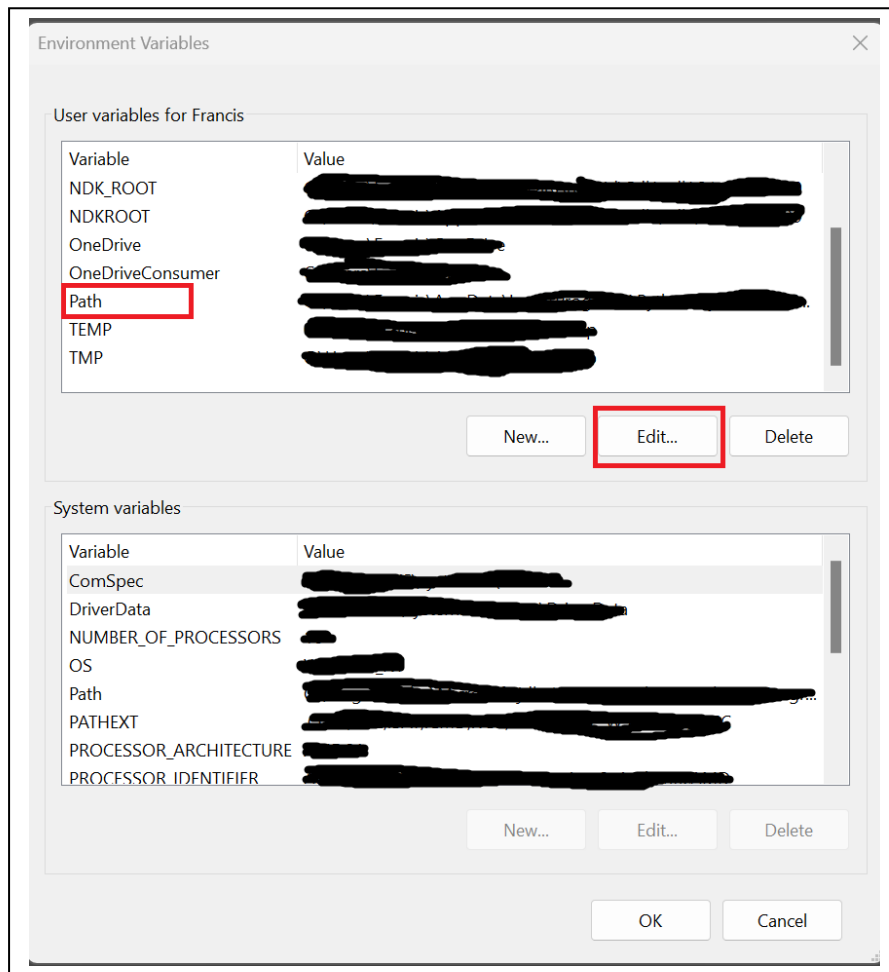# Using GCC C++ Compiler with MinGW

In this tutorial, you configure Visual Studio Code to use the GCC C++ compiler (g++) and GDB debugger from MinGW-w64 (https://www.mingw-w64.org/) to create programs that run on Windows.
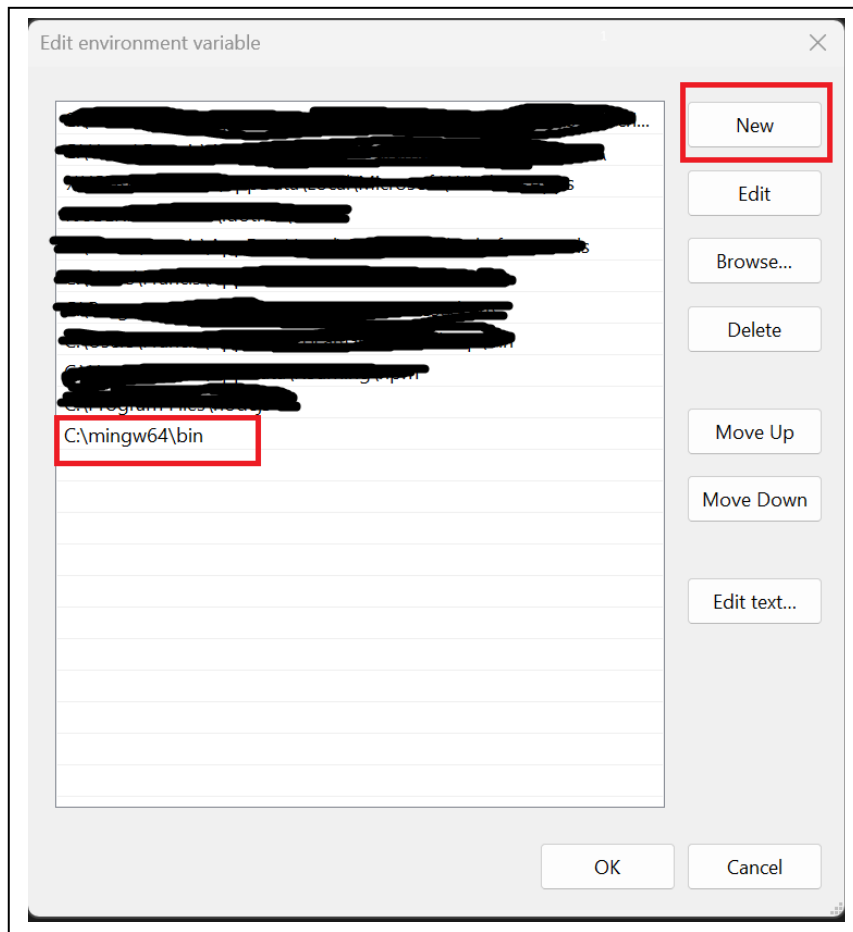
If you intend to use your own computer then you can use MinGW-64 by extracting the **mingw64.zip** zip file available on Google classroom. When you extract **mingw64.zip**, you will get a folder titled **mingw64**. Copy the extracted **mingw64** folder to your C drive directory as follows *C:\mingw64*. Note that the lab computers already have the **mingw64** folder within the C drive directory.

https://code.visualstudio.com/docs/languages/cpp

Whether you are using the lab computers or your own computer, and you have verified that there is a copy of the **mingw64** folder in C drive, add the path to your MinGW-w64 bin folder to the Windows PATH environment variable as described in the following steps:

1. In the Windows search bar, type **Settings** to open your Windows Settings.
2. Search for **Edit environment** variables for your account.
3. In your **User variables**, select the Path variable and then select **Edit**.

4. Select **New** and add the MinGW-w64 destination folder you recorded during the installation process to the list. If you used the instructions above, then this will be the path: ***C:\mingw64\bin***.

5. Select **OK** to save the updated PATH. You will need to reopen any console windows for the new PATH location to be available.

Check your MinGW installation

To check that your MinGW-w64 tools are correctly installed and available, open a **new** Command Prompt and type:

```
gcc --version

g++ --version

gdb --version
```