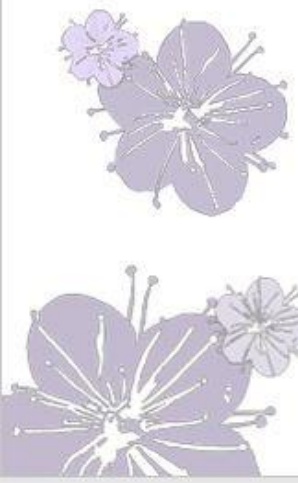
OpenGL Environment Setting

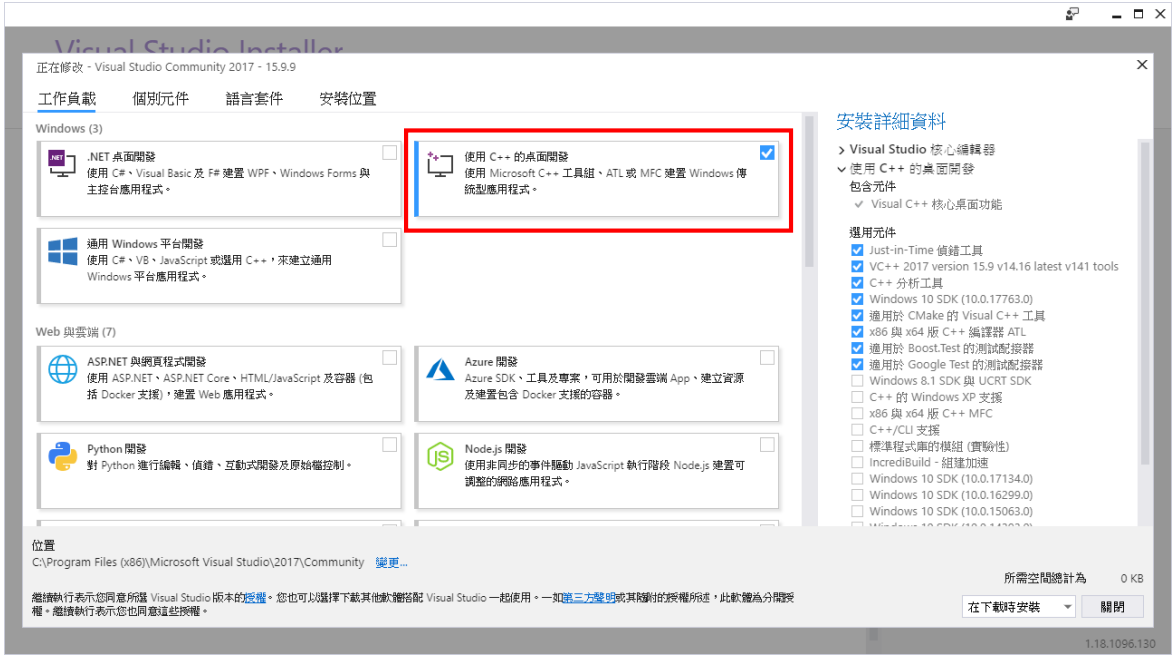
CS 550000 Computer Graphics

CGV Lab, NTHUCS



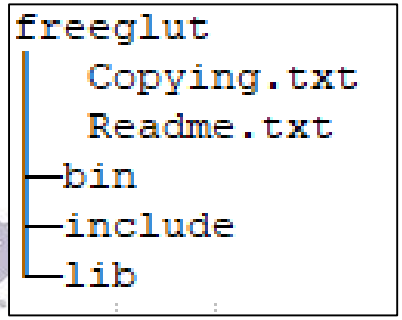
Prerequisite

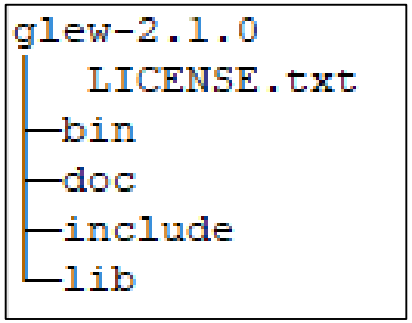
- Choose one of the solution bellow
  - Microsoft Visual Studio Professional 2017/2015/2013 (available from Campus Licensed Software Service)
  - Visual Studio Community 2017 (recommend)
- Ensure you have also install C++ package when installing IDE

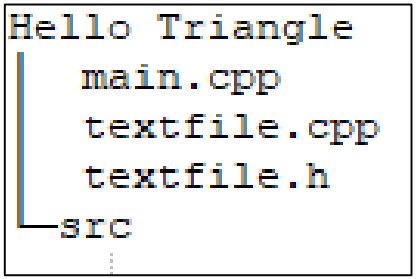


Prerequisite

- Download the latest version of third-party library freeglut and glew precompiled binaries
- Download "Hello Triangle.zip" available from iLMS
- Unzip the downloaded file above



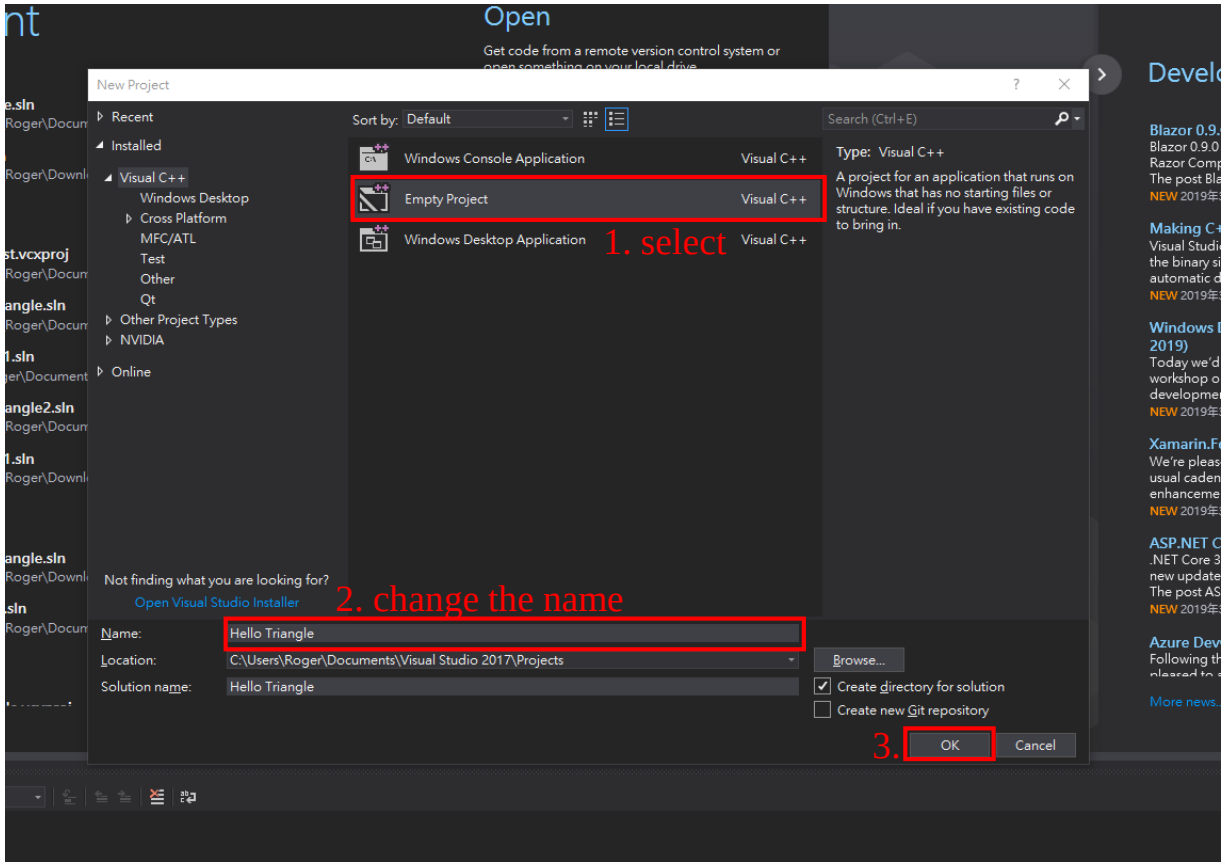




unzipped folders structure

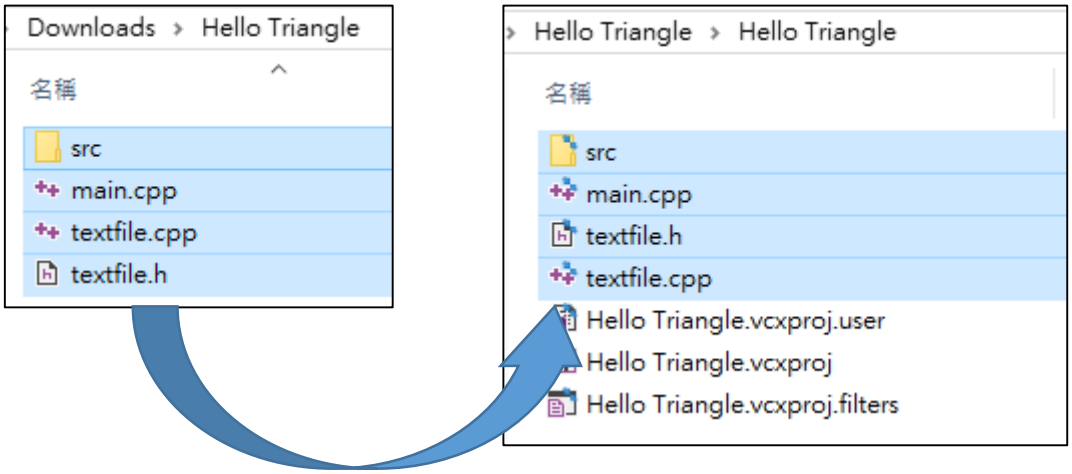
How to run this source code

- Create a visual studio empty project
  File>New>Project…(Ctrl+Shift+N)



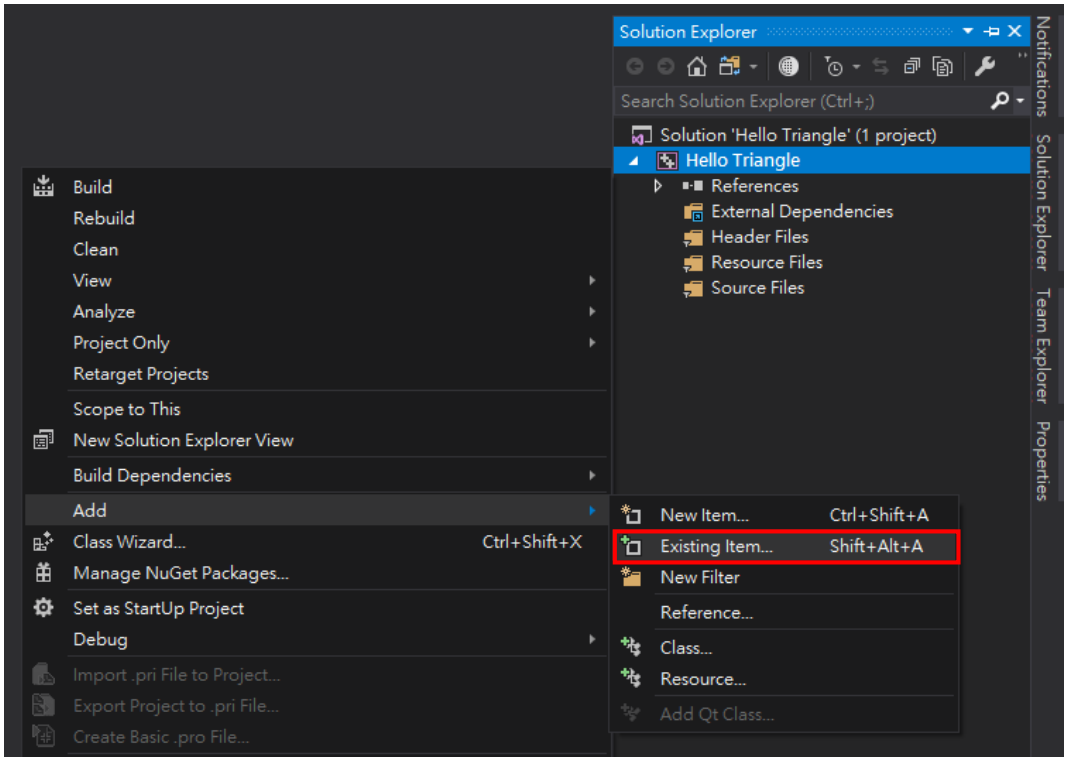
How to run this source code

- Put all the files in the “Hello Triangle” folder you just unzipped into the **project folder** (default path: C:/Users/[UserName]/source/repos/Hello Triangle/Hello Triangle/)



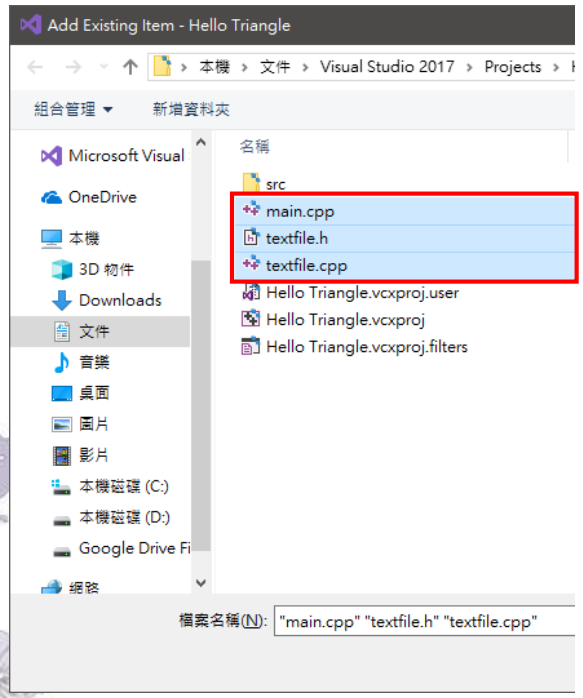
How to run this source code

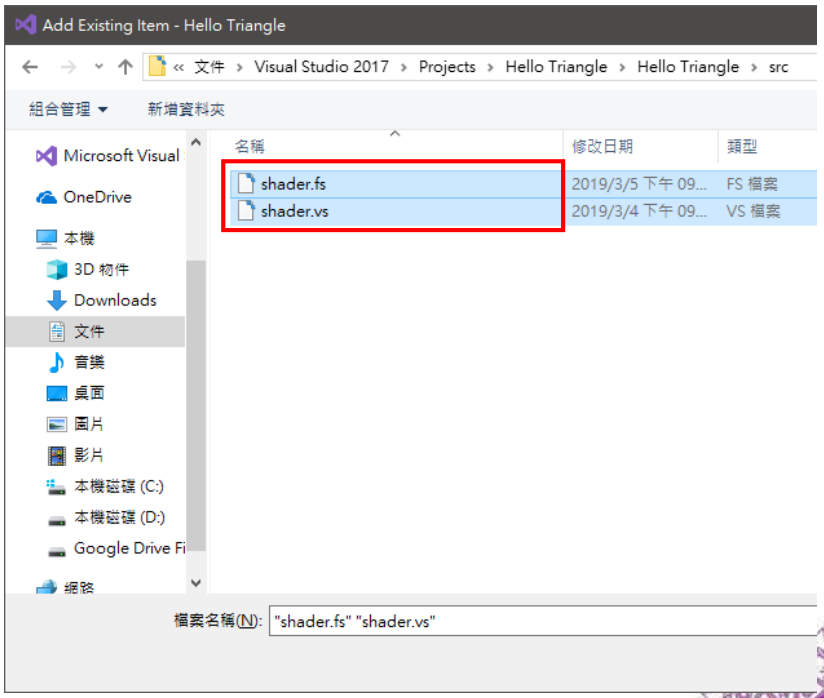
- Right-click the project name on “Solution Explorer” panel and select “Add>Existing Item…”



How to run this source code

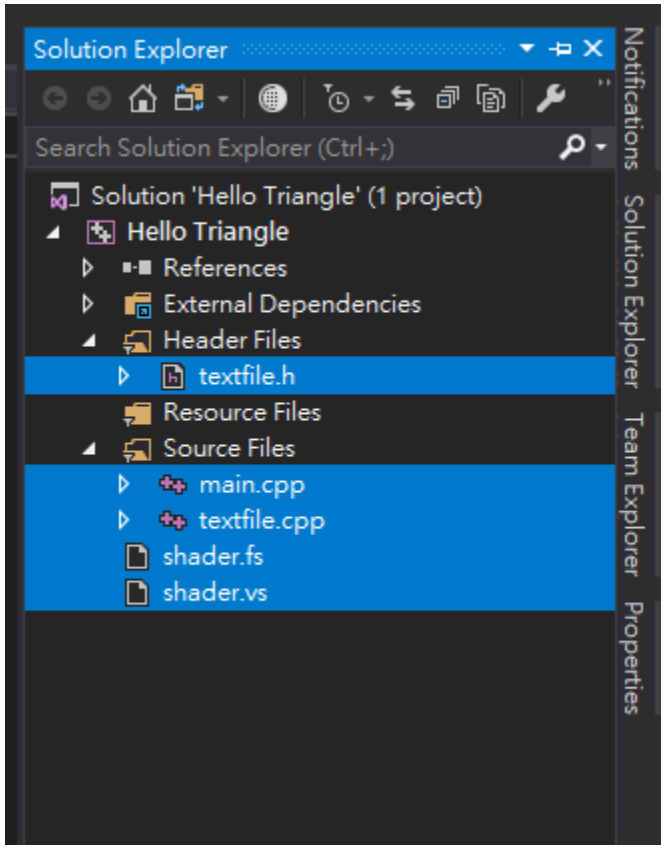
- Add the files that have just been moved into the **project folder**





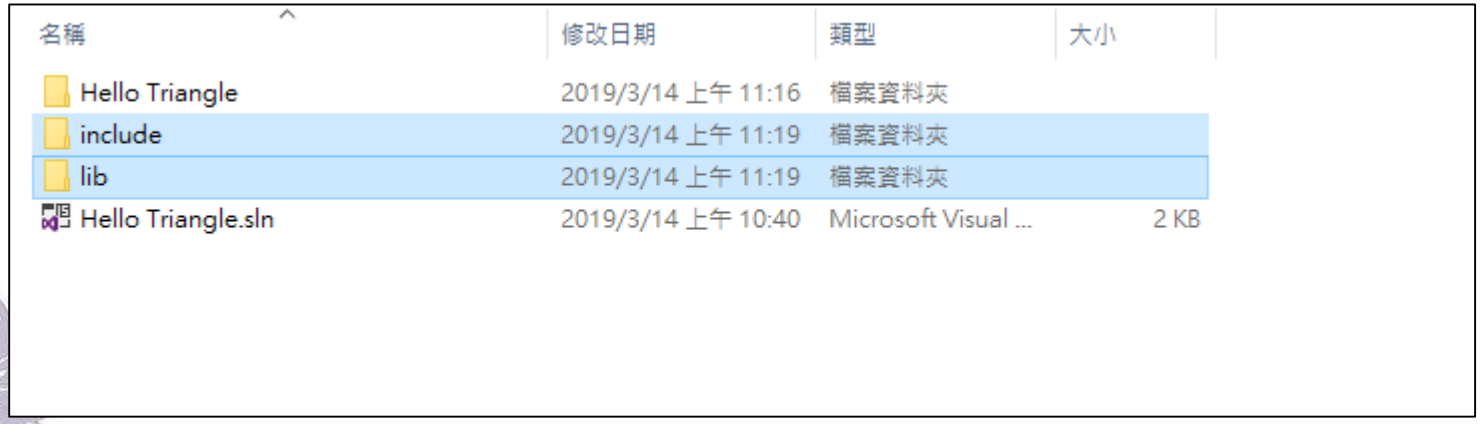
How to run this source code

- Make sure the files are added correctly



How to run this source code

- Create “include” and “lib” folders in the **solution folder** (default path: C:/Users/[UserName]/source/repos/Hello Triangle/)

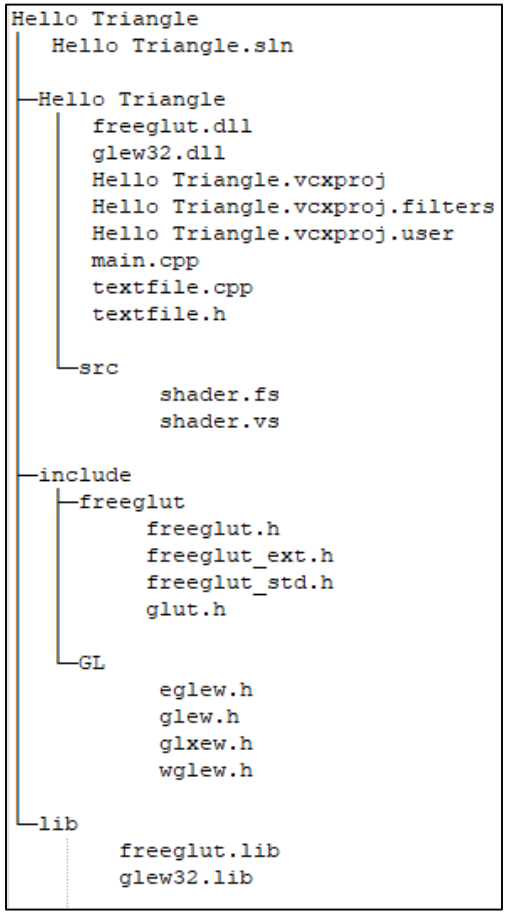


How to run this source code

- Put the files in “freeglut” and “glew-2.1.0” folders into the corresponding folder according to the following structure:
  - freeglut/include/GL －> Hello Triangle/include/freeglut
  - freeglut/lib/freeglut.lib －> Hello Triangle/lib/freeglut.lib
  - freeglut/bin/freeglut.dll －> Hello Triangle/Hello Triangle/freeglut.dll
  - glew-2.1.0/include/GL －> Hello Triangle/include/GL
  - glew-2.1.0/lib/Release/Win32/glew32.lib －> Hello Triangle/lib/glew32.lib
  - glew-2.1.0/bin/Release/Win32/glew32.dll －> Hello Triangle/Hello Triangle/glew32.dll

How to run this source code

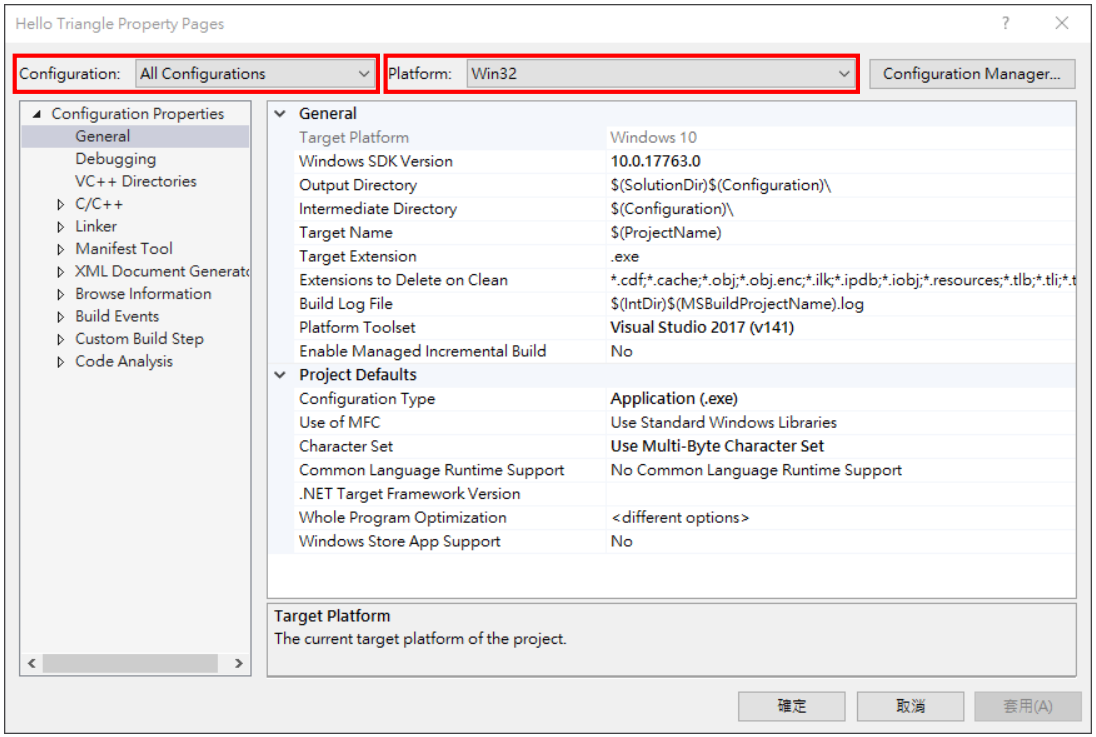
- Confirm that the files are in the correct location



you can use the “tree” command to get this information

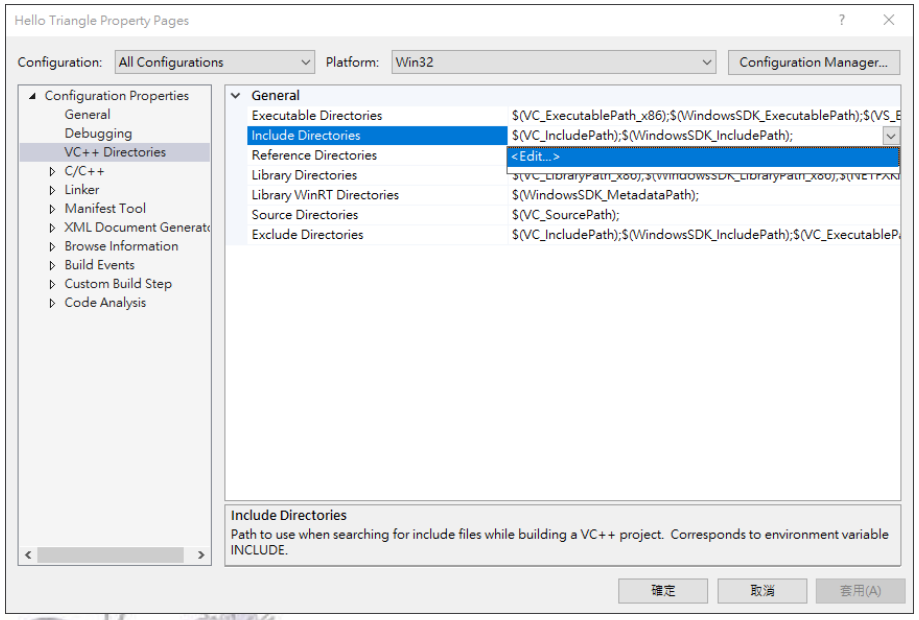
How to run this source code

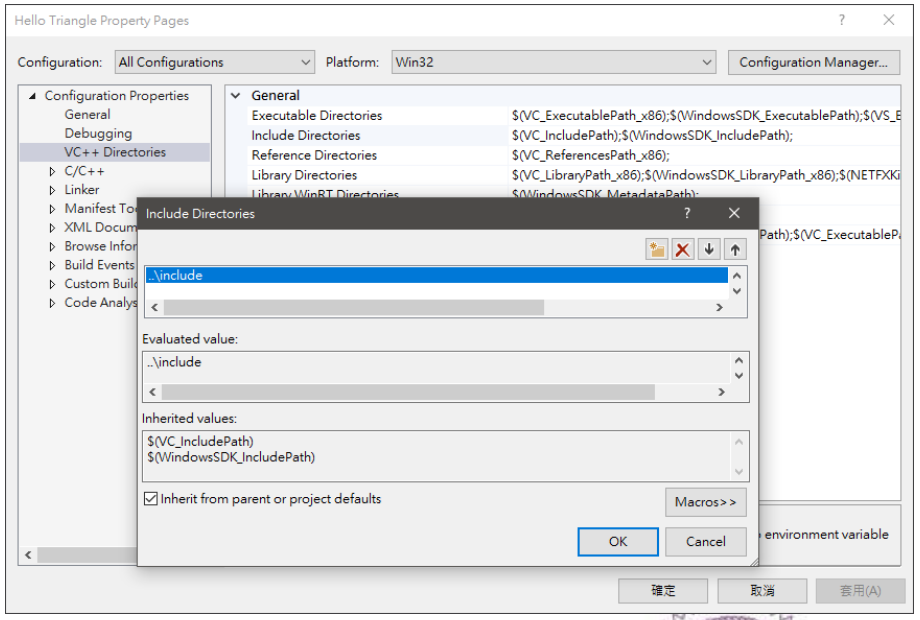
- Open the project property page (Debug>Hello Triangle Properties…) and change the configuration and platform like the picture below



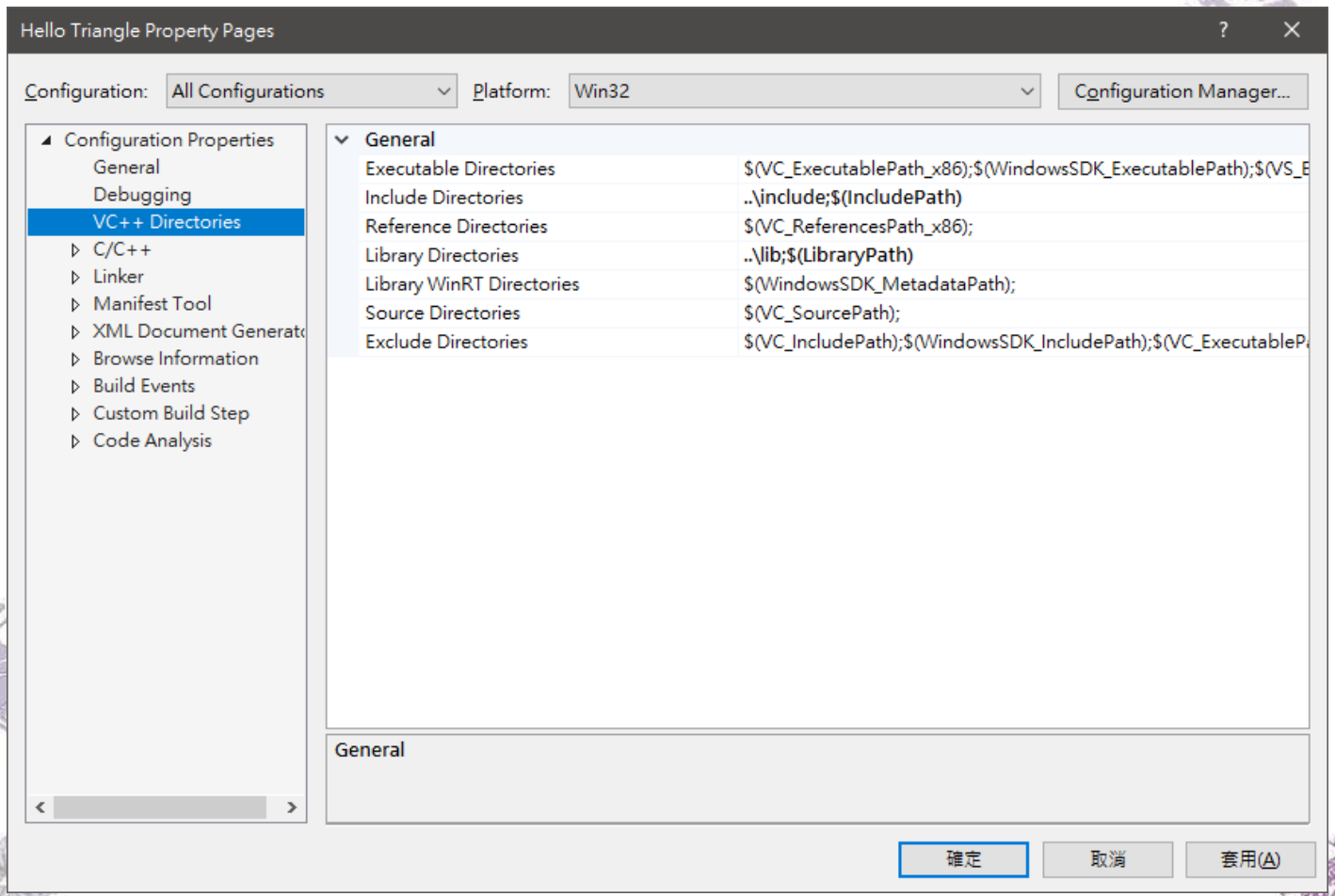
How to run this source code

- Check out the “VC++ Directories” and add “..\include” to the “Include Directories” and “..\lib” to the “Library Directories”



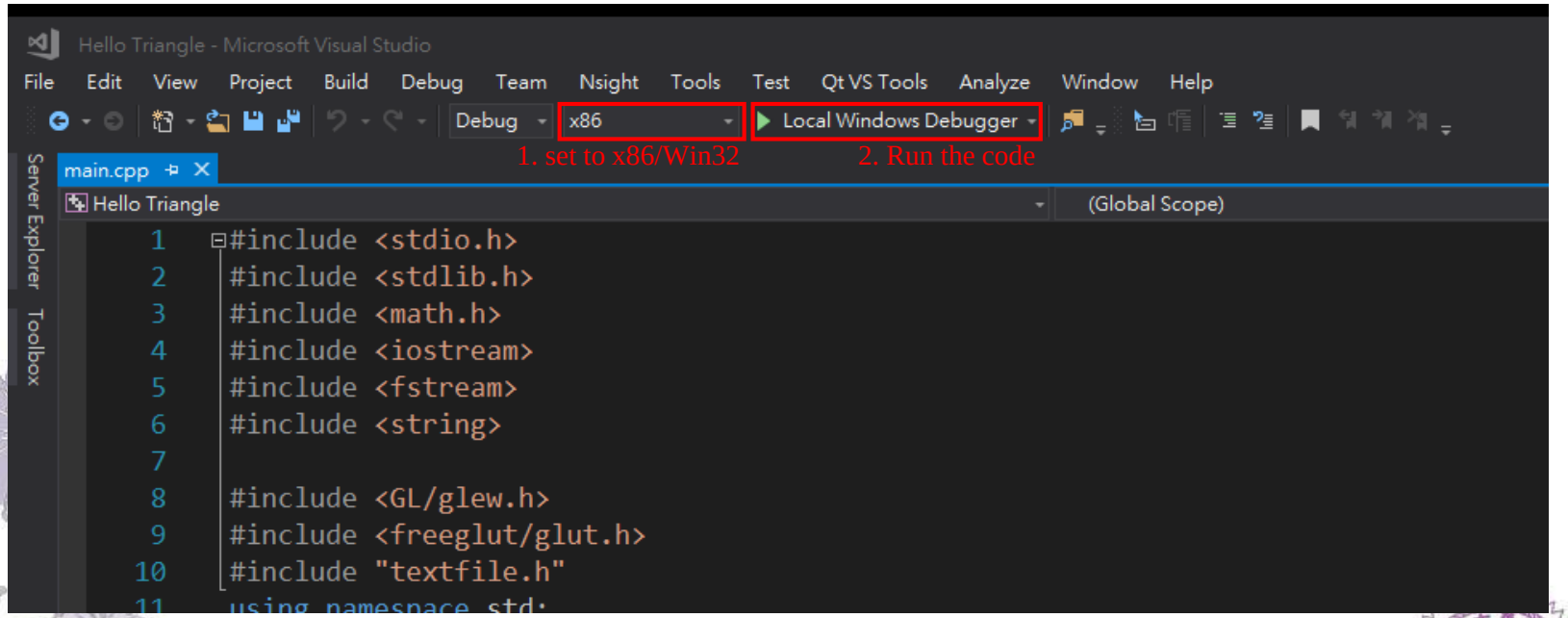


How to run this source code



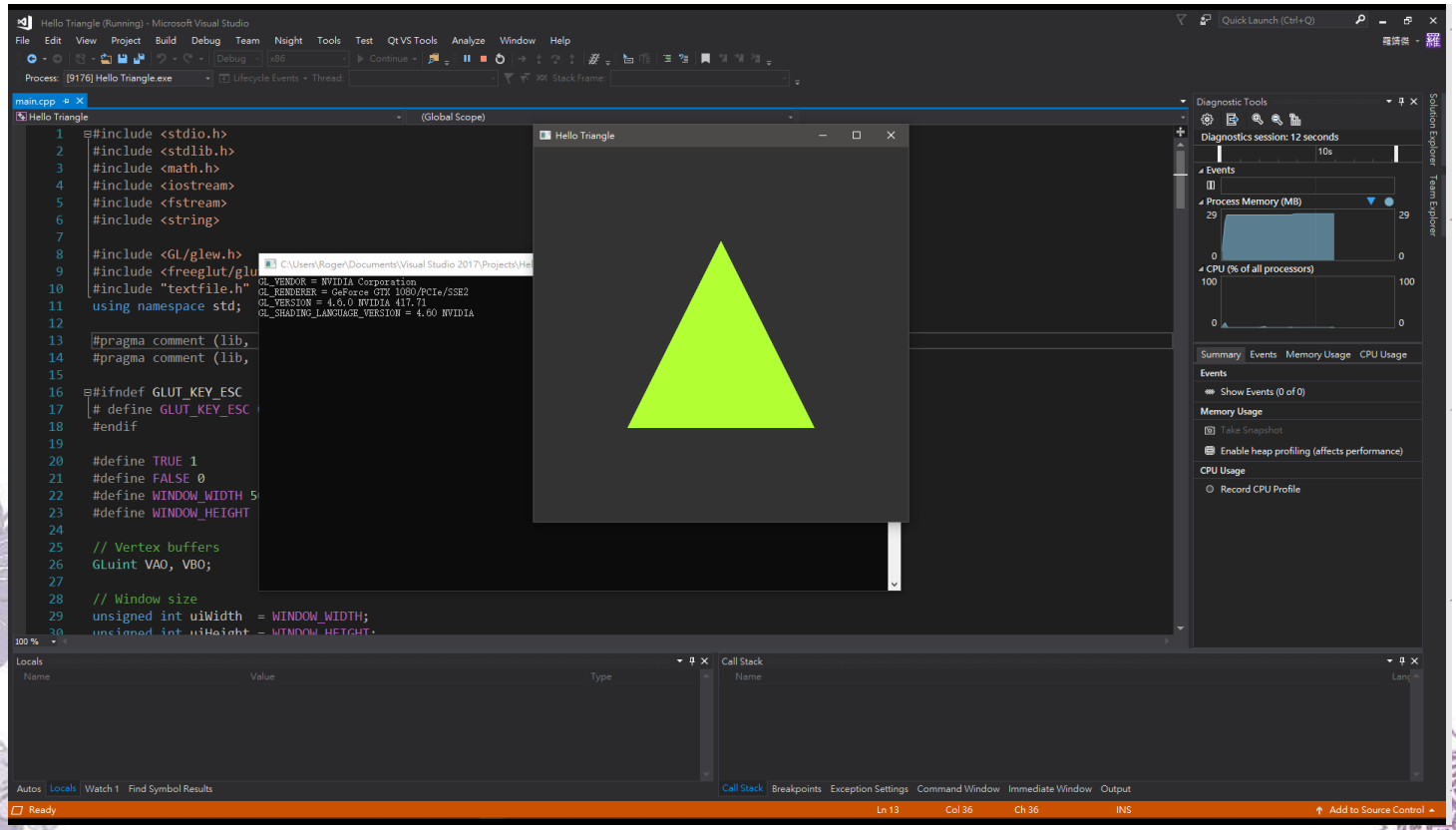
How to run this source code

- Check the platform setting and run the code



How to run this source code

- Success



Notice

- Make sure the third-party libraries and source code you downloaded are the latest version
- Make sure you have the correct settings of project properties for the x86/Win32 platform and execute the program on the x86/Win32 platform
- Check that the directory structure of the solution is exactly the same as page 11 of the slide
- Check if “include” folder and .lib and .dll files are correct