CS 380
Visual Leak Detector Installation and use

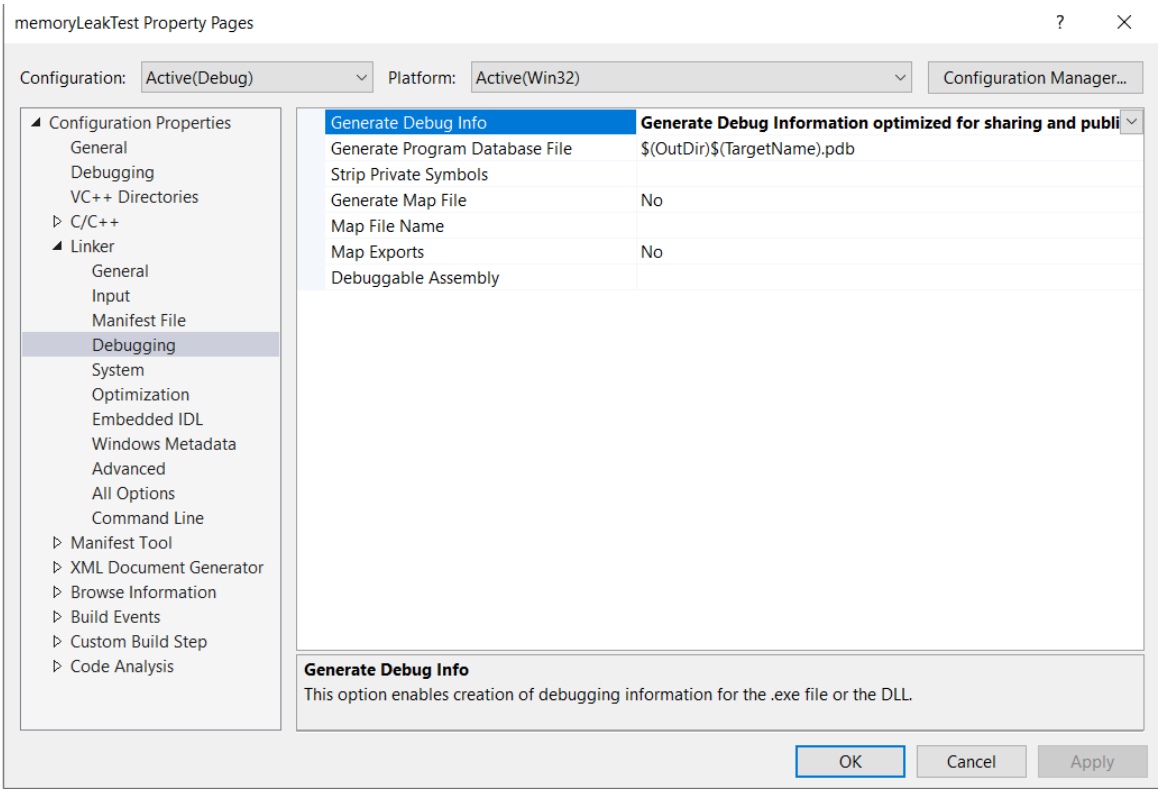
Installing VLD:

VLD is installed in the Strain Lab and in Scott 204. To install on your own computer, you can download the installer at:

https://kinddragon.github.io/vld/

When you run the installer, there will not be an option to install VLD within Visual Studio 2017, but the Visual Studio 2015 option works with the modifications given below:

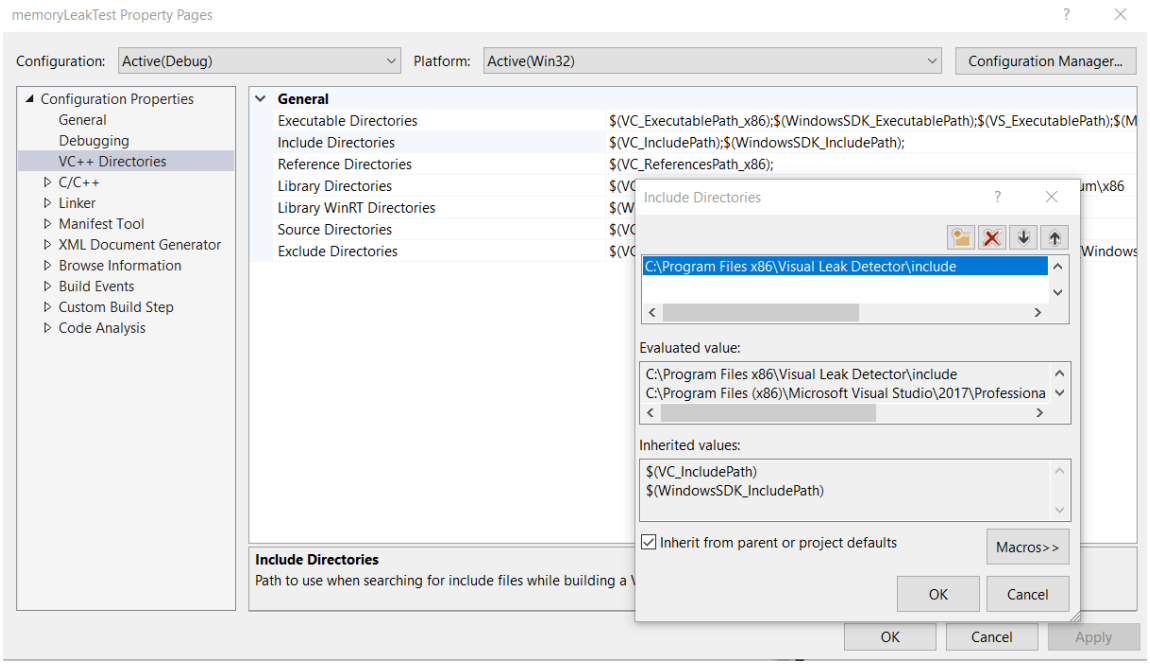
1) Select Project | <Project Name> Properties | Linker | Debugging | Generate Debug Info
2) Use the dropdown menu to change this option to "Generate Debug Information optimized for sharing and publishing(/DEBUG:FULL)"



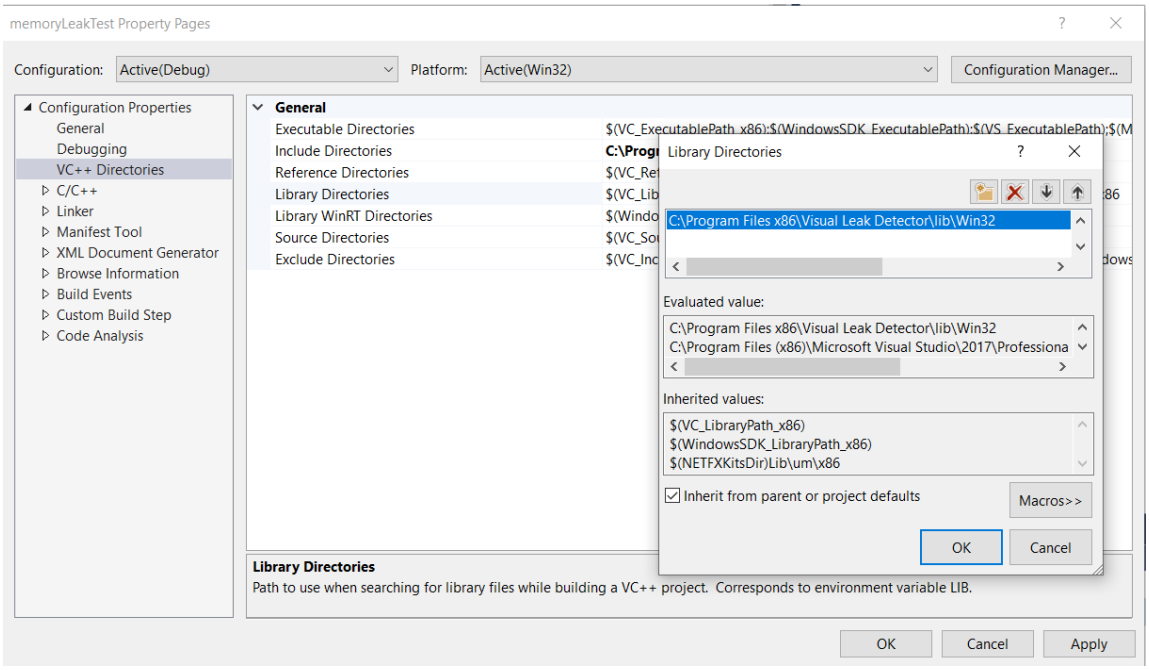
3) Select VC++ Directories from this same window. We need to add two paths, one to the "Include Directories" and one to the "Library Directories". Assuming the default installation location for VLD, you need to add the following paths:

   In Include Directories, add the path: C:\Program Files x86\Visual Leak Detector\include

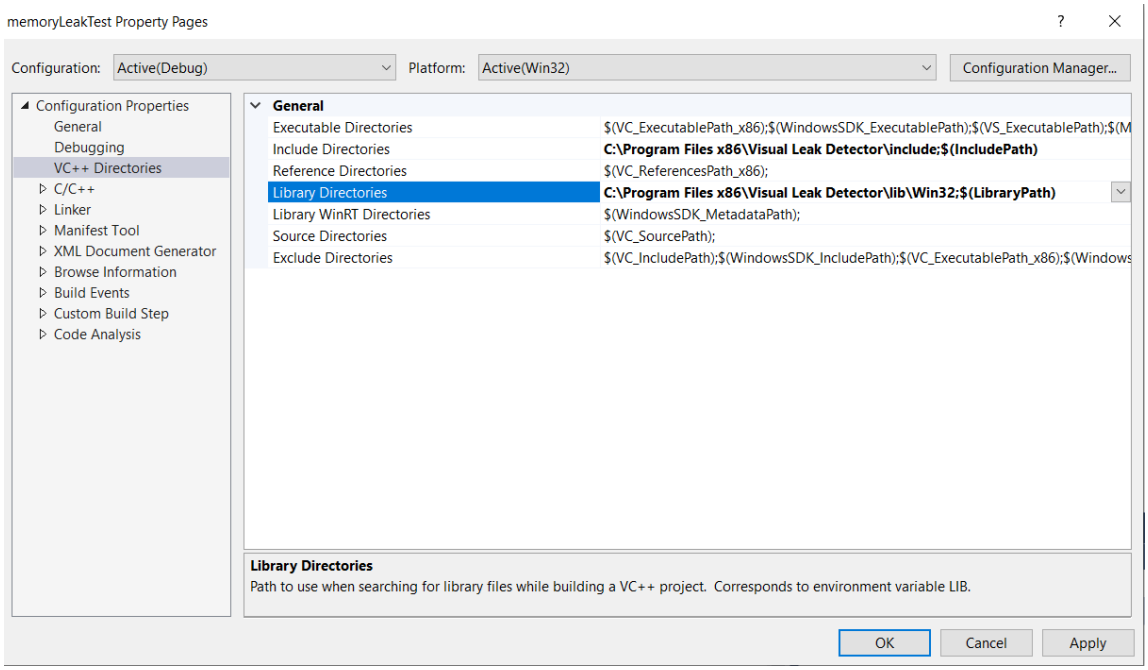
   NOTE: If you use the built-in directory selector, make sure that you remove an errant symbols in the generated path, such as %29:



In the Library Directories, add the path: C:\Program Files x86\Visual Leak Detector\lib\Win32



At the end of this process, your VC++ Directories screen should look like this:



Using VLD:

1. In at least one C/C++ source file from your project, include the *vld.h* header file. It should not matter which file you add the include statement to. It also should not matter in what order the header is included in relation to other headers. The only exception is *stdafx.h* (or any other precompiled header). A precompiled header, such as stdafx.h, must always be the first header included in a source file, so *vld.h* must be included after any precompiled headers.
2. If your project contains one or more DLLs that you would also like to check for memory leaks, then also include *vld.h* in at least one source file from each DLL to be included in leak detection.
3. Build and run the debug version of your project.

The output window will indicate any memory leaks in your project.

```
Visual Leak Detector detected 1 memory leak (40 bytes).
Largest number used: 40 bytes.
Total allocations: 80 bytes.
Visual Leak Detector is now exiting.
The program '[7768] memoryLeakTest.exe' has exited with code 0 (0x0).
```

https://github.com/KindDragon/vld/wiki/Using-Visual-Leak-Detector
https://stackoverflow.com/questions/44708137/visual-leak-detector-with-visual-studio-2017-no-source-code-line-numbers/44724869#44724869