Source Code Editors

+ Mac

– Option 0: Xcode and scp command

 ∗ Download and install Xcode from Mac App Store

 ∗ Installing Xcode will install a c++ compiler, along with source code editor. This will allow you to write, compile, and run your program locally. (i.e., no need to login to bobby to do so.)

 ∗ Compiling and running your program on Mac does not equate to not having to test your program on bobby. A program compiled with Mac may produce slightly different results then a program compiled using bobby. **(i.e., you must test your program on bobby before turning it in, more on this later.)**

 ∗ Guide to creating a C++ file, compiling, and running a program:

 ∗ **Open Xcode, click on 'File' on the menu bar. Click 'New' to create a file. Click on the 'OS X' tab, click on 'Source', then select 'C++ File' and click next.**

 ∗ **Uncheck 'Also create a header file'. Enter the name of the new C++ file to be created, click next, and then choose where you want to save your file.**

 ∗ **Code editor window will appear, and you may begin writing your program.**

 ∗ **Compiling, and running your program locally is the same as in the CS Lab. Open a terminal session, navigate to the directory where you saved your program, compile with 'g++ <program.cpp>', run with './a.out'.**

 ∗ **To transfer your program to your CS account, so that you may test your code with bobby, use the following terminal command: 'scp <program.cpp> <CSlogin@bobby.cs.unlv.edu:>'**

 ∗ **You can now login to bobby using the terminal, the file will be in your home directory. YOU MUST TEST YOUR PROGRAM ON BOBBY BEFORE SUBMITTING AN EXERCISE/ASSIGNMENT. A PROGRAM THAT WORKS ON MAC IS NOT GUARANTEED TO WORK ON BOBBY. ALL YOUR PROGRAMS WILL BE GRADED USING BOBBY.**

– Option 1: TextWrangler

    ∗ Download and install TextWrangler:
http://www.barebones.com/products/textwrangler/download.html

    ∗ TextWrangler will allow you to save programs directly to bobby, eliminating the need to transfer your program via the scp command.

    ∗ Guide to creating a C++ file, and setting up TextWrangler to save to bobby.

    ∗ **Open TextWrangler, click on 'File' on the menu bar. Click 'Save to FTP/SFTP Server…'**

    ∗ **Enter your bobby login information, and before clicking 'Connect' check the 'SFTP' box.**

    ∗ **Enter the name of file you want to create, and select the directory where you want the file saved, then click 'Save'**

    ∗ **If you look at the top of the TextWrangler window it will say 'File Path: sftp:/whatever-directory-you-saved-to.cpp'**

    ∗ **As long as you have an internet connection, saving your file will save it to bobby.**

    ∗ **To open a file from bobby in TextWrangler, click on 'File' on the menu bar. Click 'Open from FTP/SFTP…'. Once you've found the file, double click to open it.**

    ∗ **To compile and run your program, login to bobby via the terminal as you would regularly.**

+ Windows

– Option 0: Notepad++ with NppFTP plugin

    ∗ **Download and install Notepad++:**
https://notepad-plus-plus.org/download/v6.8.8.html

    ∗ Open Notepad++. In the menu bar click 'Plugins' –> 'Plugin Manager' –> 'Show Plugin Manager'

    ∗ Find NppFTP from the list, check the box next to it, and click 'Install'

    ∗ To open the NppFTP window click on 'Plugins' –> 'NppFTP' –> 'Show NppFTP Window'

* On the new sidebar that appears, click the gear icon –> 'Profile settings'

* For the 'Hostname' field enter 'bobby.cs.unlv.edu' fill out the 'Username' and 'Password' fields with your CS account credentials. Change 'Connection type' to 'SFTP' then click 'Close'

* Your bobby profile is now saved to Notepad++. Press the '(Dis)Connect' icon on the NppFTP and select the profile you created. This will connect you to bobby using your CS login.

* Create, or open a new file in Notepad++. If the file is a new file that has not been saved locally, you must do so first before saving it on bobby. After the file has been saved locally,using the NppFTP side bar right click the folder where you want to save your file and click 'Upload current file here'

* Alternatively you could download a file from bobby by locating the file using the NppFTP, right click the file, then select 'Download file'

– Option 1: PuTTy

* If you would rather use the terminal interface of emacs, but want syntax highlighting, then just download Putty. Its similar to SSH Secure Shell Client.
    http://www.putty.org

* Install PuTTy, and set up the hostname, and your username just as you did with SSH Secure Shell Client.

* Syntax highlighting is automatically enabled when using emacs. To enable line numbers: While you have a file open in emacs press the escape key, then press the 'x' key. Then type 'linum mode' and press enter. This will enable line numbers.

* Everything else with PuTTy works similar to SSH Secure Shell Client, if not the same.