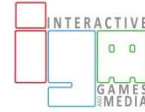


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Sciences
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Data Structures & Algorithms for Games & Simulation II

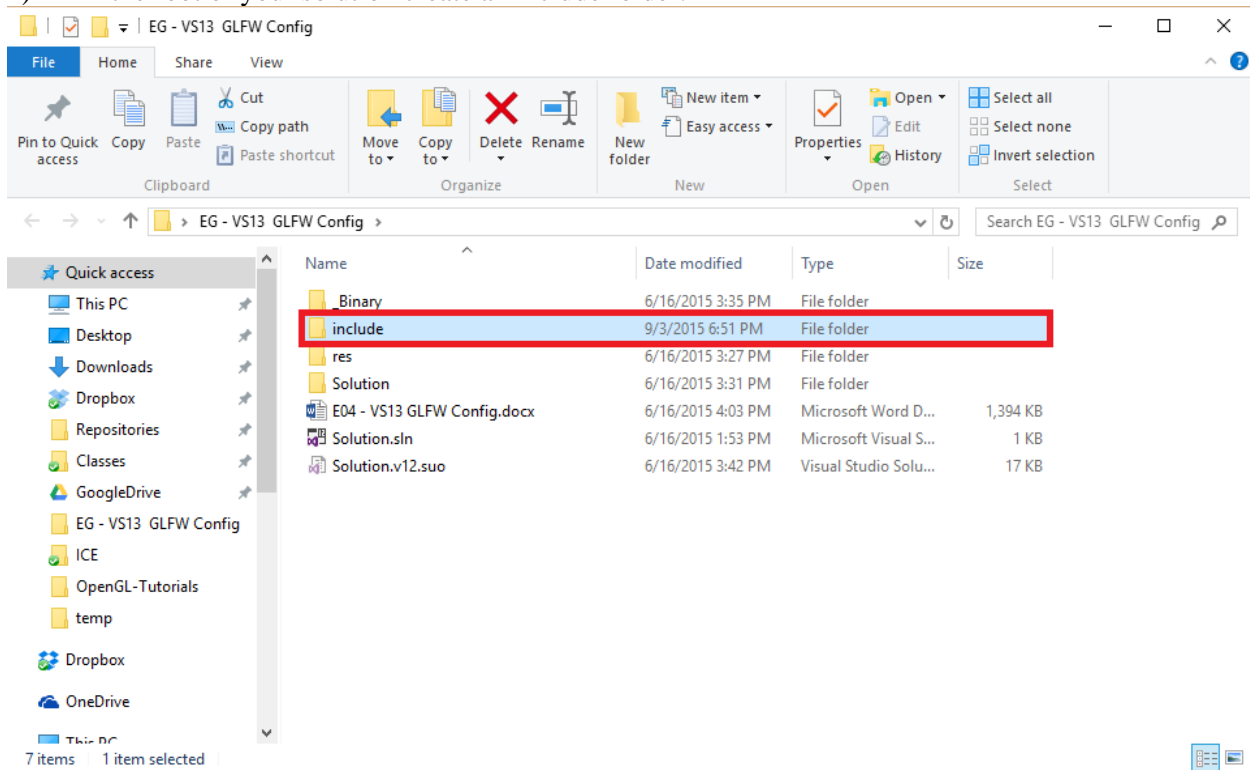
IGME 309

E02: Visual Studio 20 GLFW Configuration

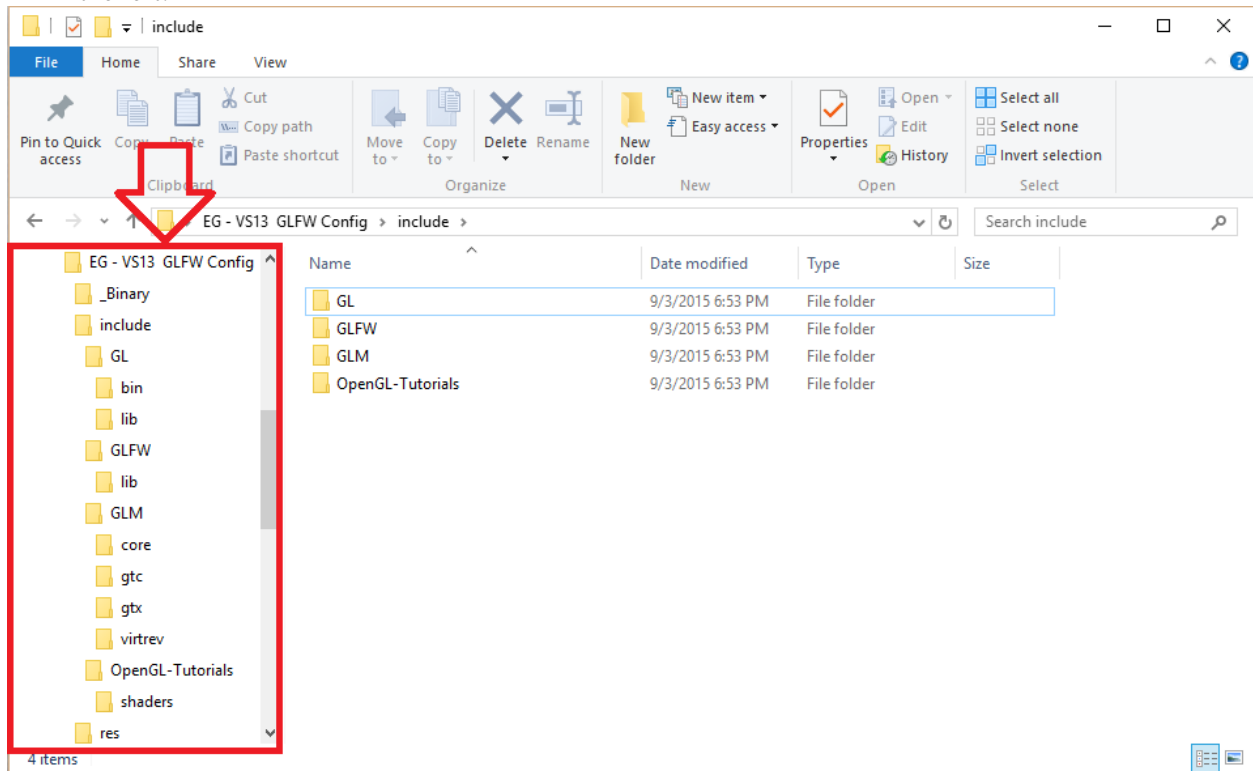
This exercise follows lecture **01C – OpenGL**

0) The starter is the actual solution for E01 so feel free to use that as your starting point

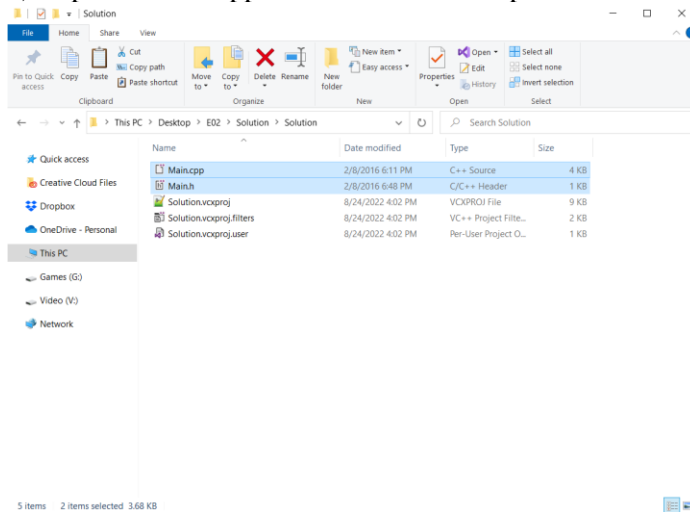
1) In the root of your solution create an include folder:



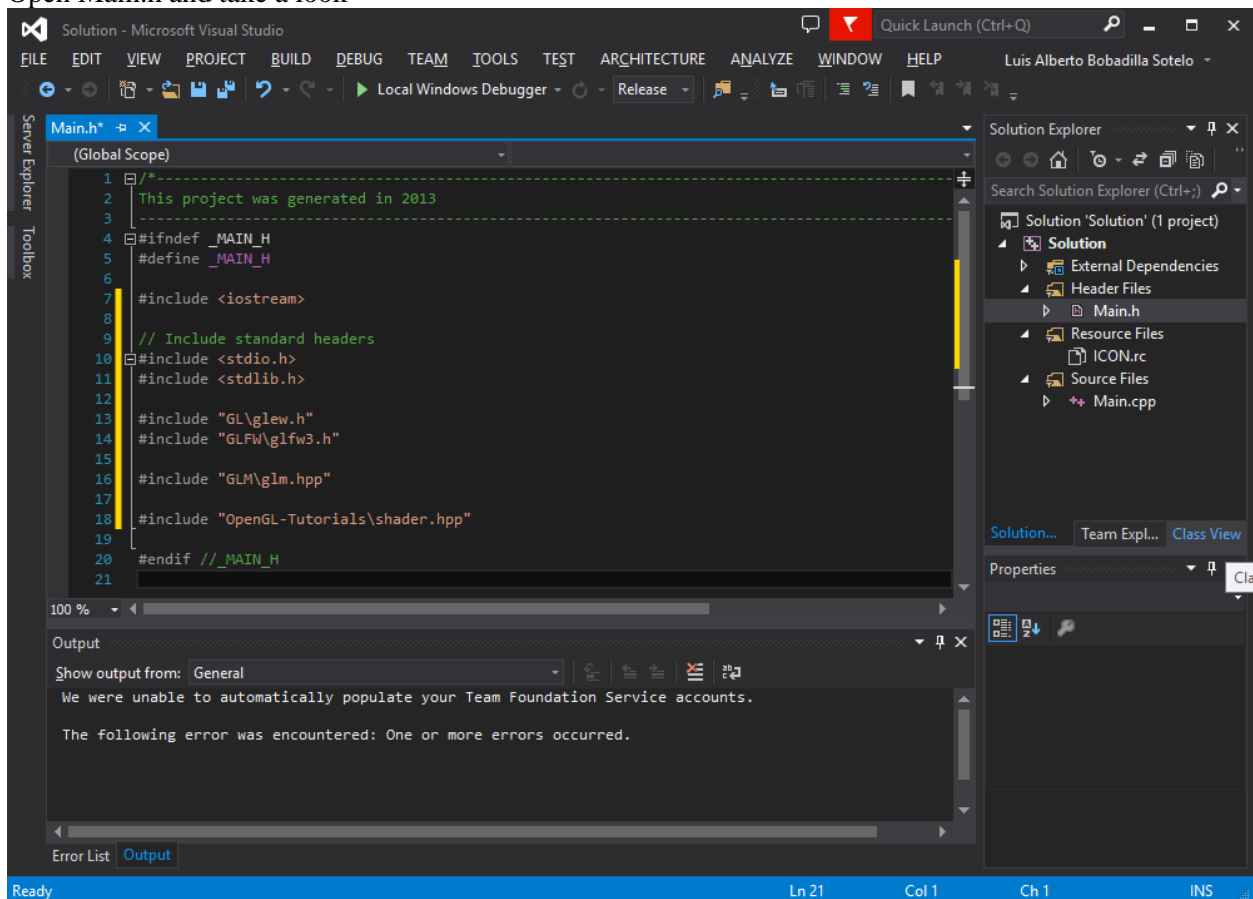
2) Inside of that folder unzip the provided library files in such a way they follow the folder structure on the left:



3) Replace Main.Cpp and Main.h with the provided ones:

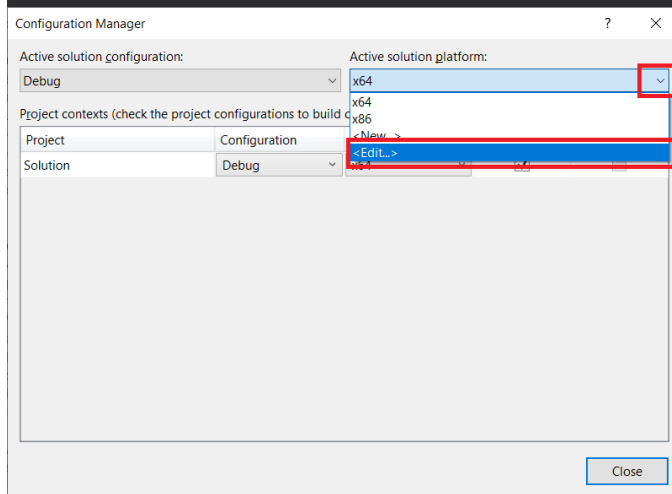
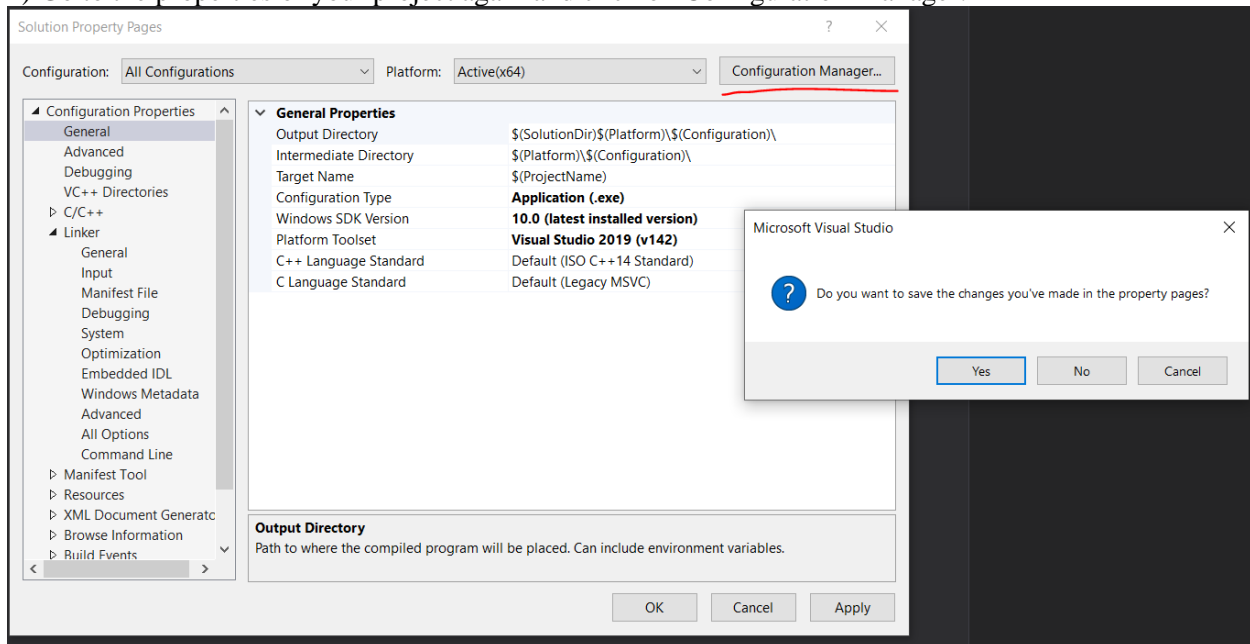


Open Main.h and take a look

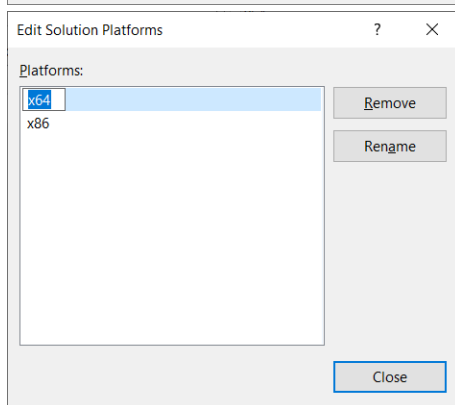


With this you are telling the compiler to look for these libraries, the issue is they are relative routes right now, and the compiler ignores the real location of these files, we will fix that next.

4) Go to the properties of your project again and click on Configuration Manager:



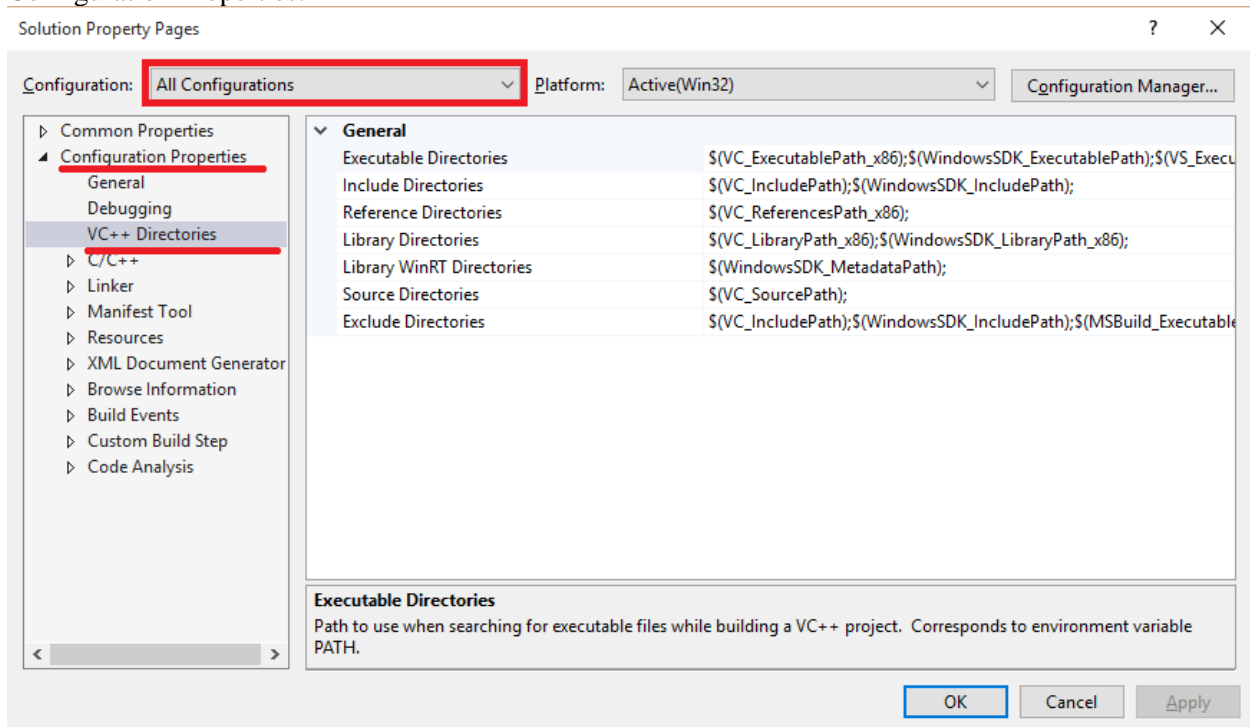
Click on the dropdown and look for edit.



Click on X64 and Remove it. Then close (twice)

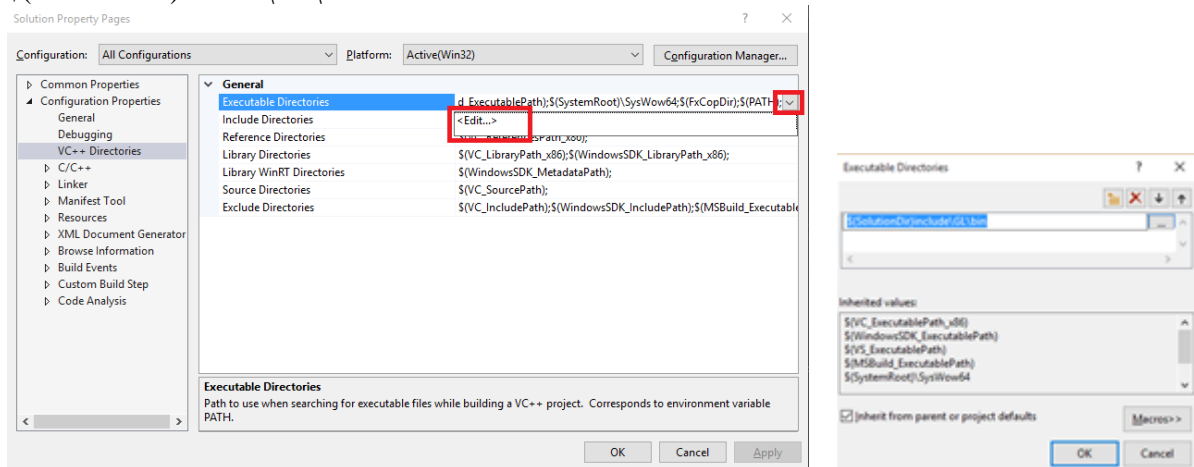
What is going on here is that VS can compile for Windows 32bits (X86) or Windows 64bits, the problem is that the libraries that we are using are only compiled for windows 32bits so this will make sure that all the changes we do are in the right configuration.

5) (make sure you are under “all configurations” settings) and look for the option VC++ Directories under Configuration Properties:



a) making sure you edit the properties and not just pasting this addresses (using the arrows) add the following folders:

\$(SolutionDir)include\GL\bin



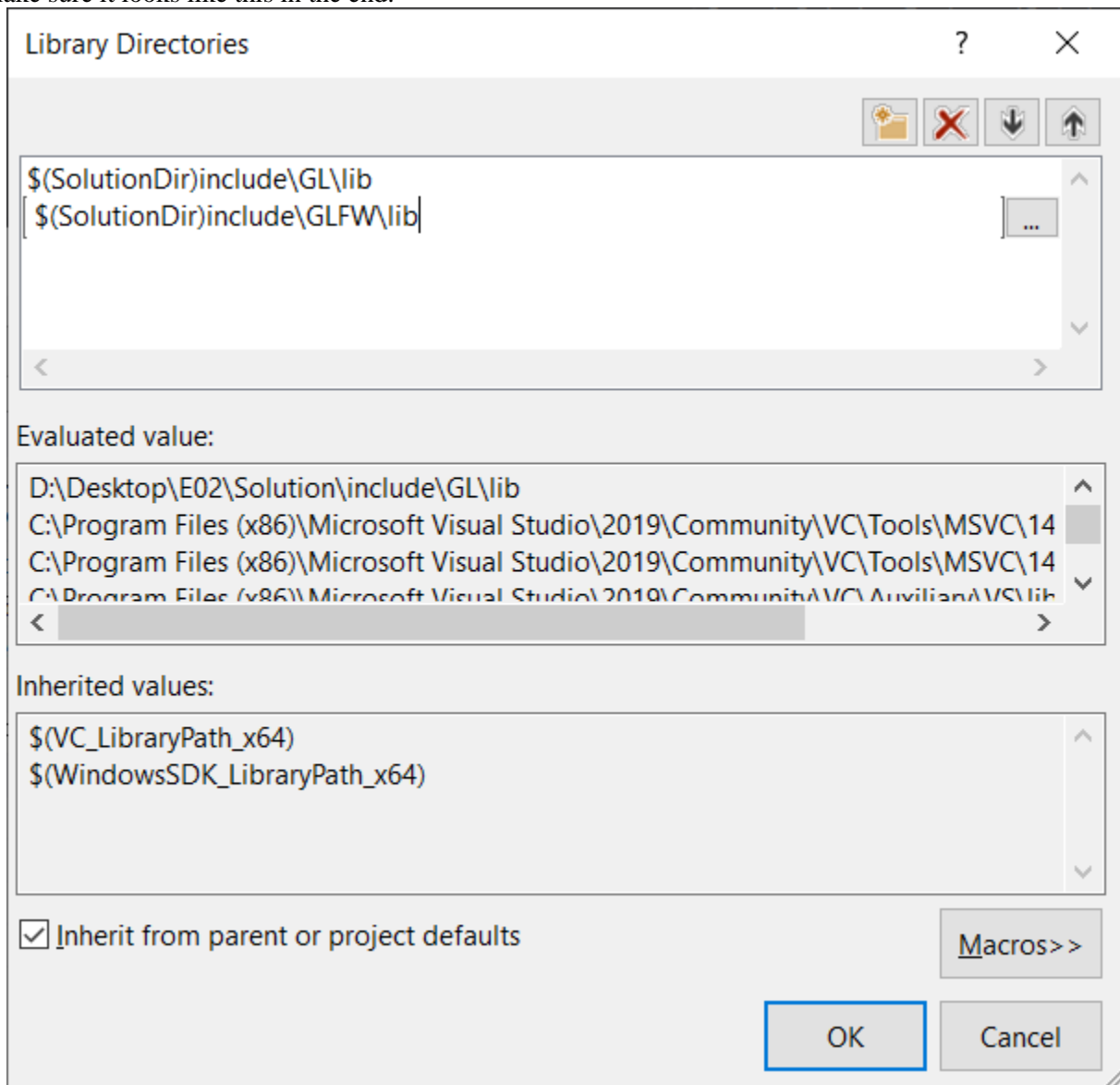
b) Do the same for Include directories but add the following instead:
include

c) For Library directories add:

\$(SolutionDir)include\GL\lib

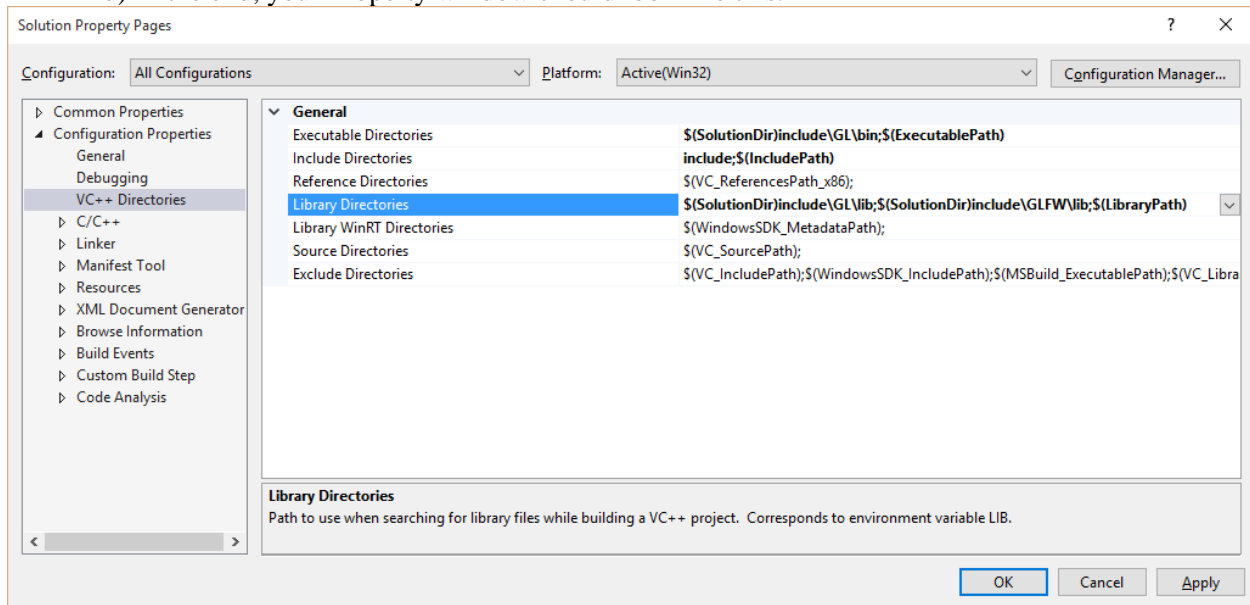
\$(SolutionDir)include\GLFW\lib

-make sure it looks like this in the end:

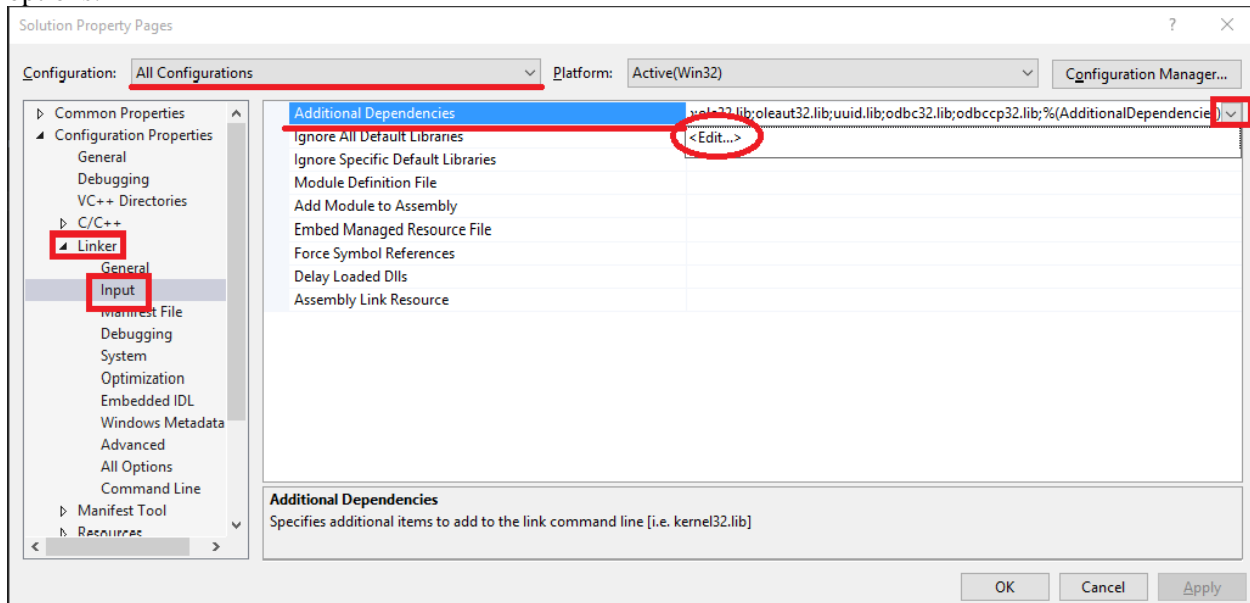


\$(SolutionDir)include\GL\lib;\$(SolutionDir)include\GLFW\lib;\$(LibraryPath)

d) In the end, your Property window should look like this:

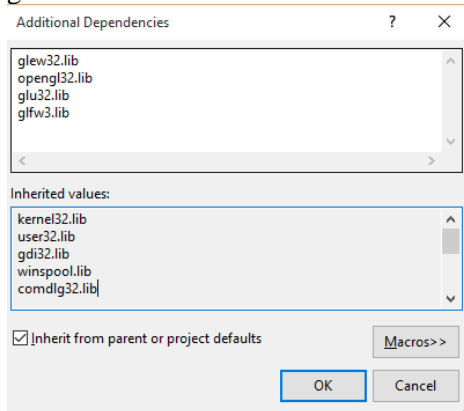


6) Under “Additional Dependencies” in Linker Input click on the arrow so you have access to the edit options.

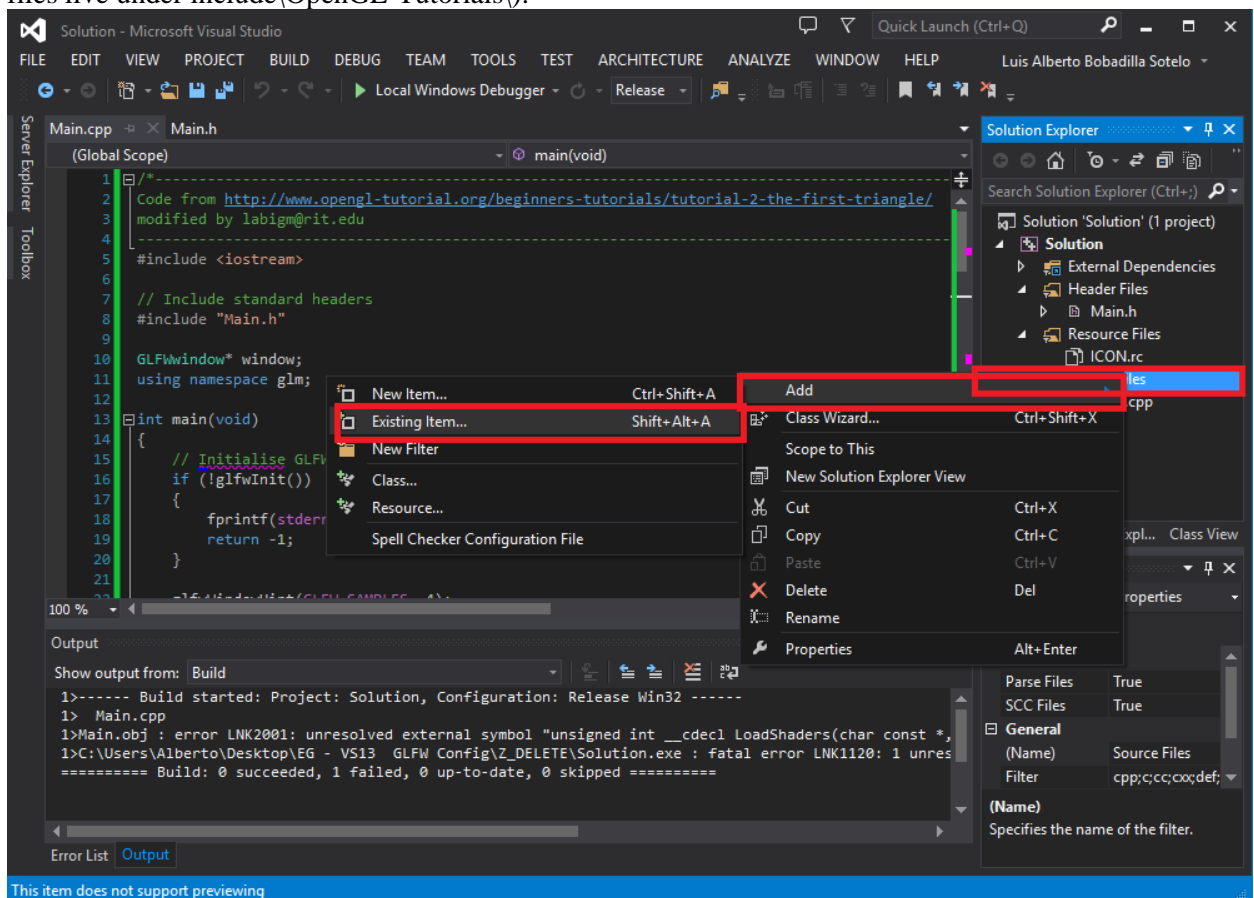


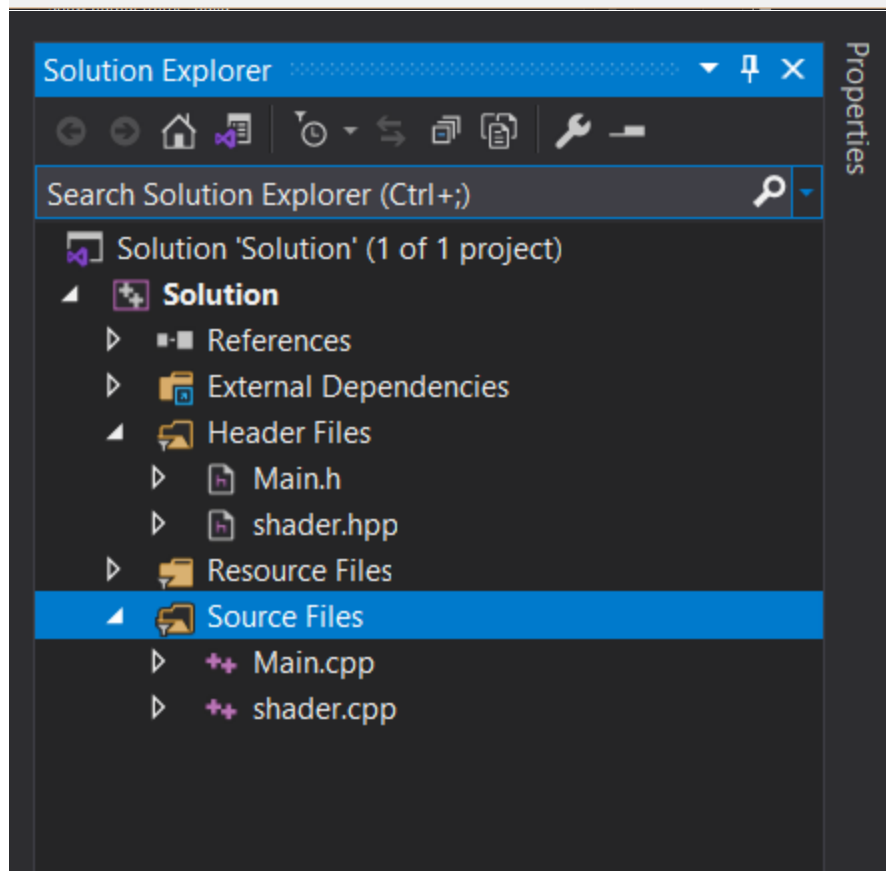
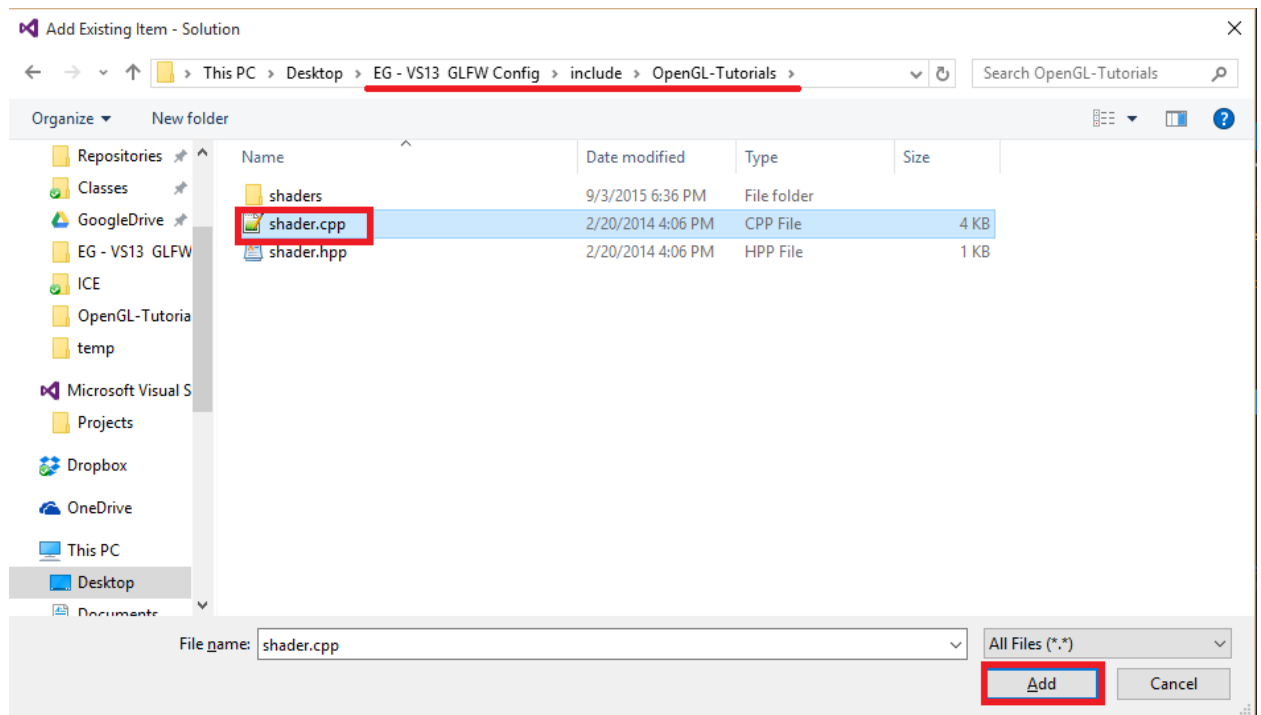
Insert the following dependencies:

glew32.lib
opengl32.lib
glu32.lib
glfw3.lib

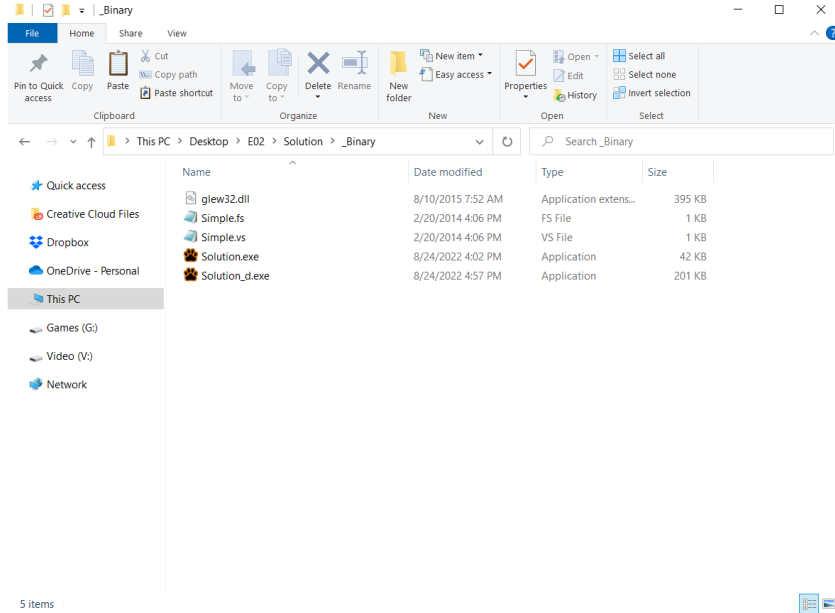


- 7) Include the files shader.cpp to your “source files” folder and the shader.hpp to your “header files” (the files live under include\OpenGL-Tutorials\):

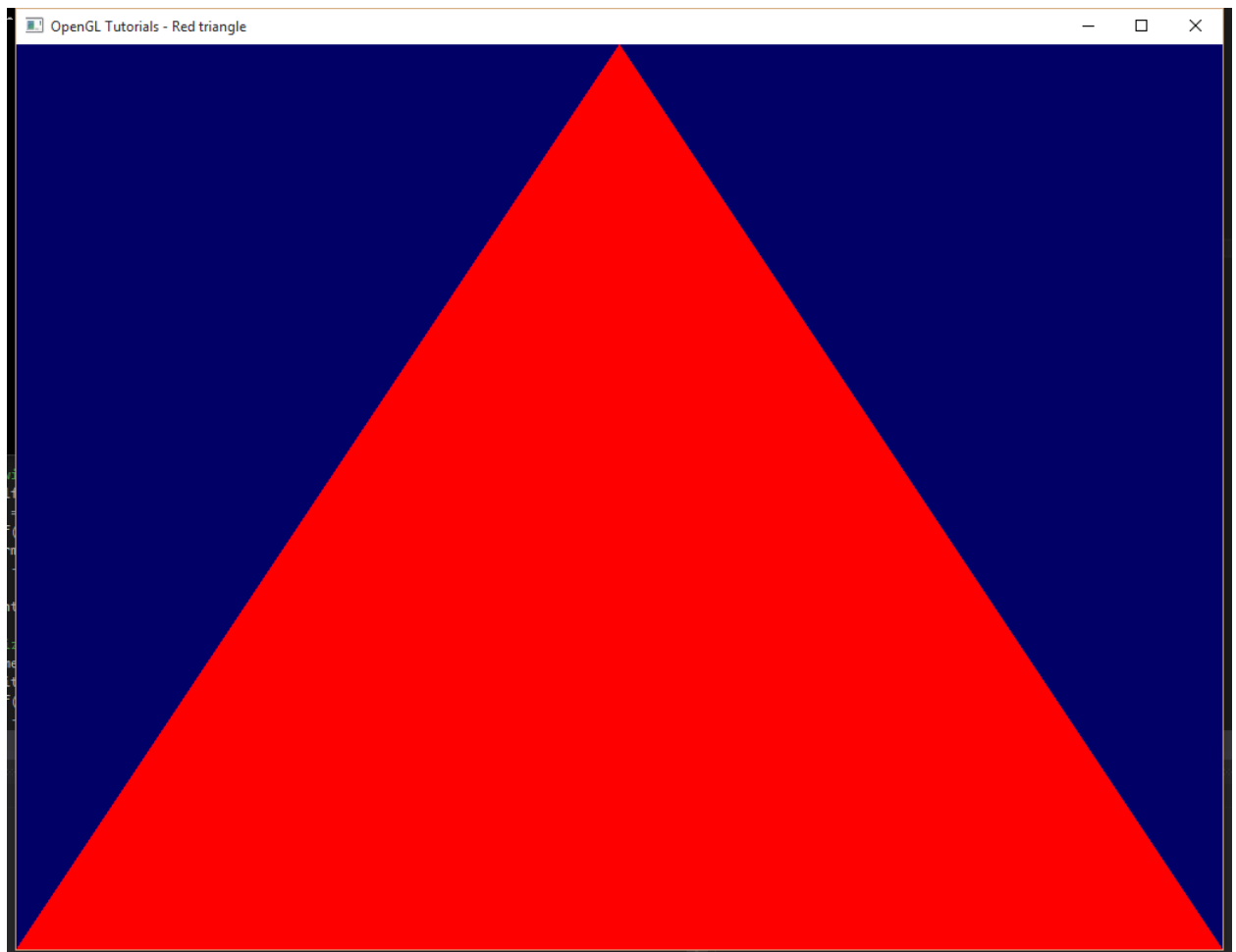




8) Copy Simple.fs and Simple.vs from Include\OpenGL-Tutorials\Shaders to _Binary as well as your Include\GL\Bin glew32.dll



9) Should you have no errors, the window will display:



10) Remove the hidden .vs folder and the intermediary Z_Delete folder and zip your folder.

NOTE: This configuration will only work for an x86 solution, you can apply the same changes to a 64 solution but the corresponding libs and dlls are needed (I only provided 86 versions)