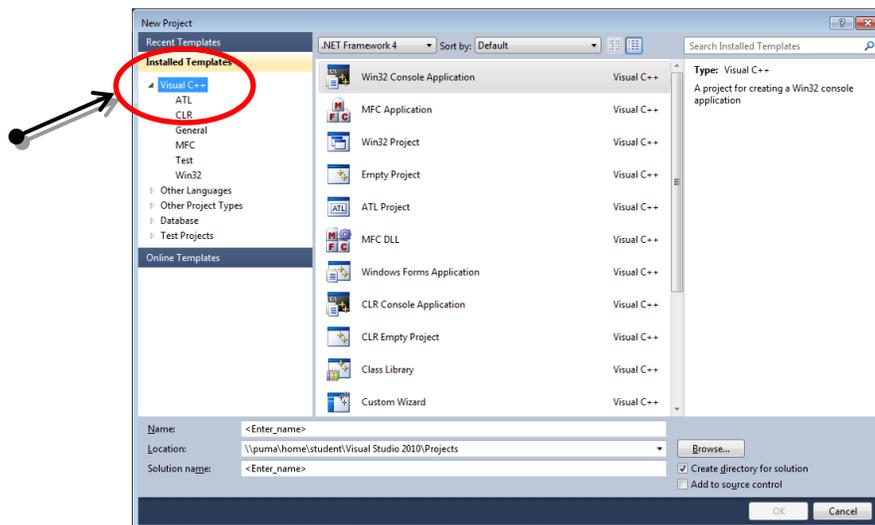**De Anza College**
Computer Information Systems

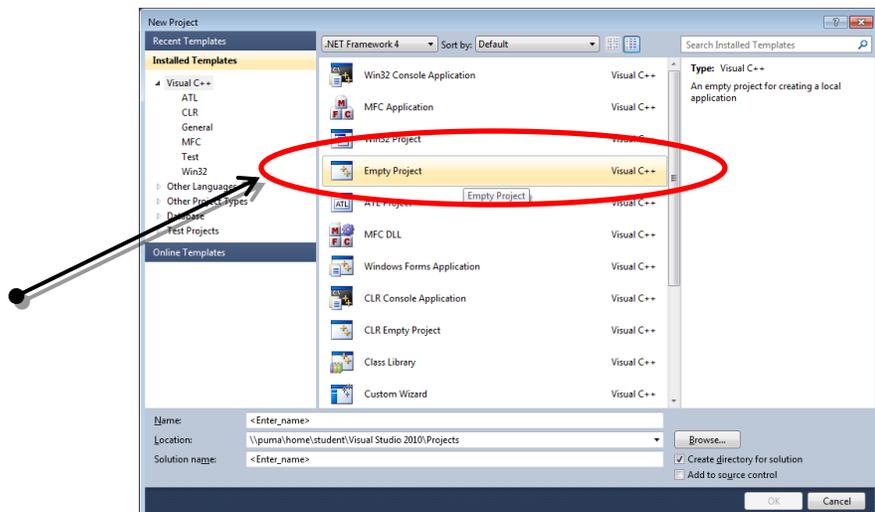# Microsoft Visual Studio 2010 Instructions For C Programs

Creating a NEW C Project

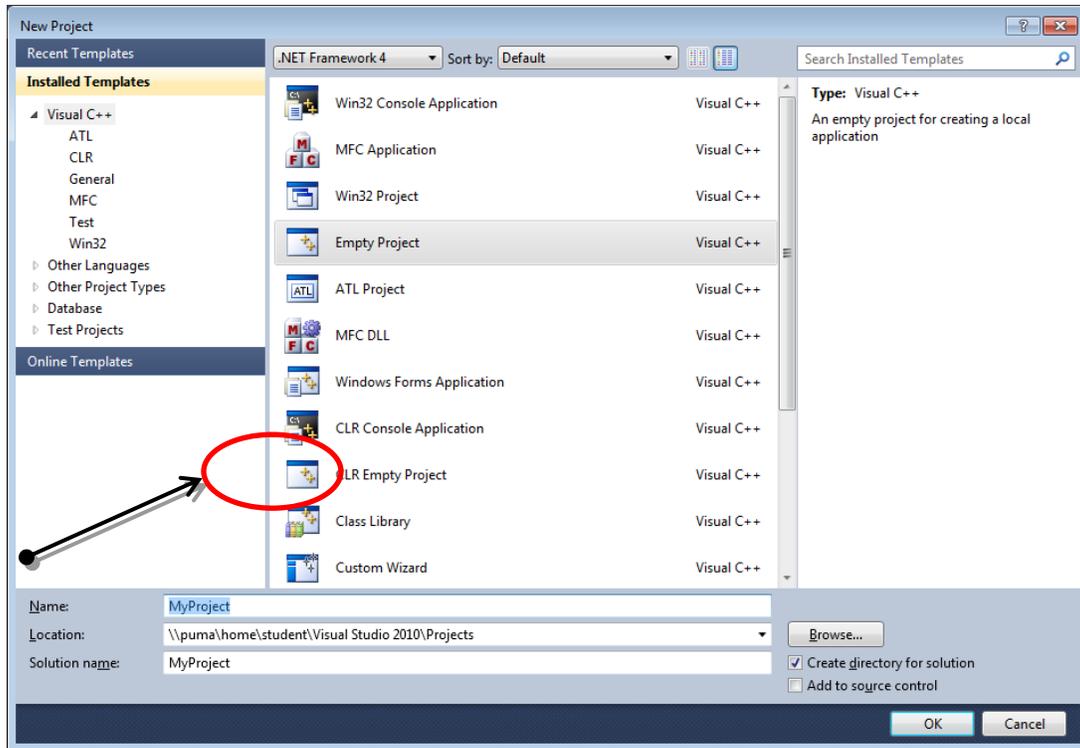After you open Visual Studio 2010,

1. Select **File > New > Project** from the main menu. This will open the **New Project** dialog box.

2. Select the **Visual C++** option from the **Installed Templates** panel on the left hand side of the **New Project** dialog box.
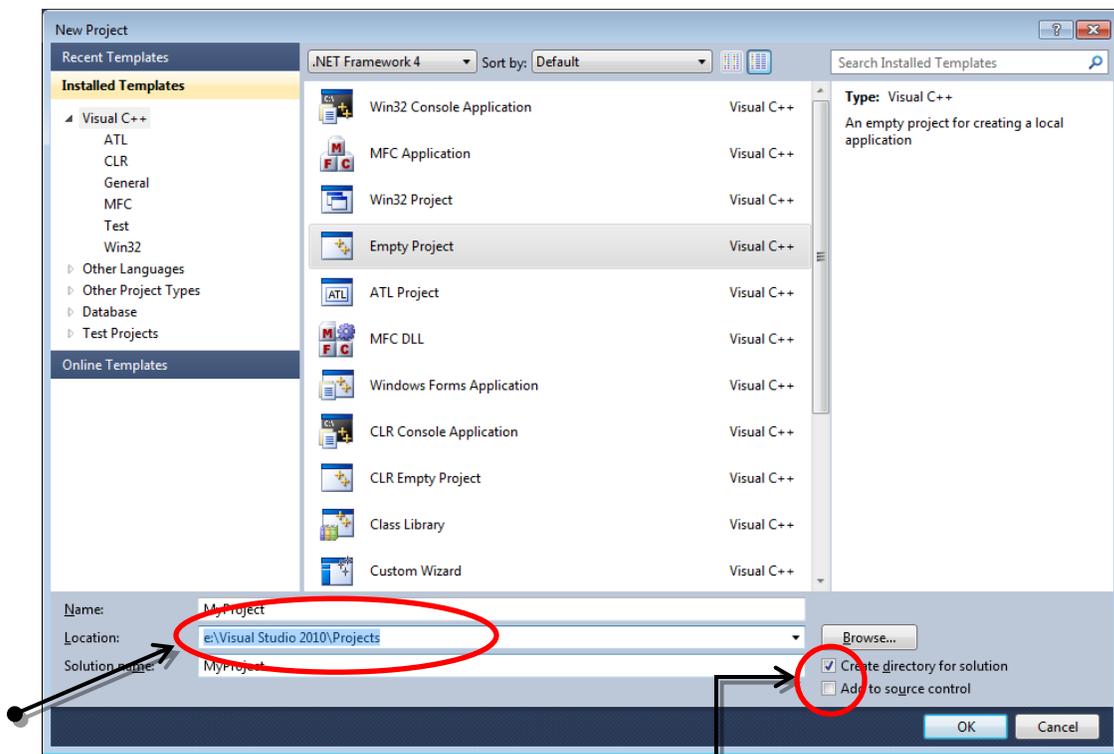

3. Select the **Empty Project** option from the middle panel of the **New Project** dialog box.

4. Enter the name of your **NEW** project, such as 'MyProject', in the **Name** textbox located at the bottom of the **New Project** dialog box.
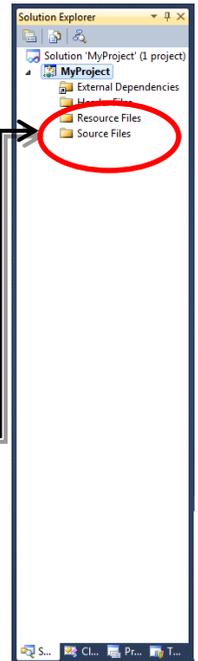

5. Change the **Location** of where you would like to save your **NEW** project. *Note that your Home Directory on the Business/CS Lab computers resides on drive Z: and your USB usually resides on drive E:.*

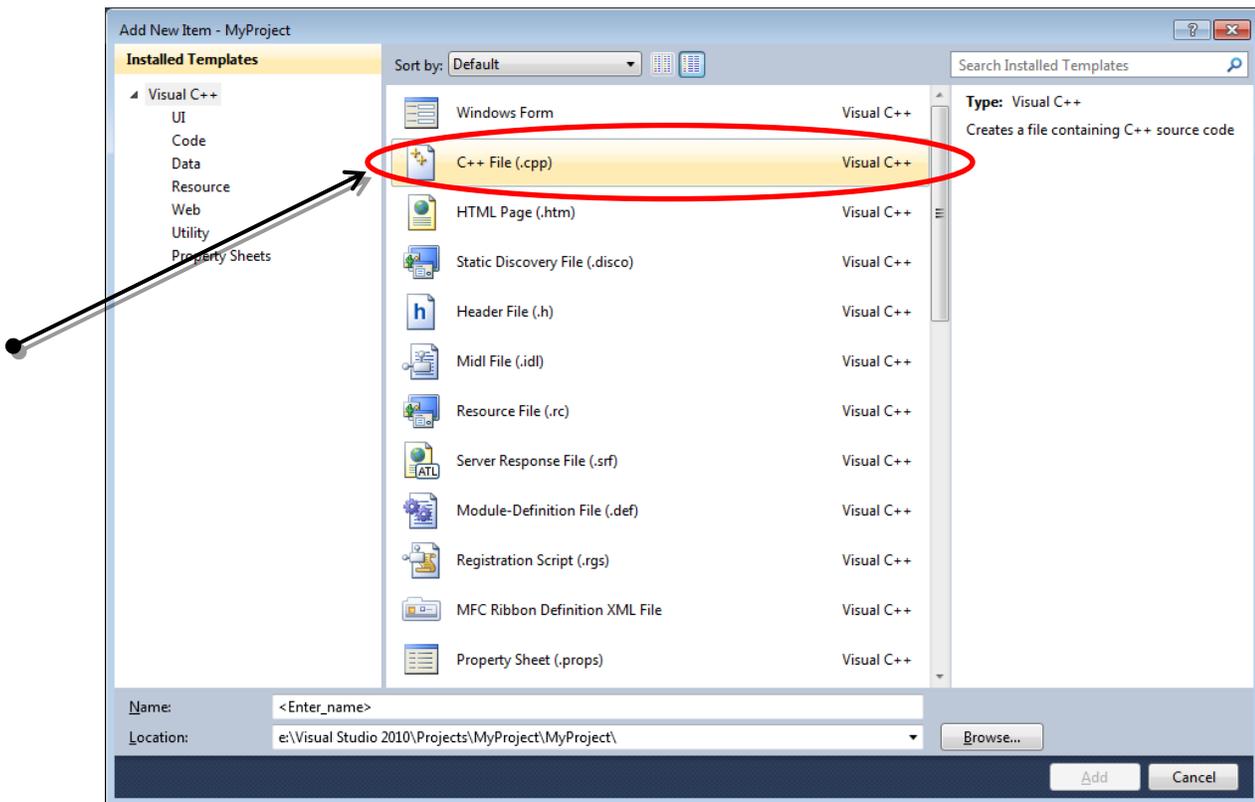6. Select the **Create directory for solution** check box.

7. Press the **OK** button to continue.

   At this point in time your **NEW** project should open up in **Visual Studio** and you should be able to see your project assets in the **Solution Explorer** on the left hand side of your **Visual Studio** window.
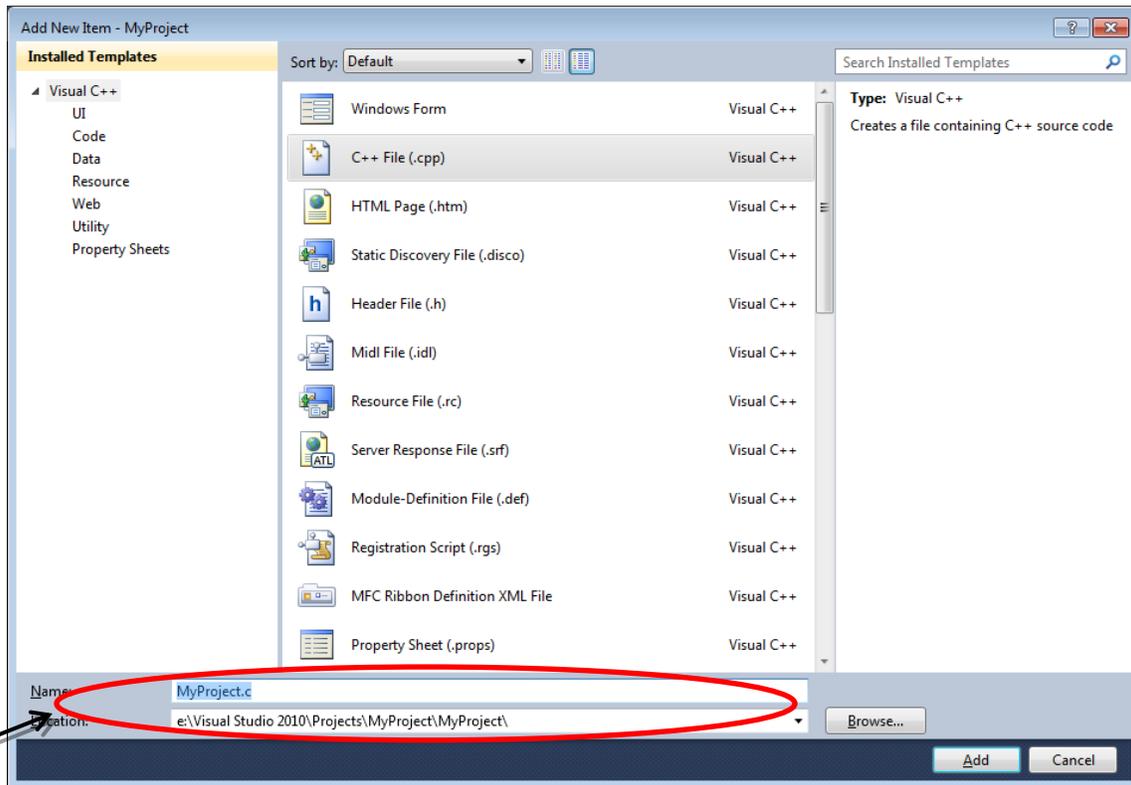
8. Right click on the **Source Files** folder in the **Solution Explorer** and select **Add > New Item**. The **Add New Item** dialog box should appear at this time.

9. Select the **C File (.cpp)** option from the middle panel of the **Add New Item** dialog box.
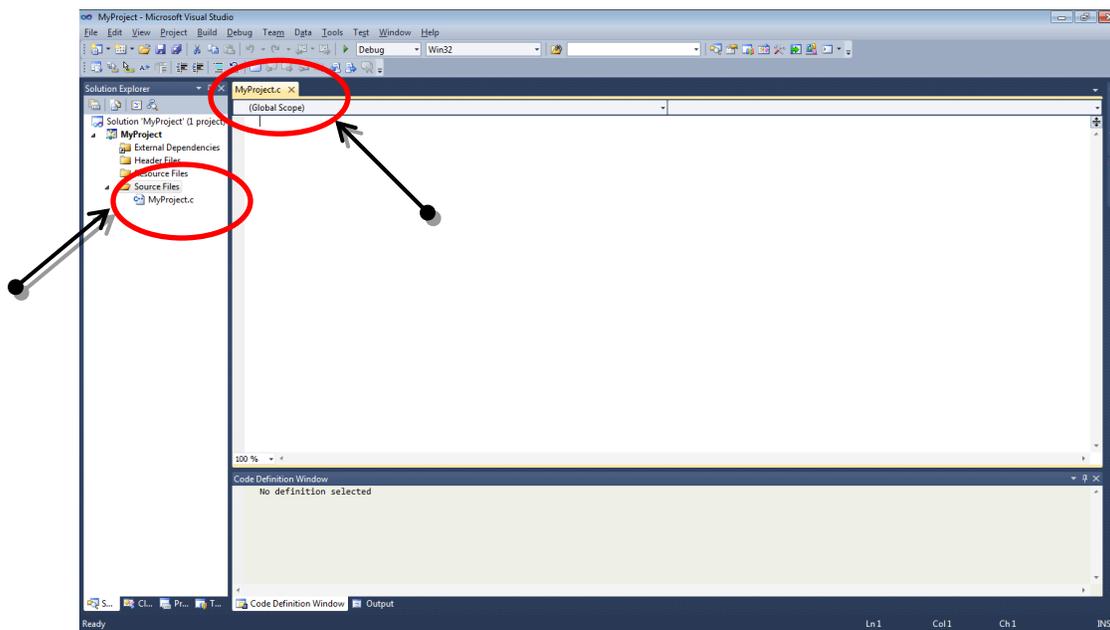
10. Enter the name of your **NEW** C file in the **Name** textbox located at the bottom of the **Add New Item** dialog box with a **.c extension** (ie., **MyFile.c**). Note that you should not have to change the **Location** of your file as it should automatically appear in the directory you specified in **Step 5** of these instructions.
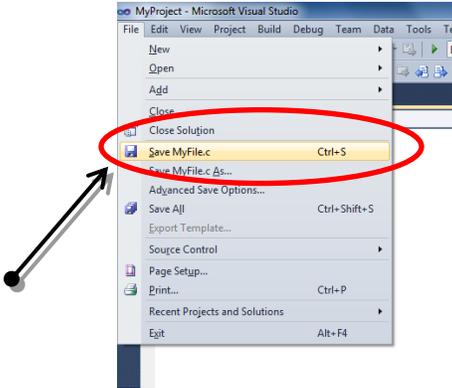

11. Press the **Add** button to continue.

At this point in time your **NEW** C **Source File** should appear as a project asset under the **Source Files** folder in the **Solution Explorer** on the right hand side of your **Visual Studio** window. Your **NEW** C Source File should open under a **NEW Tab** on the left hand side of the **Visual Studio** window as shown below. You can now type your program into the Visual Studio 2010 editor.
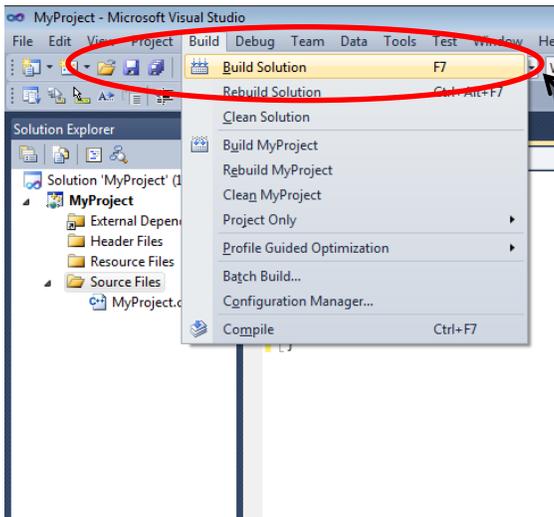
Saving a C Project / Source File

1. Select the **Tab** that contains the **Source Code** you wish to save.

2. Select **File > Save** *filename.c* from the main menu. This will automatically save the source code in that is open in the active tab of your **Visual Studio 2010** workspace.

Compiling and Running a C Program

1. **To compile and link your program**, press **F7** on your keyboard or select **Build > Build Solution** from the main menu. This will allow you to build an executable file which will be saved in your projects **Debug** directory.
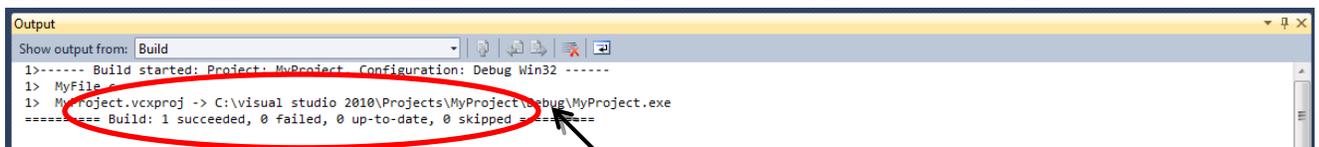

Notes About Saving Your Files

- If you want to save a copy of your source code in a new file, you will want to choose the **Save** *filename.c* **As..** option from the **File** menu.
- If you have more than one file open that you need to save, you may use the **Save All** option from the **File** menu and this will update all of your open files.

- **When saving your files in the Business/CS Computer Lab and Classrooms**, make sure that you are saving your files to either your Home Directory (Z: drive) or your USB drive otherwise you may lose your documents.
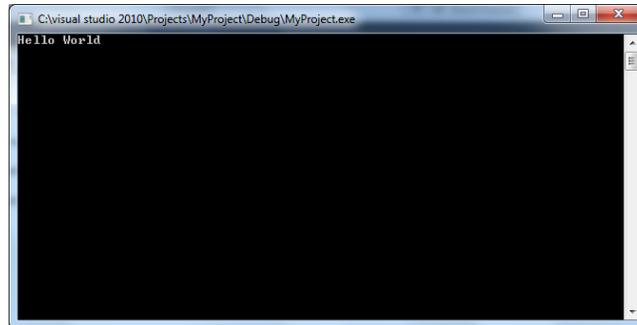
  DON'T FORGET TO BACK UP YOUR FILES!

At the bottom of your screen you should see the results of the compilation process which look similar the results in the picture below which indicate that your program has been built successfully:
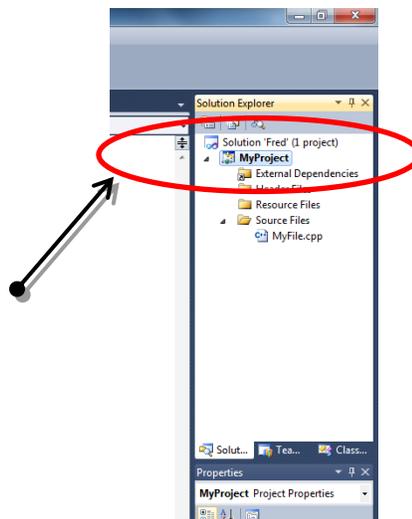
2. **To Run or Execute your program**, press **CTRL-F5** on your keyboard or choose **Debug > Start without Debugging** from the main menu.

A new window should open and this should contain the results of your programs execution.   Proceed to the following page if you do not see this window on your computer.
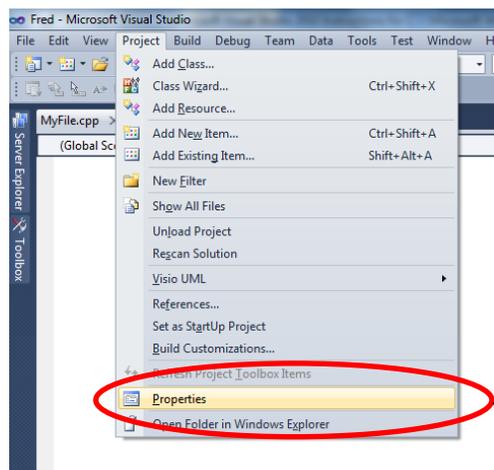

If an execution window does not appear or does not stay open, make the following changes in **Visual Studio**:
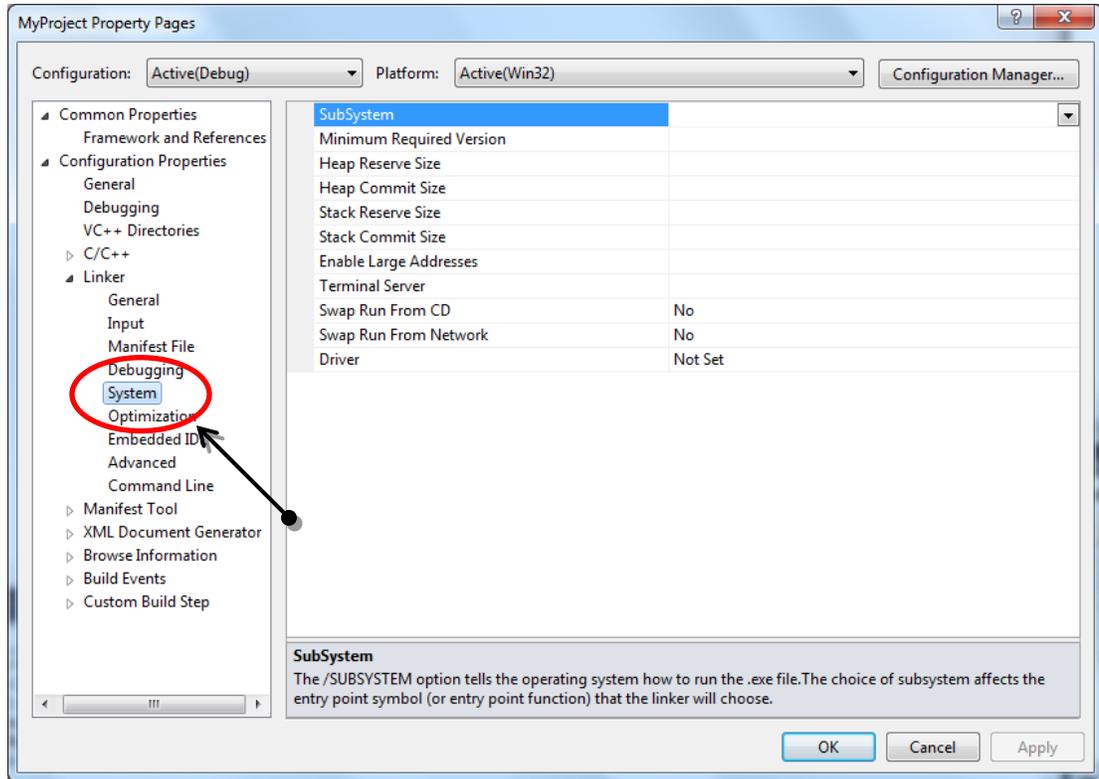
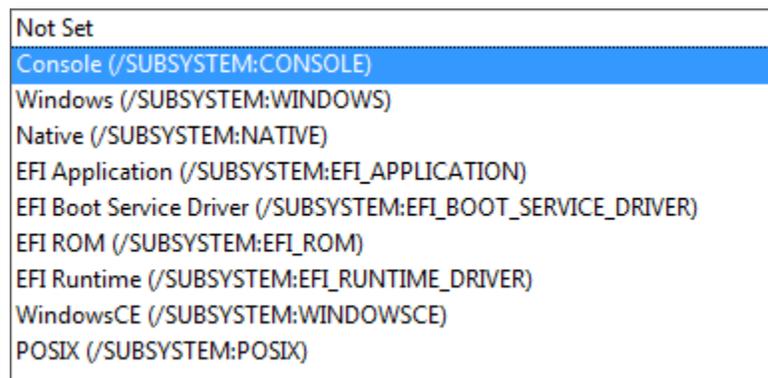a. Select the **Project Name** in your **Solution Explorer**.

b. Select **Project** > **Properties** from the main menu.

c. Expand the **Configuration Properties** option in the left panel of the **Property Pages Dialog** box by clicking on the ▷ to the left of the Configuration Properties option.

d. Under the Configuration Properties, expand the **Linker** option in the left panel of the **Property Pages Dialog** box by clicking on the ▷ to the left of the Linker option.

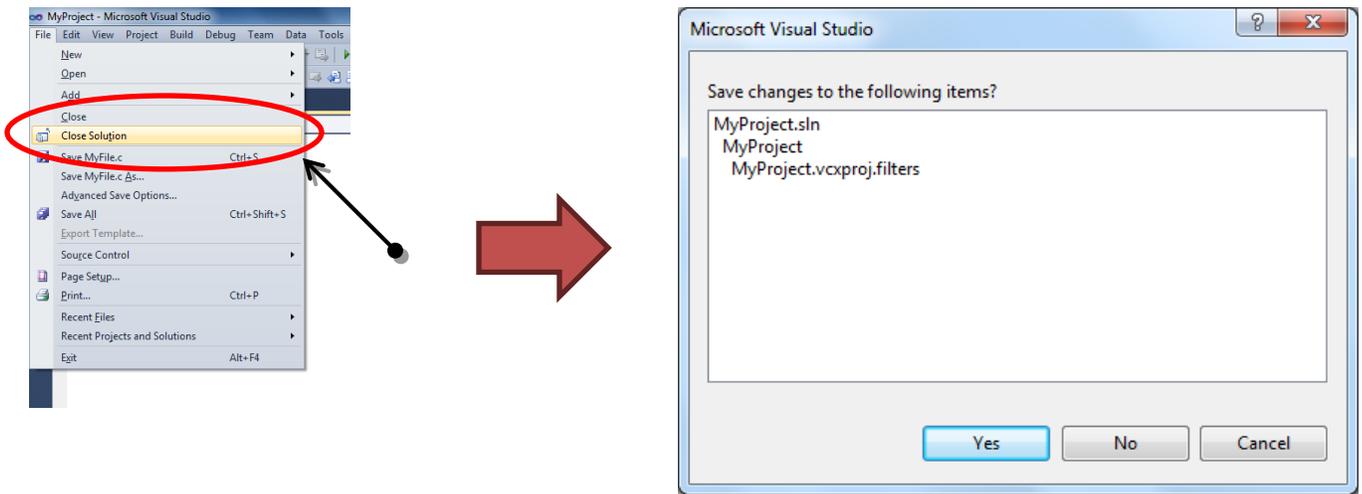e. Under the Linker option, select the **System** option in the left panel of the **Property Pages Dialog** box.

f. In the right panel of the **Property Pages Dialog** box, change the **SubSystem** option by clicking on the ▼ on the far right and select '**Console (/SUBSYSTEM: CONSOLE)**' as is shown below:

g. Select **Apply** and **OK** at the bottom of the **Property Pages Dialog** box for the changes to take place the next time you run your program.
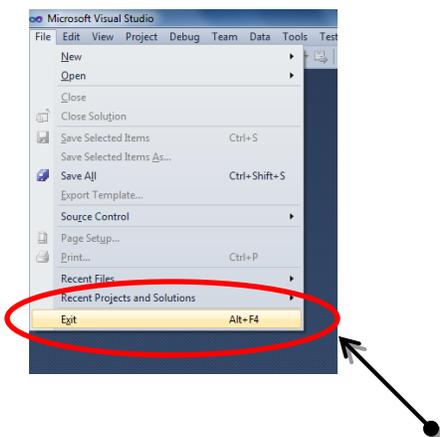
Closing a C Project

1. Select **File > Close Solution** from the main menu. If your Project has not been saved recently, a Microsoft Visual Studio message box will be opened prompting you to confirm any changes you have made to your Project and/or Source Code files.

2. Press the **Yes** button to confirm saving changes to your Project. Upon confirmation, all of your open files should be closed and your Solution Explorer should be void of information. At this point you can either close Visual Studio OR open a NEW or existing C Project.
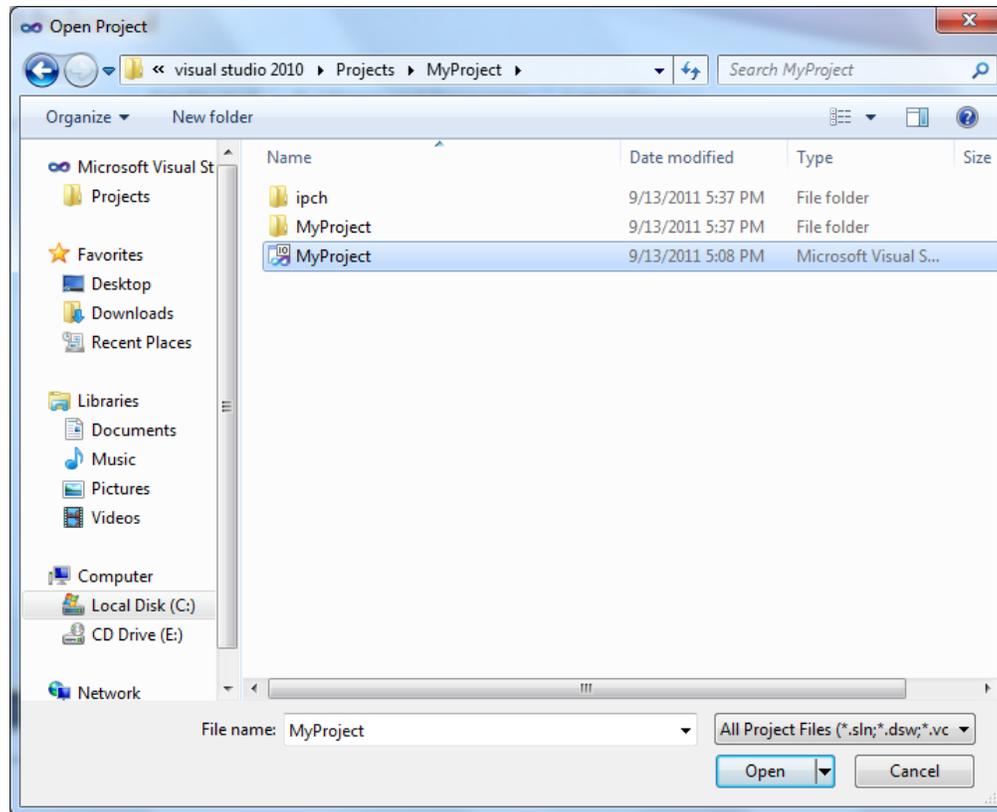
Exiting Visual Studio

1. Select **File > Exit** from the main menu. At this point Visual Studio will close.

Opening an EXISTING C Project

1. Select **File > Open > Project/Solution** from the main menu. This will open the **Open Project** dialog box.
2. Using the **Open Project** dialog box, locate the Visual Studio Project you wish to open. Your existing projects should be located either on the **Z: drive** or your USB drive. Once you have located the **Project**, select it and **Press** the **Open** button at the bottom of the dialog box.

3. At this point your Project should be open in your **Visual Studio Workspace**.