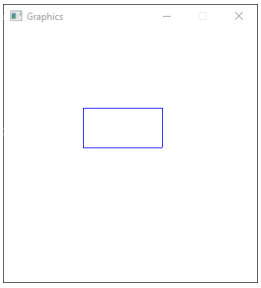
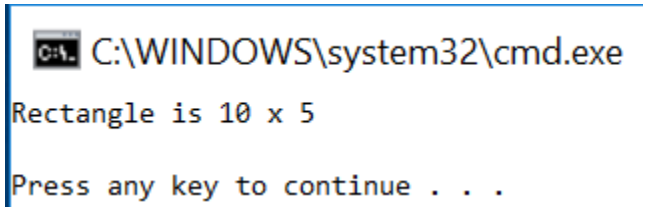
SDL Lab Using the SDL Manager

The goal for today's lab is to produce the following SDL picture:

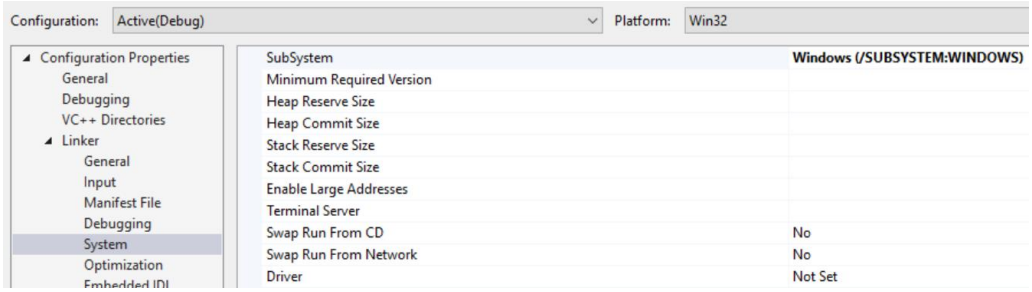


The steps to follow are listed below. Steps 1 & 2 are to be done in pairs. Once completed, drop in the DropBox and I'll copy to public. Then individually complete the lab.

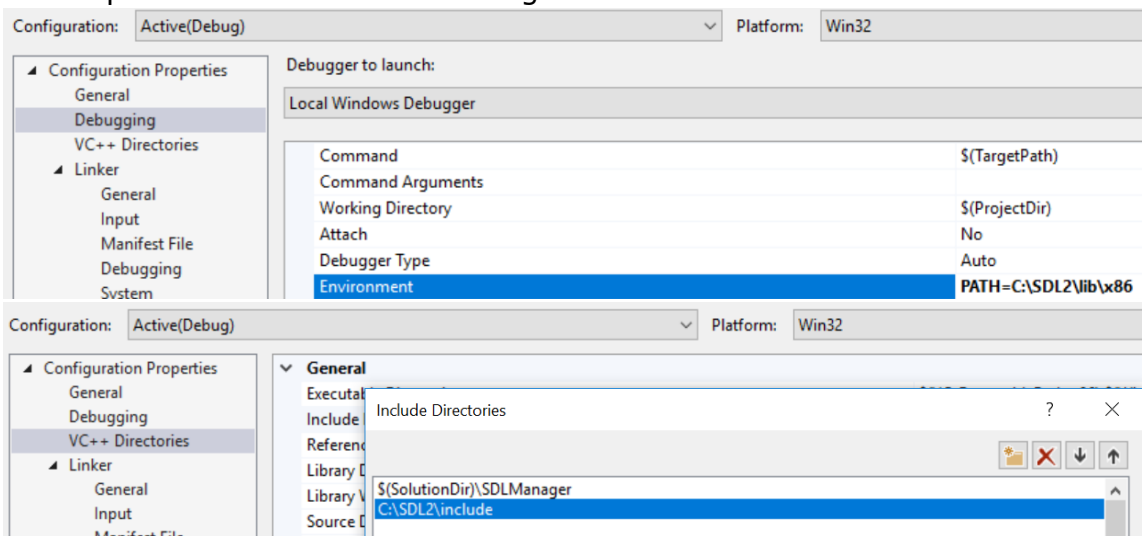
1. Copy the solution SDLRectangle in the Public folder of 3.23Files to your desktop, Build and Run.

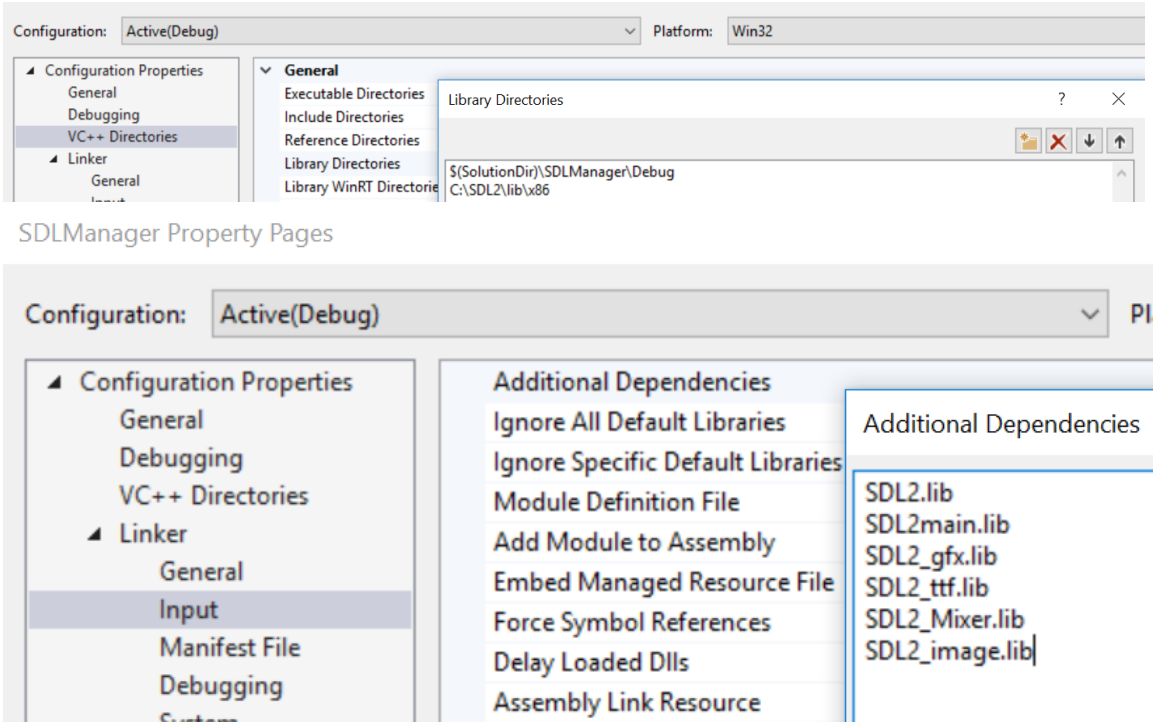


2. Add a **Visual C++|General|Empty Project** SDLManager. **We are changing this up a bit from the assignment!!!!!**
   a. Right-click on the project SDLManager Properties|Linker|System|SubSystem and select Windows (/SUBSYSTEM:WINDOWS)



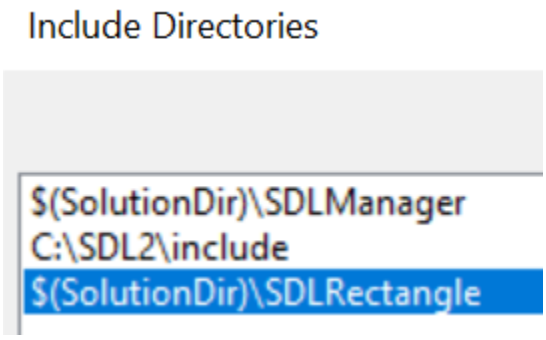
   b. Set all paths for SDL and SDLManager



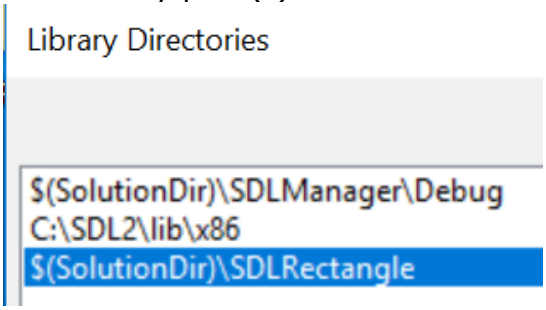


c. Copy Color.h, Color.cpp, SDLManager.h, SDLManager.cpp, SDLDriver.cpp into SDLManager.
d. Run the SDLDriver to make sure you've done this correctly.

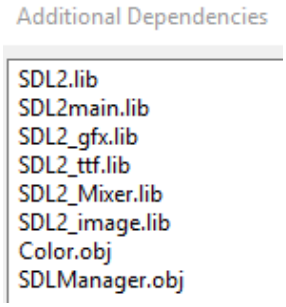
3. Add a **Visual C++|General|Empty Project** SDLRectangle. There should now be 3 projects in your solution.
4. Add the paths as in 2a) and 2b for SDLRectangle.
5. Set the paths, dependencies, and library files as follows:
   a. Add include path(s) to VC++ Directories "Include Directories"



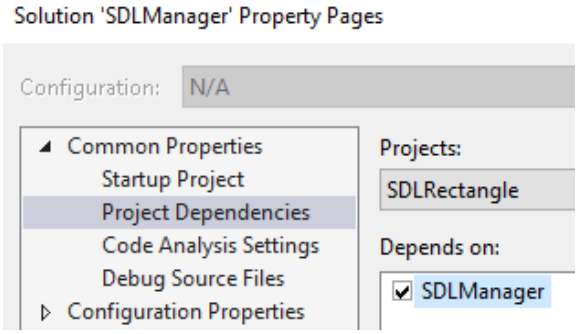
   b. Add Library path(s) to VC++Directories "Library Directories



c. Add Additional Dependencies



d. Set Project Dependencies



6. Create a driver called SDLRectangleDriver.cpp in the SDLRectangle project Source Files. Then copy the source code from SDLDriver.cpp into SDLRectangleDriver.cpp. Build and run.

7. Add an SDLRectangle interface in SDLRectangle.h as follows:

```
//*****************************************************************************
// File name:  Rectangle.h
// Author:     Computer Science, Pacific University
// Date:       3/23/2018
// Class:      CS 250
// Assignment: SDLRectangle Lab
// Purpose:    Declaration for a SDLRectangle class
//*****************************************************************************

#pragma once
#include "SDLManager.h"
#include "Color.h"

class SDLRectangle
{
  public:
    SDLRectangle (int xPos = 50, int yPos = 50, int length = 5, int height = 5,
                  const Color &rcColor = Color::BLUE);
    void draw (SDLManager &rcSDLManager);

  private:
    int mXPos;
    int mYPos;
    int mLength;
    int mHeight;
    Color mcColor;
};
```

8. Write the implementation for SDLRectangle.h in SDLRectangle.cpp
9. Create and display a Rectangle on the screen as shown in the window at the top of this lab. The window is at location (100, 100) with a size of 320x320. The rectangle is at location (100, 100) with length 100, height 50, and color BLUE.