Installation Cheat Sheet - OpenCV 2.4.11 and C++
using Windows 7 + Visual Studio 2013 (Community Edition) + precompiled binaries
(should also work with Windows 8/8.1, not tested though)

download and install Visual Studio 2013 Community Edition (yes, its free) (choosing all default options will work fine)

download OpenCV 2.4.11

make a folder "C:\OpenCV-2.4.11" and extract OpenCV 2.4.11 to there

add the **bin** directory to the operating system PATH:
C:\OpenCV-2.4.11\opencv\build\x86\vc12\bin
pull up Command Prompt and verify bin directory is now in PATH, then reboot

start Visual Studio 2013, make a new project
choose Visual C++, Win32 Console Application, name as you prefer, ex "SimpleCanny1"
set preferred location, uncheck "Create directory for solution" and "Add to source control", choose OK,
choose Next, uncheck "Precompiled Header" and "Security Development",
check "Empty Project" and verify "Console application" radio button is checked
choose Finish

in VS go to:
Project -> Properties -> Configuration Properties -> VC++ Directories -> Include Directories
add the **include** directory: C:\OpenCV-2.4.11\opencv\build\include

in VS go to:
Project -> Properties -> Configuration Properties -> VC++ Directories -> Library Directories:
add the **library** directory: C:\OpenCV-2.4.11\opencv\build\x86\vc12\lib

in Windows Explorer (not within Visual Studio), navigate to the **lib** directory:
C:\OpenCV-2.4.11\opencv\build\x86\vc12\lib
for the files that end in .lib, every other file will have a 'd' just before .lib, these are the *debug* libs
the libs that do not have a 'd' just before .lib are the *release* libs
since we will be using the debug build (Visual Studio default), we will use the debug libs

we have to add the debug libs to:
Project -> Properties -> Configuration Properties -> Linker -> Input -> Additional Dependencies

you can copy/paste the debug lib names individually from Windows Explorer, or alternatively verify the debug libs in your "C:\OpenCV-2.4.10\opencv\build\x86\vc12\lib" directory are the same as this list:

<u>debug (19 libs):</u>
opencv_calib3d2411d.lib
opencv_contrib2411d.lib
opencv_core2411d.lib
opencv_features2d2411d.lib
opencv_flann2411d.lib

opencv_gpu2411d.lib
opencv_highgui2411d.lib
opencv_imgproc2411d.lib
opencv_legacy2411d.lib
opencv_ml2411d.lib
opencv_nonfree2411d.lib
opencv_objdetect2411d.lib
opencv_ocl2411d.lib
opencv_photo2411d.lib
opencv_stitching2411d.lib
opencv_superres2411d.lib
opencv_ts2411d.lib
opencv_video2411d.lib
opencv_videostab2411d.lib

then copy/paste this list into:
Project -> Properties -> Configuration Properties -> Linker -> Input -> Additional Dependencies

next in the Visual Studio toolbar, verify that "Solution Configurations" and "Solution Platforms" are set to "Debug" and "Win32", respectively

next, copy any JPEG image into the project directory and rename it "image.jpg"
(unless you are going to use a webcam feed, in which case this is not necessary, see below)

right click in Solution Explorer, choose Add -> New Item
name C++ file as preferred, ex. "SimpleCanny1.cpp"

from my MicrocontrollersAndMore GitHub page, copy/paste CannyStill.cpp (uses a still image), CannyWebcam.cpp (uses a webcam), or RedBallTracker.cpp (tracks a red ball, uses a webcam) and run (with or without debugging)