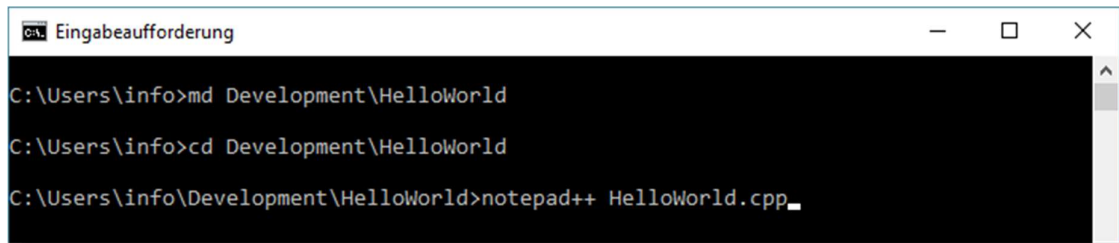
Step 6 – Create your personal “Development” folder:

Use the lookup feature to locate “cmd.exe”

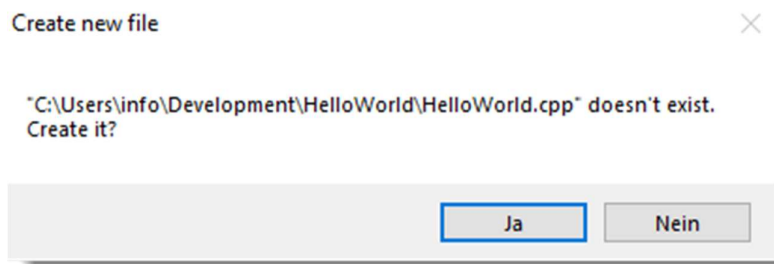


When launched the Windows Command Prompt appears – allowing you to enter the below commands:


```
md Development\HelloWorld  
cd Development\HelloWorld  
notepad++ HelloWorld.cpp
```



When the last command is being executed a popup appears asking you if you want to create the new File "HelloWorld.cpp"...



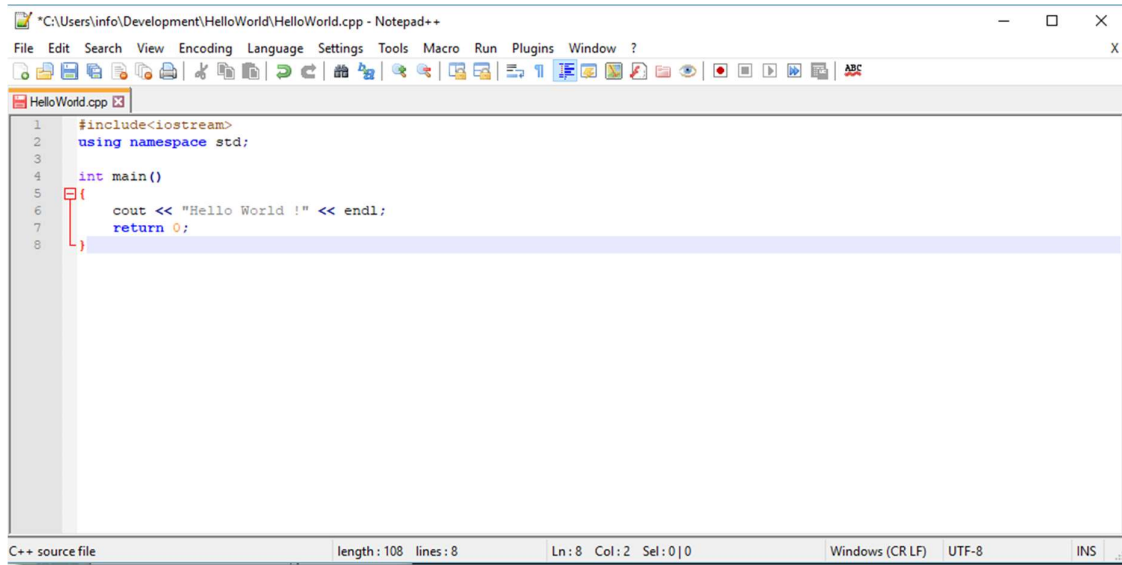
Confirm the Dialog by clicking the button "Yes"...

Step 7 – Write some C++ Code by using the "notepad++" editor:

The notepad++ Editor appears with a blank document.

Type the listed Code from below into the editor panel:

```
#include<iostream>  
using namespace std;  
  
int main()  
{  
    cout << "Hello World !" << endl;  
    return 0;  
}
```

```
1 #include<iostream>
2 using namespace std;
3
4 int main()
5 {
6     cout << "Hello World !" << endl;
7     return 0;
8 }
```

Save the edited file by pressing the key combination...



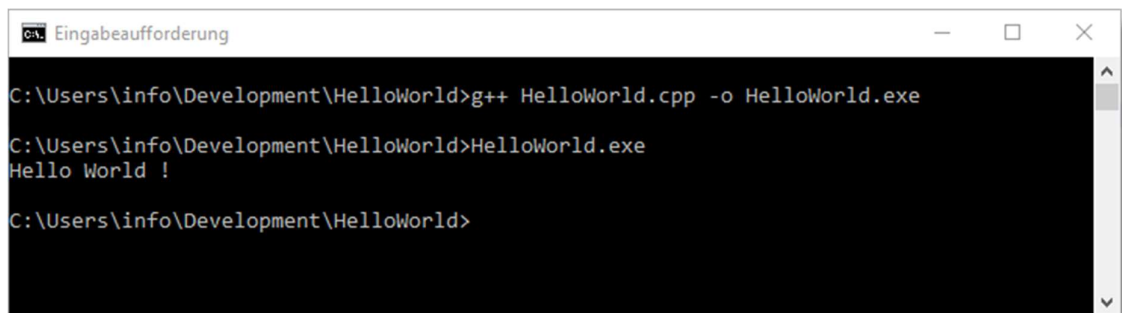
Step 8 – Compile your program > “HelloWorld.cpp”

In order to compile your program, enter the following instruction in the console:

```
g++ HelloWorld.cpp -o HelloWorld.exe
```

Finally run your program with the command:

```
HelloWorld.exe
```



```
C:\Users\info\Development\HelloWorld>g++ HelloWorld.cpp -o HelloWorld.exe
C:\Users\info\Development\HelloWorld>HelloWorld.exe
Hello World !
C:\Users\info\Development\HelloWorld>
```

The output of your first program is:

```
Hello World !
```

