Microsoft Visual Studio Express 2012 Setup for C

I think it is best for students to have social interaction in the CS lab; however, some people find it easier to use the Microsoft Visual Studio development tools from their home Microsoft PC and then use ssh to move it to CS servers.

1. Downloading Microsoft Visual Studio Express 2012 for Windows Desktop:

- google microsoft visual studio express for windows desktop
- Download from the Microsoft web site. (There are other sites which will try to trick you so that they can drop viruses or spyware on your machine.)
- There are some differences in the various versions.
- Download whichever product is suitable for your system at home

2. Open New Project

> Templates > Visual C++ > Win32
> Win 32 Console Application
> Name: *cs1713proj0*
> Create Directory for Project – check
> Press OK button.
> In the wizard, press Next button.
> Uncheck Precompiled Header
> Uncheck Security Development Lifecycle (SDL) checks (this isn't on the screen for VS 8)
> Press Finish button.

3. Set up configuration information

> Project > *cs1713proj0* Properties
> Configuration Properties
> Linker > General > Enable Incremental Linking – No (/INCREMNTAL:NO)
> Press OK button

4. Set up indentation for Visual Studio

> Tools > Options

> Text Editor > All Languages > Tabs

> Indenting – Smart

> Tab Size – 4

> Indent Size – 4

> check Insert Spaces

5. Add your .c source file

>select Solution Explorer tab
> right click on Source Files
> Add New Item
> select C++ File
> Name: *cs1713p0*.c (very important that you specify .c)
> press ADD button

At the top of your file (before other include files), specify:

```
#define _CRT_SECURE_NO_WARNINGS 1
```

6. Remove the .cpp file

> select Solution Explorer tab
> right click on *cs1713proj0*.cpp (very important that you select the .cpp file)
> select remove
> Press Delete button in the confirmation window

7. Command arguments can be set here:

If still on Solution Explorer Tab:
> right click on your *cs1713* project
> Configuration Properties
> Debugging > Command Arguments – *set to whatever is needed (*See specifying data files*)*

If not on Solution Explorer Tab:
> Project > *cs1713proj0* Properties
> Configuration Properties
> Debugging > Command Arguments – *set to whatever is needed*

8. To avoid losing the console window, include a Breakpoint near the end of your code and at any program exits.

9. To compile and execute your code:

> Press the green arrow (which is right below the menu items).
> VS will execute your code and stop at the first breakpoint.
> You can continue by using the green arrow or one of the function keys.

10. Specifying input data files. Assuming you want to pass in a data file, you must specify command arguments and place the data in the directory used by Visual Studio:
    - o Place your data file in your project directory. This is the same place where the .c source is located.
      example: C:\Users\larry\Documents\Visual Studio 2013\Projects\cs1713proj0\cs1713proj0
    - o If you are using stdin, specify the following in the command arguments (see #7 above):
      `< fileName.txt`
    - o If you are using command switches, specify something like the following in the command arguments (see #7 above):
      `-i fileName.txt`

11. Specifying that you want the output to go to a file. By default, output directed to a file will be placed in the directory used by Visual Studio for you .c source file.
    - o If you are writing to stdout, specify the following in the command arguments (see #7 above):
      `> outputFileName.txt`

12. To increase the width of the console window:
    - > Once the console window displays (you may want a break point in your code so that it doesn't disappear), click the top left corner of the console window.
    - > Select **Properties**
    - > Select the **Layout** tab
    - > Change the Screen Buffer Size to 120
    - > Change the Window Size to 120