1. Install [Visual Studio 2010](http://www.microsoft.com/visualstudio/en-us/try) (Professional version recomended).
2. [Install the game server](http://www.windward.net/codewar/2012_01/c_sharp.php).
3. [Extract PlayerCppAI](http://www.windward.net/codewar/2012_01/images/extractpcppaiwin.png) from [LastRobotStanding.zip](http://www.windward.net/codewar/2012_01/LastRobotStanding.zip).
4. The following instructions are for installing boost c++ libraries. Your proctor may have already installed this on your system.  
   Download the boost installer from <http://www.boostpro.com/download/>.
5. Run the boost installer. you can either close Visual Studio before running the installer, or restart Visual Studio after running the installer.
6. In the variants page, check Visual C++ 10.0 (Visual Studio 2010), and check the multithreaded debug, static runtime variant.
7. In the components page, *uncheck* everything *except* for the following. **Make sure you set them to have the green check mark, otherwise you'll get build errors.**
   * Boost header files (required)
   * Boost DateTime
   * Boost Regex
   * Boost System
   * Boost Thread
   * Add to path
8. NOTE: There have been difficulties with the Windows installer, we have found better luck compiling boost from the ZIP file referencing it directly.
   * This video will assist you visually in completing the steps described below: <http://www.youtube.com/watch?v=5AmwIwedTCM>
   * Go to <http://www.boost.org/>
   * Click “Get Boost” image at the far top right of the page
   * Click the “download” link under the latest release (1.52.0 at the time of this writing)
   * Download the zip file (NOTE: 7zip version is much smaller if you can work with 7zip files, otherwise just grab the .zip file)
   * Extract to a directory on your system. I am using C:\boost
   * Open a Visual Studio command prompt and navigate to the directory where you extracted boost
   * Run bootstrap.bat from the root directory to build the boost automated build program
   * When finished bjam.exe should be built run it with the following parameters
   * PROMPT>bjam.exe toolset=msvc-10.0 variant=debug,release thread=muli link=static
   * This will take about 20 minutes to complete so grab your favorite beverage and contemplate life for a bit.
   * Lastly, copy the generated stage/lib directory one level up to the boost root directory.
   * When finished you have now compiled Boost and you just need to setup the environment variable in Windows as detailed in step 9 below. Set it to the destination of your Boost root, in our case it was C:\boost\boost\_1\_52\_0 (NOTE: do not add a trailing “\”)
9. On the destination page, copy the destination folder path to a system environment variable called BOOST\_ROOT. The project is setup to use this environment variable, so if you don't set it, you'll get build errors.  
   The installer takes about 10-15 minutes, depending on your connection speed.
10. In Visual Studio go to File, Open, Project/Solution and go to the directory you extracted PlayerCppAI to. [Open the file PlayerCppAI.sln.](http://www.windward.net/codewar/2012_01/images/openslnwin.png)
11. [Open the project properties and set the command line arguments.](http://www.windward.net/codewar/2012_01/images/cppcmdargswin.png) The arguments are ip address of the server, your name, and your password.
12. [Start the game server.](http://www.windward.net/codewar/2012_01/c_sharp.php)
13. [Run the client (CTRL+F5).](http://www.windward.net/codewar/2012_01/images/startclientwin.png) You will get a command window that will print out turns, etc. [You should see your client connected in the server window.](http://www.windward.net/codewar/2012_01/images/connectwin.png)
14. Start a game on the server. [You should see turns listed in the command window.](http://www.windward.net/codewar/2012_01/images/turnslistedwin.png) If you do, you are successfully configured.
15. One additional note: Sometimes Visual Studio produces incorrect IntelliSense errors when you're working with C/C++. You can disable the error reporting of IntelliSense, which has no impact on build error reporting. Go to Tools > Text Editor > C/C++ > Advanced. Under the IntelliSense section, set Disable Error Reporting to True.