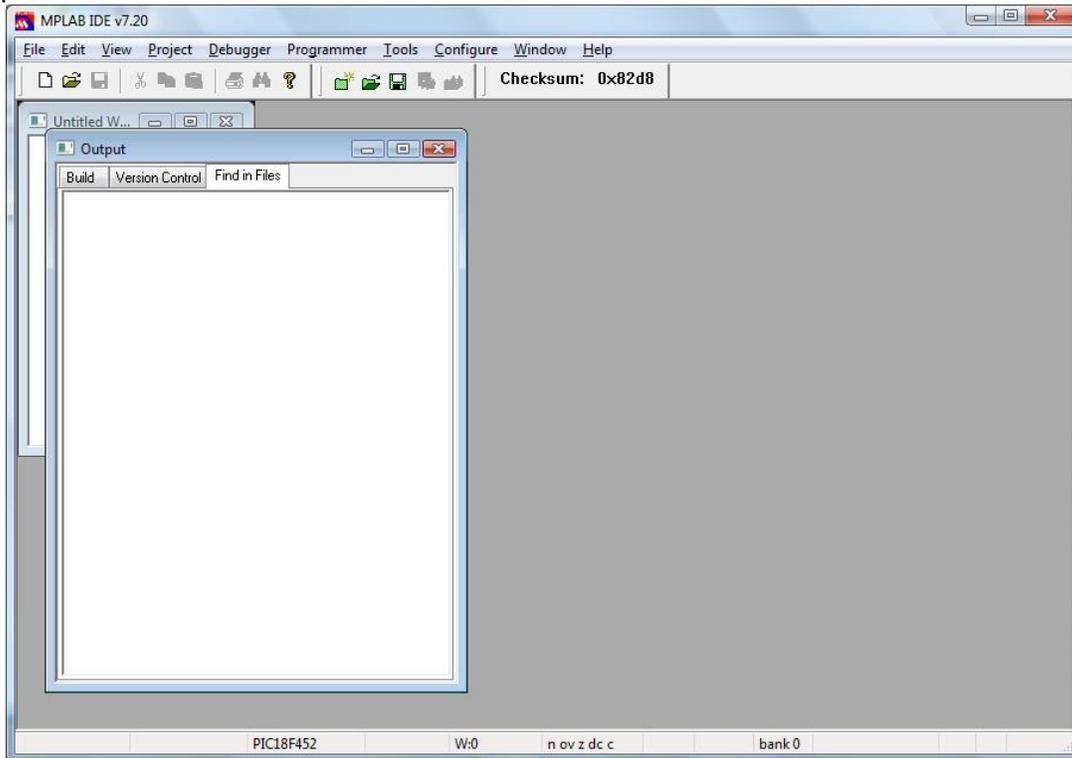
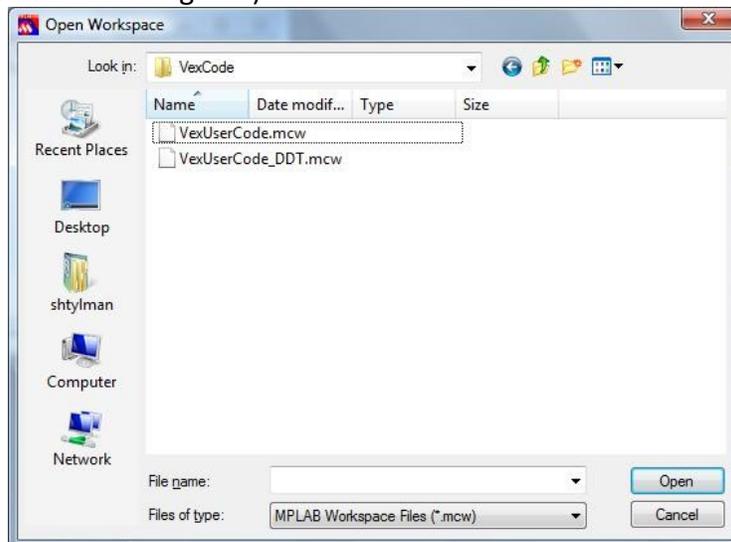


## Building the Default Project with MPLab

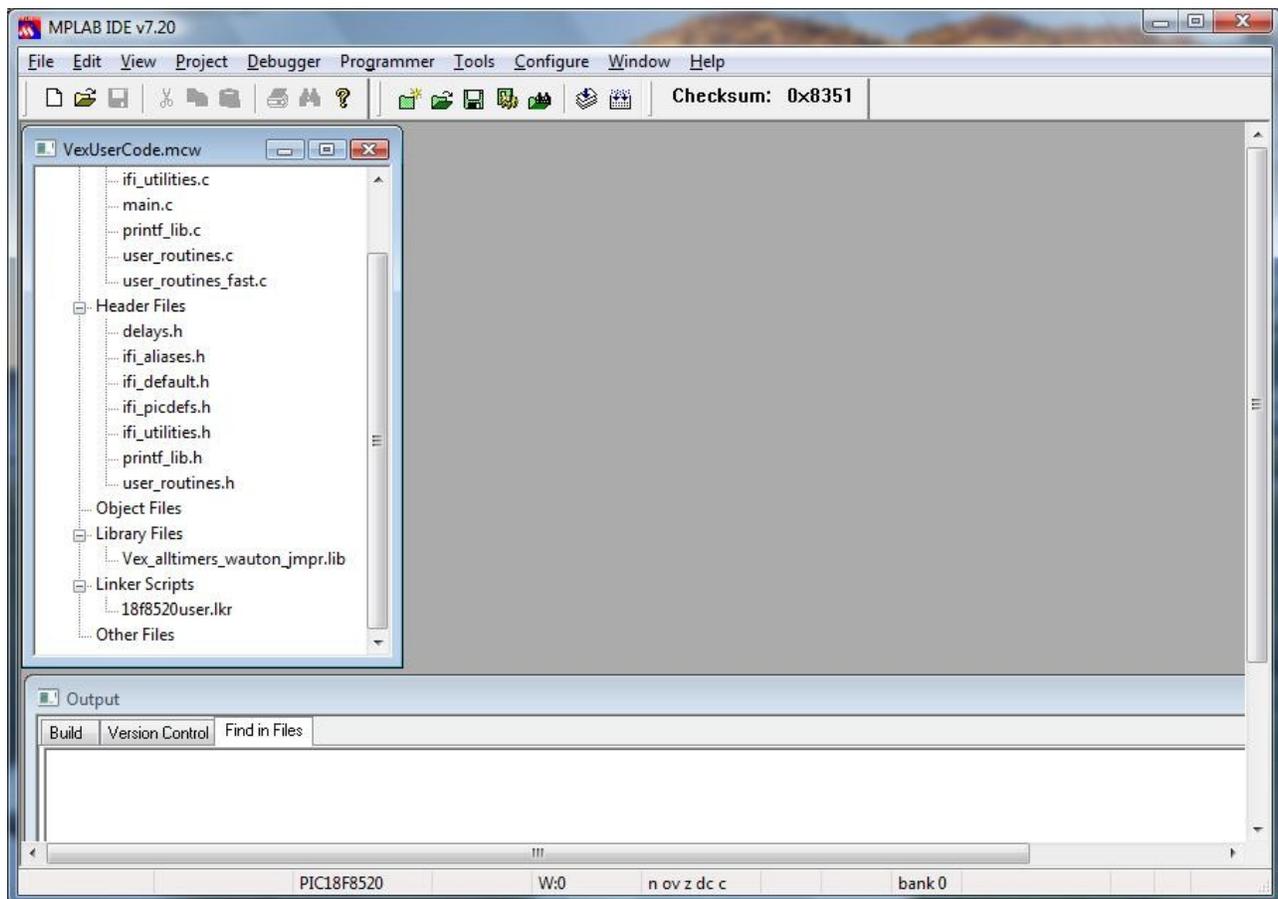
1. Open the MPLab IDE.



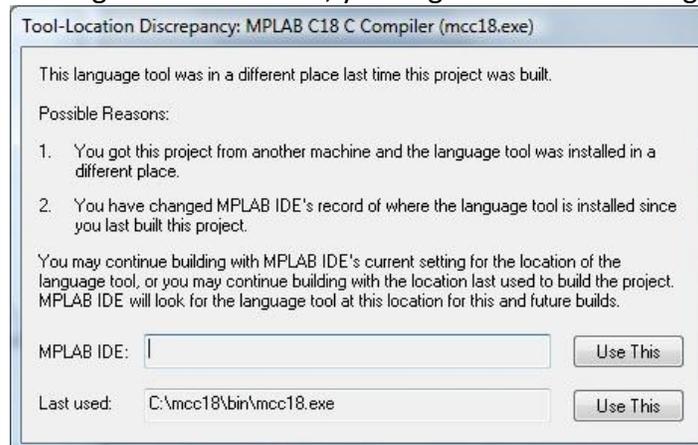
2. The above is the default blank MPLab workspace. Currently no project is loaded. We want to load the provided default Vex project.
3. Click on **File**, then on **Open Workspace**.
4. A dialog will appear asking for you to specify a project file.
5. Using the dialog, navigate to the folder that contains the default code. It is called **VexCode** by default (if you have not changed it).



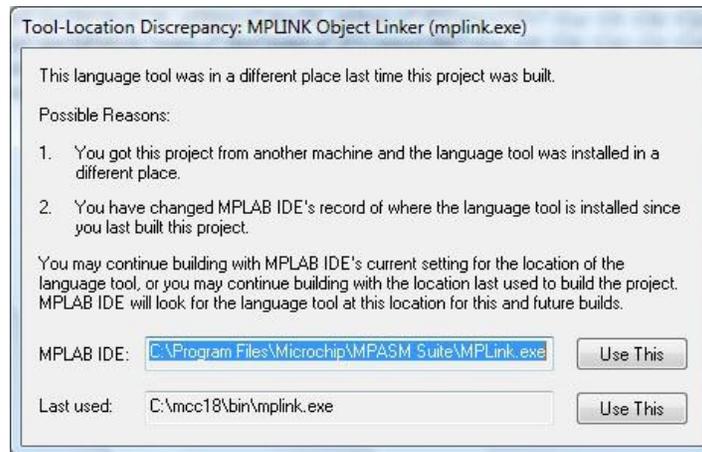
6. Select the workspace file you wish to open. In our case, it is the **VexUserCode.mcw** file.
7. Click on it, and then on **Open**.
8. The workspace area will change to the following.



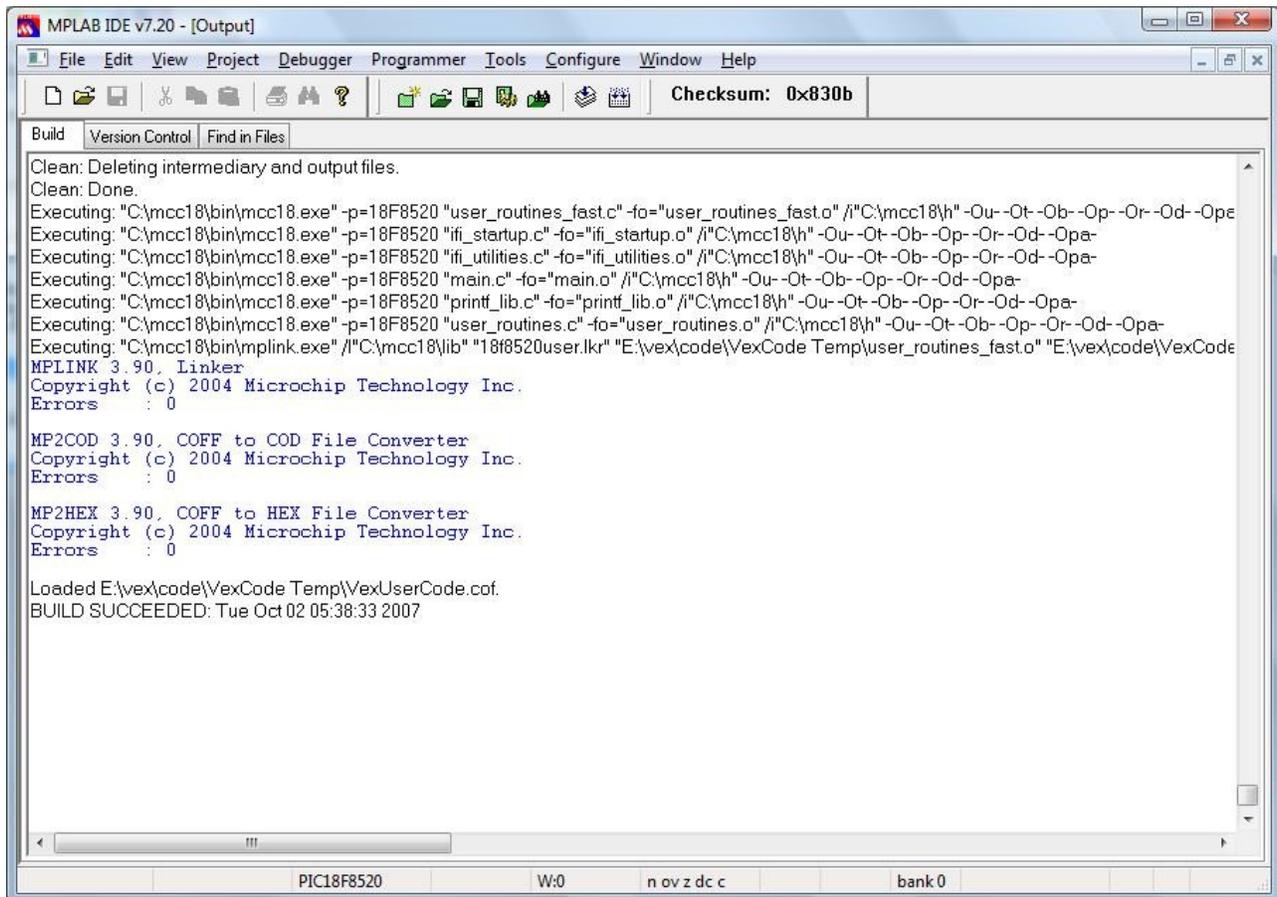
9. On the right hand side we have a list of project files. We will mostly be concerned with the *Source* and *Header* files.
10. The bottom contains an *Output* window. When you build your project, any errors or successes will be reported here.
11. We now want to build the default code. This will create a **.HEX** file which we will then upload to the controller. The **.HEX** file represents a *compiled* version of your code.
12. To build the **.HEX** file, navigate to **Project** (on the menu bar) and then to **Build All**.
13. Note: If you are building for the first time, you might see the following dialogs.



14. If you used the default C18 installation directory, click the **SECOND** Use This button, next to the *Last Used* line. Otherwise, you must type in the full path location of the **mcc18.exe** program on the MPLAB IDE Line. (This will be the installation path you used plus *\bin\mcc18.exe*)



15. This screen is also very similar and you should once again use the **SECOND** Use This button if possible. Again, if you did not use the default installation path for C18, then you must type in the full path to the **mplink.exe** program on the MPLAB IDE Line. (This will be the installation path you used plus `\bin\mplink.exe`).
16. Once the build has started running, you will see the **Output** window start to fill up with information.



17. Any errors would be reported in the **Output** window (Maximized above). In our case, the default code compiled with 0 Errors, and the *MPLink Linker* also ran with 0 errors. The **.HEX** file was only created if the last line says BUILD SUCCEEDED.
18. You will now have a **VexUserCode.hex** (default name) files in the same folder as the rest of the default Vex code.