Setting up Visual Studio 2010, 2012, 2013 or 2015 for 64 Bit Programming

There are four main steps for setting up Visual Studio 2010, 2012, 2013 or 2015 for 64 bit programming.

Please note that 64 bit programming will only work on a system with a 64 bit cpu and a 64 bit operating system like Windows 7, 64 bit.

1.   Create your usual project for assembly language programming.

file->new->project->Visual C++->Win32->Win32 Console Application

(for VS 2013 or 2015): file->new->project ->Visual C++-> Win32 Console Application)

type name of project in text box at the bottom. Uncheck box "Create Directory for solution"

then ok.

Then "application settings" and select "console application" and "empty project"

then finish.

Then in the Solution Explorer right click on the project name and select build customizations and select masm.

(for VS 2013 or 2015: right click on the project name->build dependencies->build customizations -> masm)

2. After your project is created do the following to change it from 32 bits to 64 bits

In the drop down list at the top of Visual Studio click on Win32 then Configuration Manager.

Then click in the Active Solution Platform dialogue box, click on new

then in the "Type or select the new platform" box select x64 and
check the box [x] Create new project platforms then ok.

x64 should then be the Active solution platform.

click on close.

3. Configure the entry point for the linker

For some reason after creating a project for 64 bit programming the main function cannot be found by the linker so you must manually create the entry point as follows:

Right click on your project name then click on properties then configuration properties then linker then Advanced then "entry point" then new. Type "main" (all lower case) for the entry point then ok,ok.

4. Add your source file and then check the following.

To coincide with step 3 above, the main function in in your asm file must be all lower case "main".

Sometimes the asm file is not associated with the masm compiler and you will get a compile error. You should check the following.

Right click on the file name in the Solution Explorer
 ->properties->Configuration Properties->General->
then
Excluded from build->no
Item Type-> Microsoft Macro Assembler