SCIT

School of Computing & Information Technology

CSCI336 – Interactive Computer Graphics

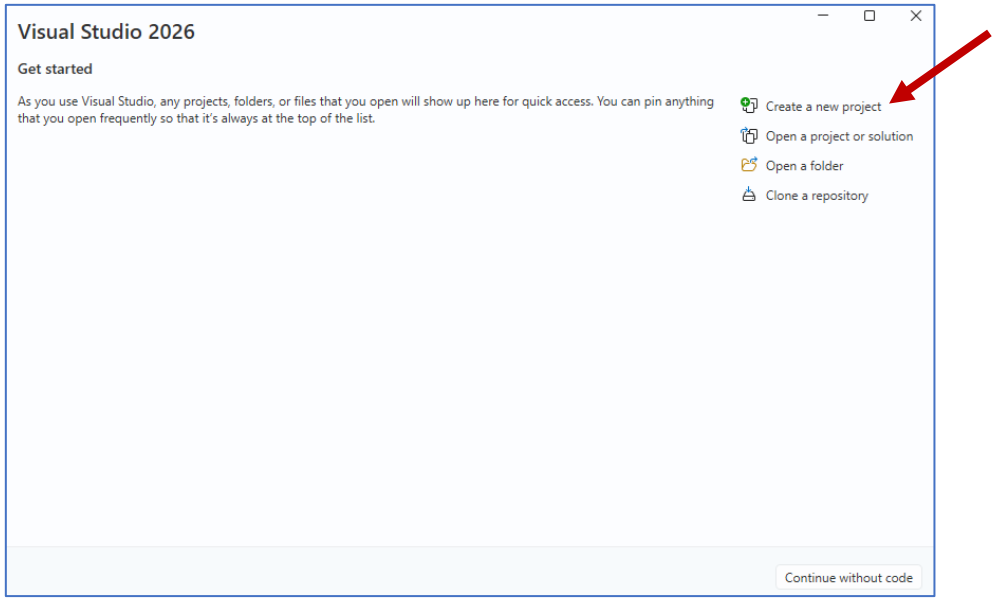
Setting up the Visual Studio Project Environment

This document is a guide to creating a new Visual Studio Project and setting it up to use the libraries in C:\GraphicsSDK

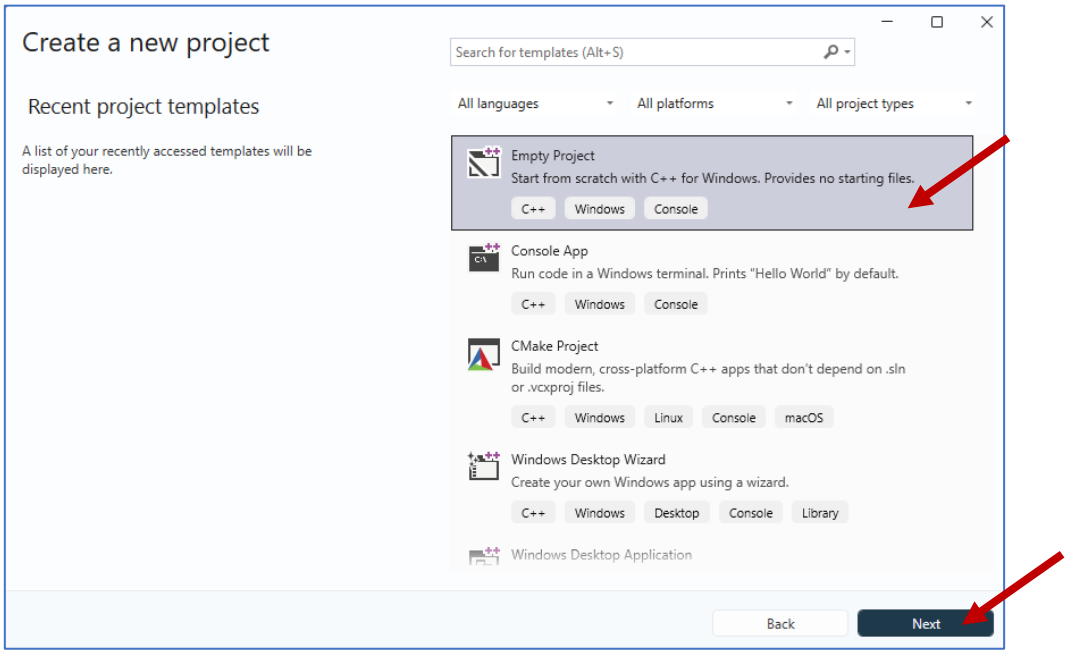
Note that the Test.zip file contains the end result of the following steps.

Creating a New Project

Open Visual Studio. Select "Create a new project":



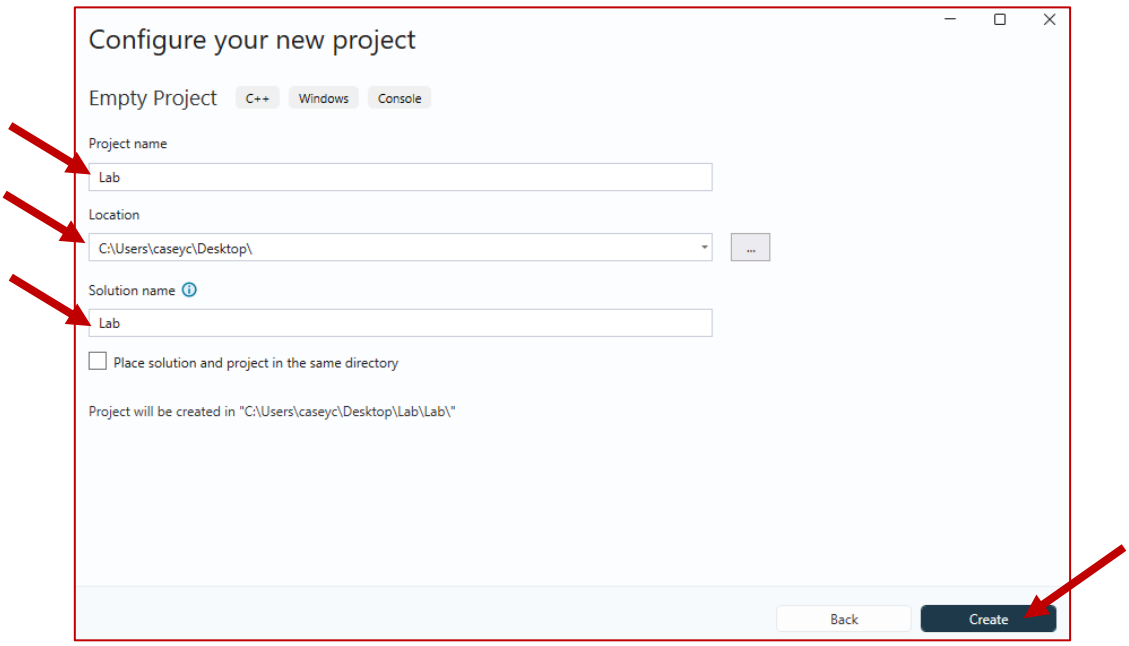
Then select an “Empty Project” and click “Next”.



Enter

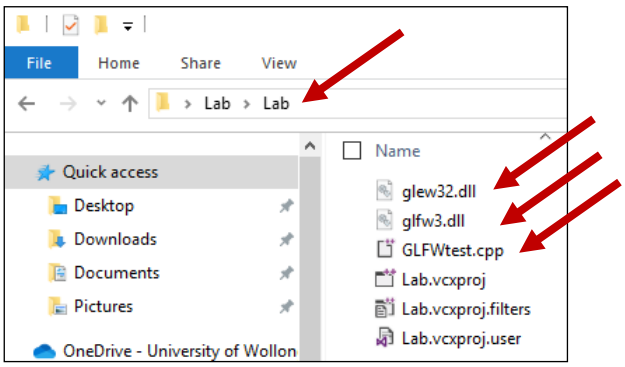
- a project name
- a location where the project folder should be created
- a name for the project solution

then click “Create”:

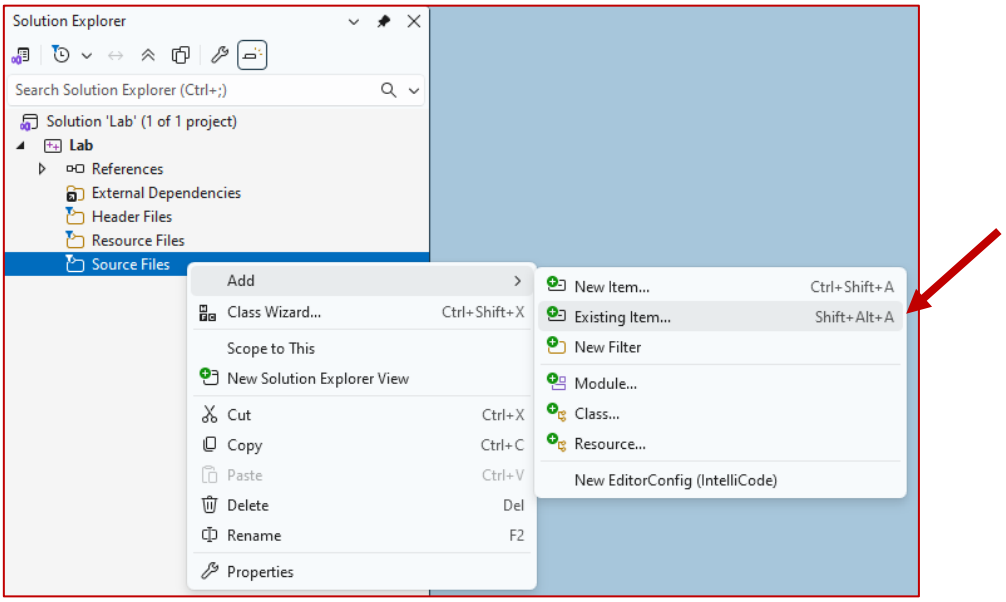


Adding an Existing File

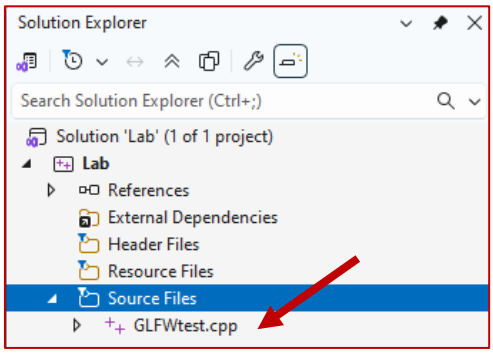
If you have existing source files for the project, put them in the newly created solution folder:



Add existing files to the project by *right-clicking* on the appropriate folder in **Solution Explorer**. For example, if you want to add a source file, right-click on **Source Files → Add → Existing Item**, and select the appropriate file(s) to the project:

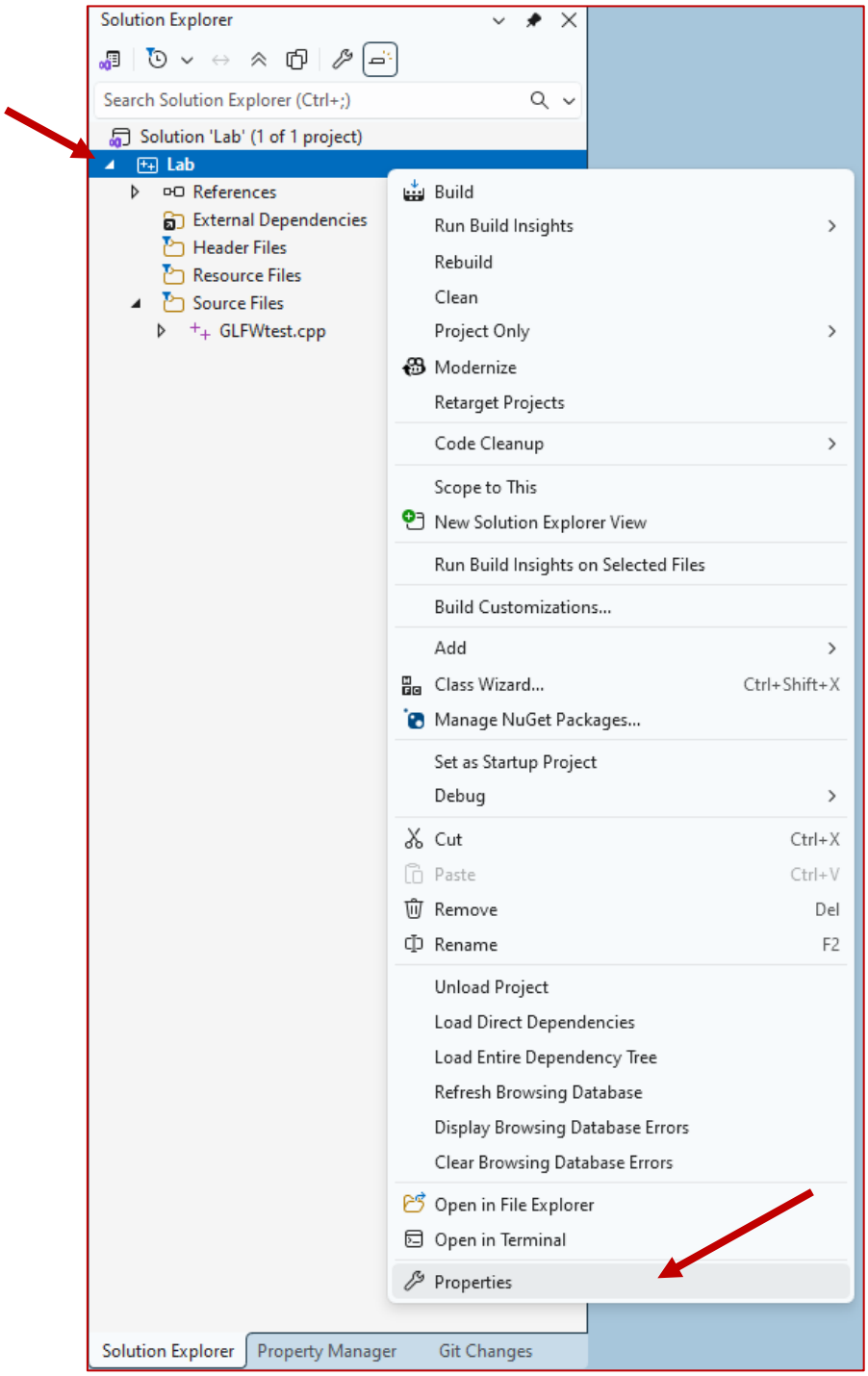


For example, the content of the project should look like this:



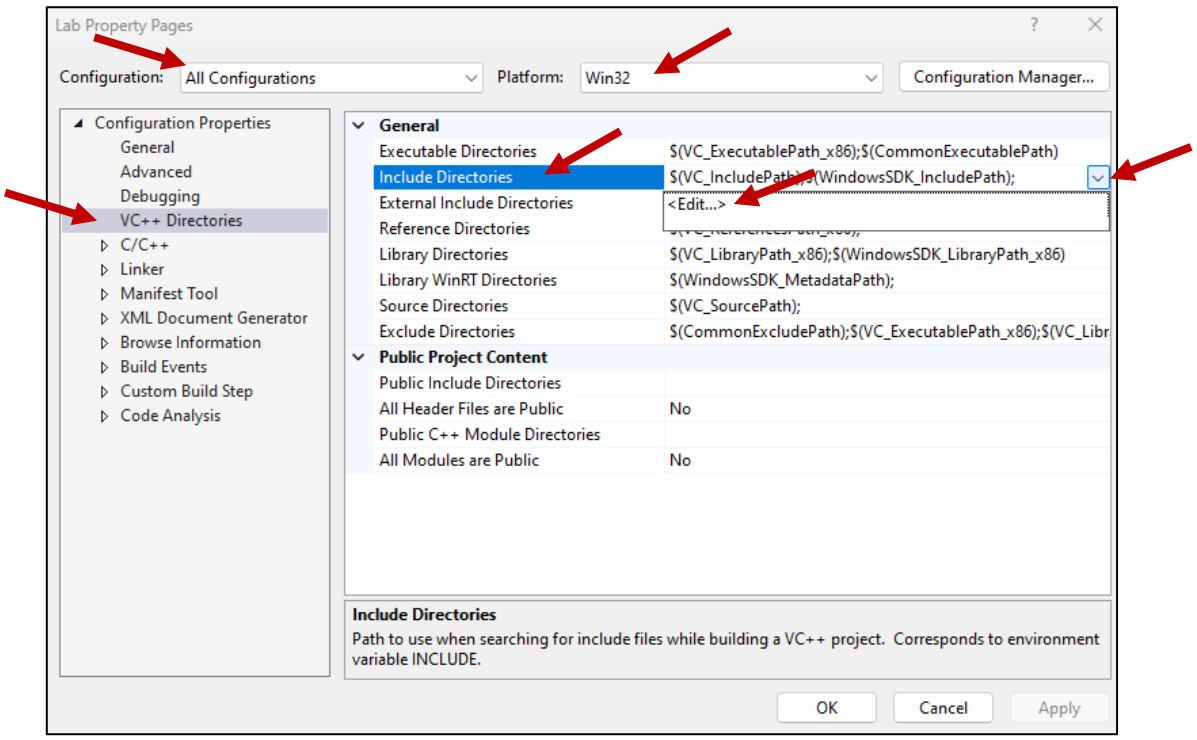
Setting Project Properties

Now open the project properties, by *right-clicking* on the project name and selecting **Properties**:

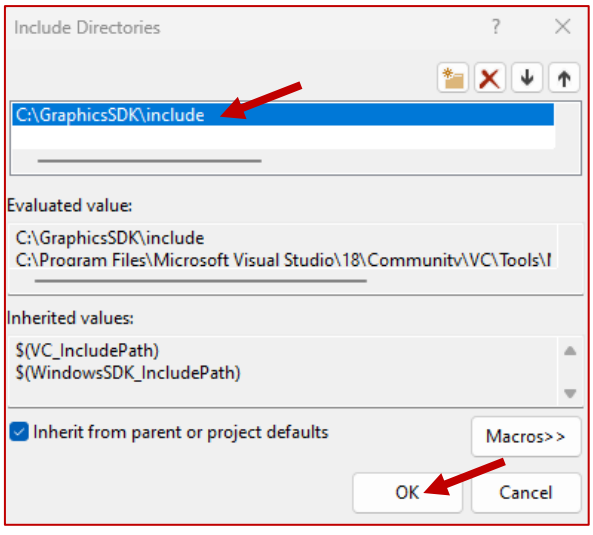


Apply the properties to all configurations by selecting "**All Configurations**" and "**Win32**".

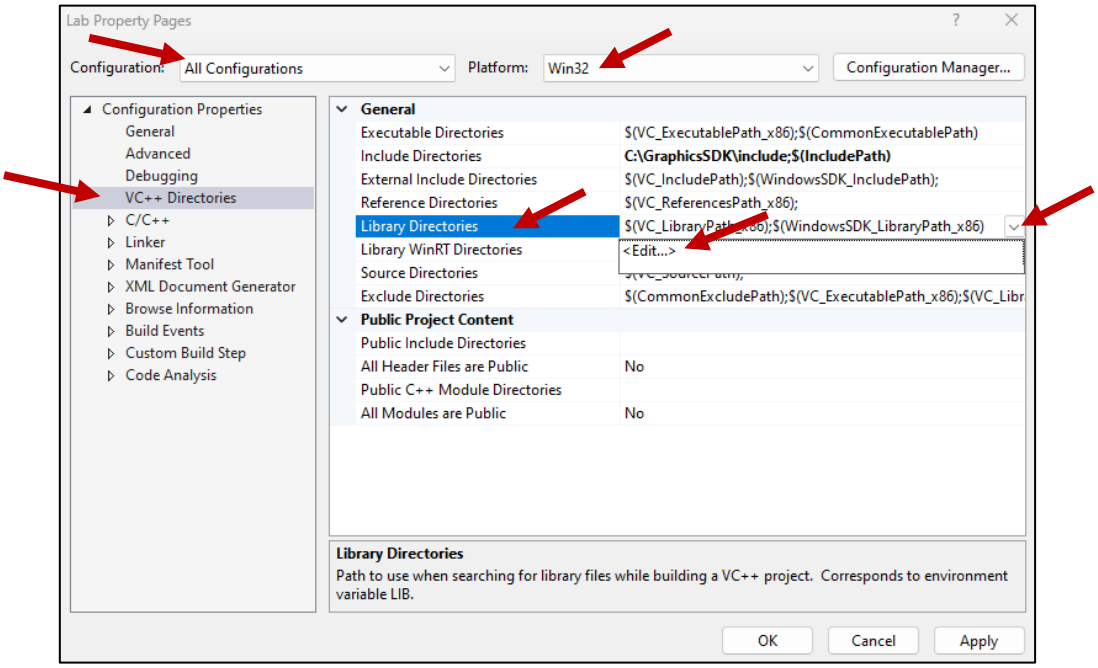
Then, under **Configuration Properties → VC++ Directories**, under **Include Directories**, click and select <Edit…>



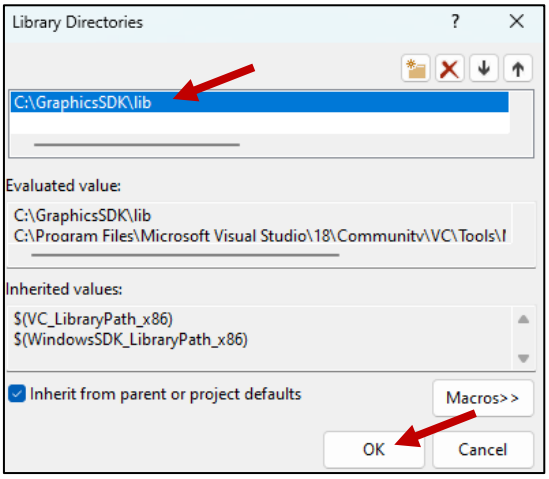
Enter: **C:\GraphicsSDK\include**, and click "OK":



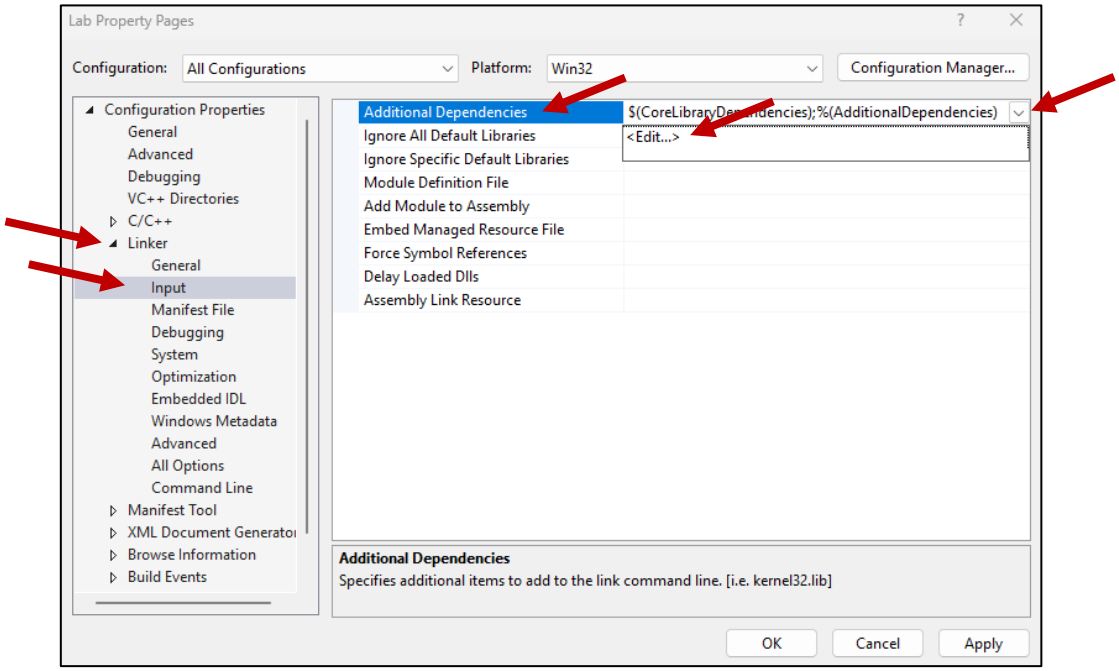
Under **Library Directories**, click ▾ and select <Edit…>



Enter **C:\GraphicsSDK\lib**, and click "OK":



Next, under **Configuration Properties → Linker → Input**, under **Additional Dependencies**, click ▾ and select <Edit…>



Enter:

Opengl32.lib

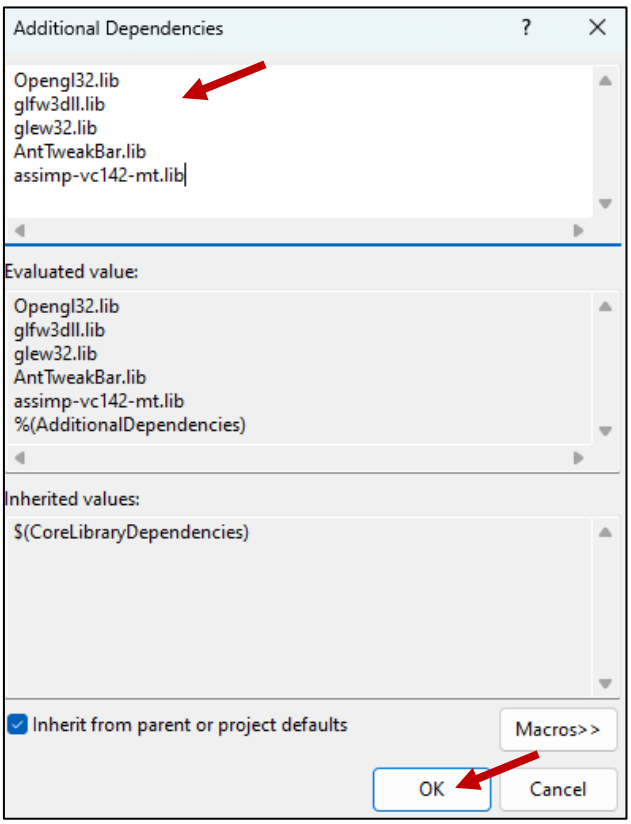
glfw3dll.lib

glew32.lib

AntTweakBar.lib

assimp-vc142-mt.lib

Then click OK.

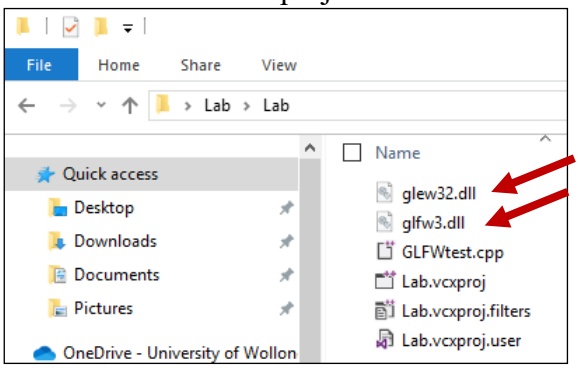


These are for the OpenGL, GLFW, GLEW, AntTweakBar and Assimp libraries, respectively.

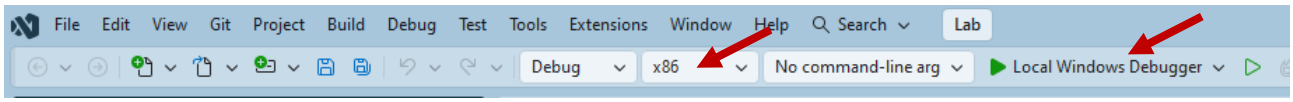
Back in the **Property Pages** window, click “Apply” and “OK”.

Compiling and Running

Before compiling and running the code. Copy the dynamic link libraries (.dll files) that are used in the project from the GraphicsSDK folder into the project folder. For example:



To compile and run the code, **make sure "x86" is selected**[1] and click on the ▶ button:



The instructions provided in this document show you how to set up the visual studio project environment. However, in the examples provided in this subject, the projects have already been set up for you.

Also, if you do not want to set up a new project every time you write an OpenGL program, you can use an existing project and just replace the source files with new files.

[1] Don't use x64 as not all libraries were set up for that.