

# C/C++ IDE Guide

## For COSC 251 – Programming Languages

### Updated Spring 2017

For this course you will need an IDE that handles both C and C++. We suggest Visual C++ (through Visual Studio) for Windows users and the XCode command line tools (for clang) and atom for the editor.

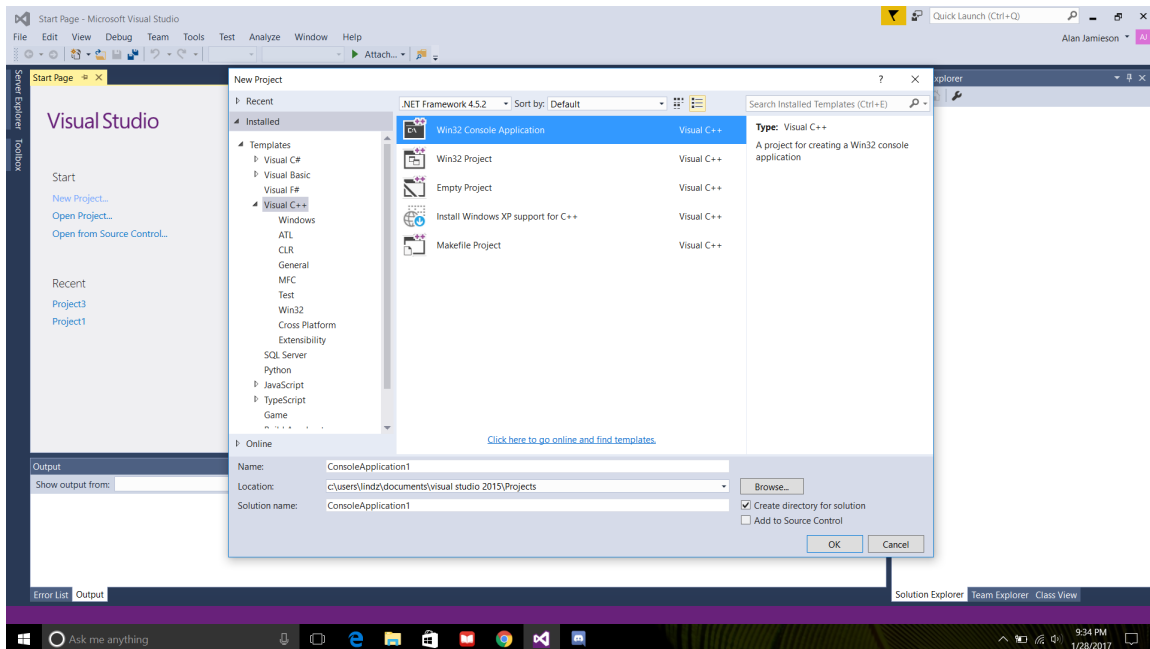
### For Windows:

Either through the program's Microsoft Imagine subscription or through Visual Studio Community (<https://www.visualstudio.com/downloads/>) download and install Visual Studio. While installing, be sure to select the C++ language feature. If you miss it, check the bottom of the document for instructions on how to change your installation.

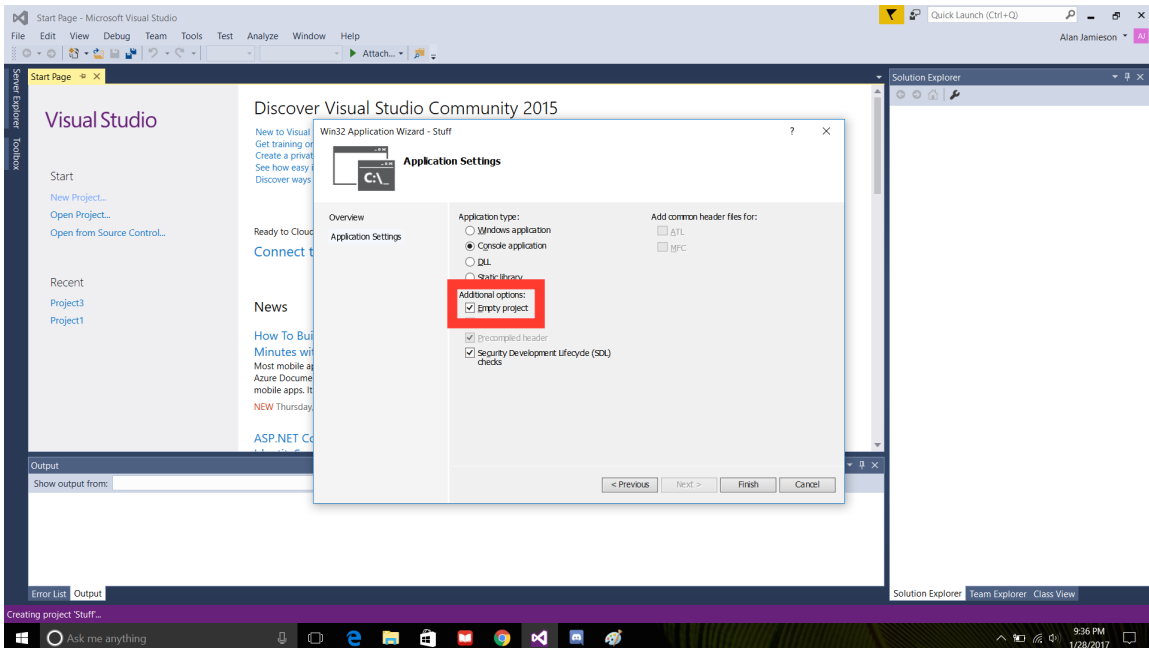
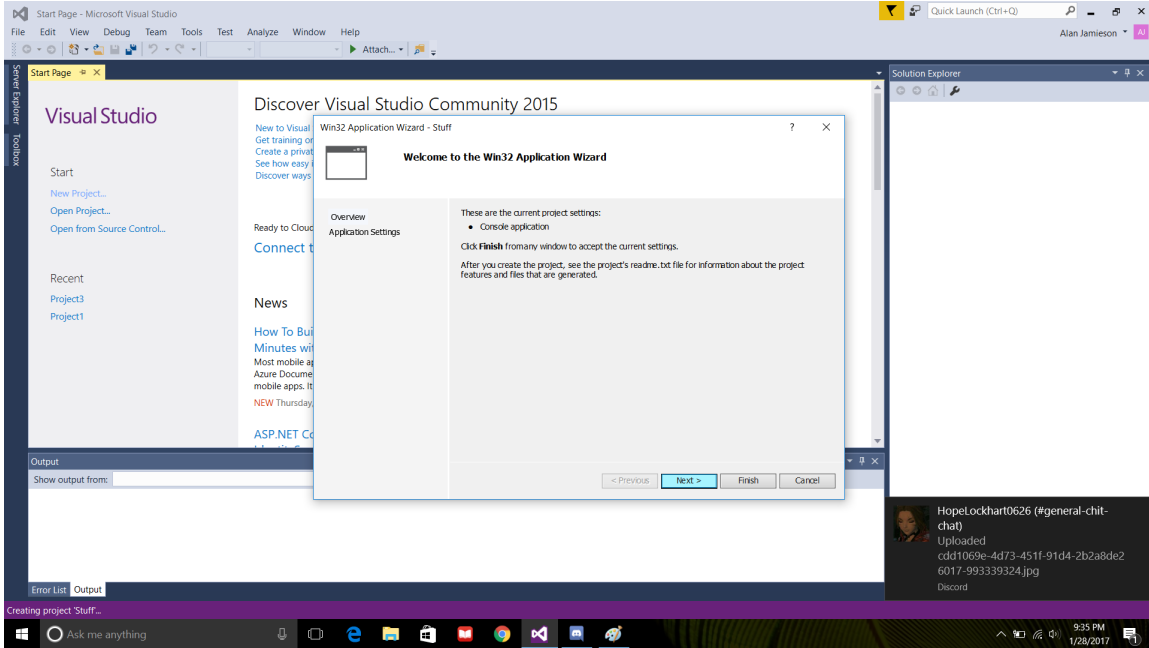
To create a C/C++ project:

1.) Start Visual Studio

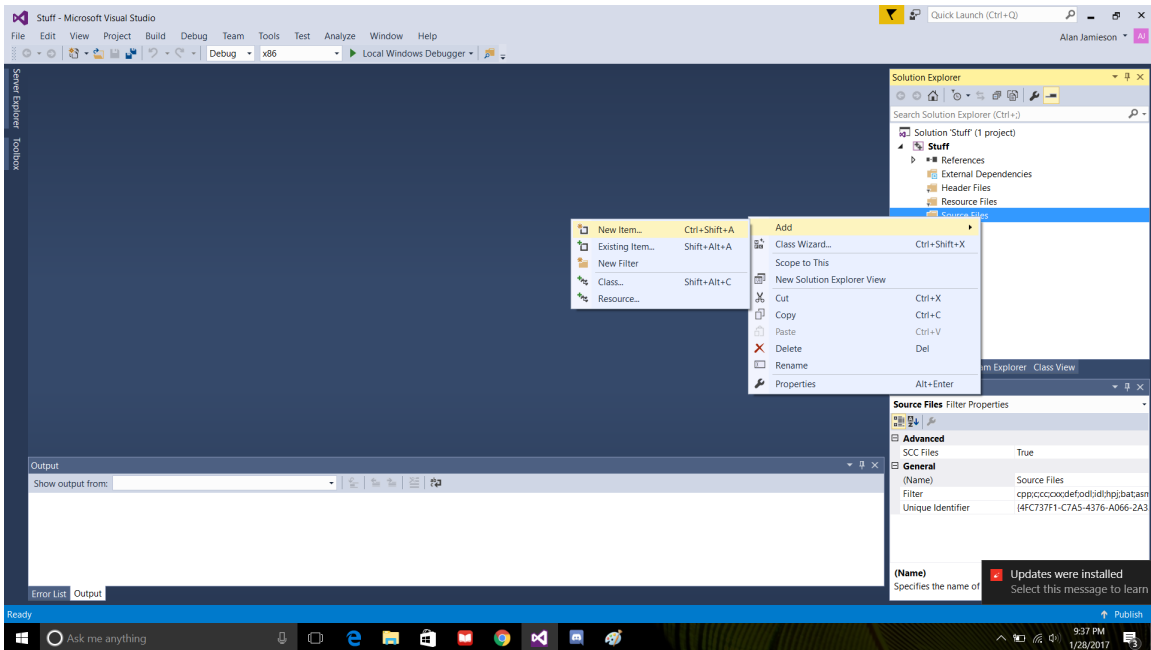
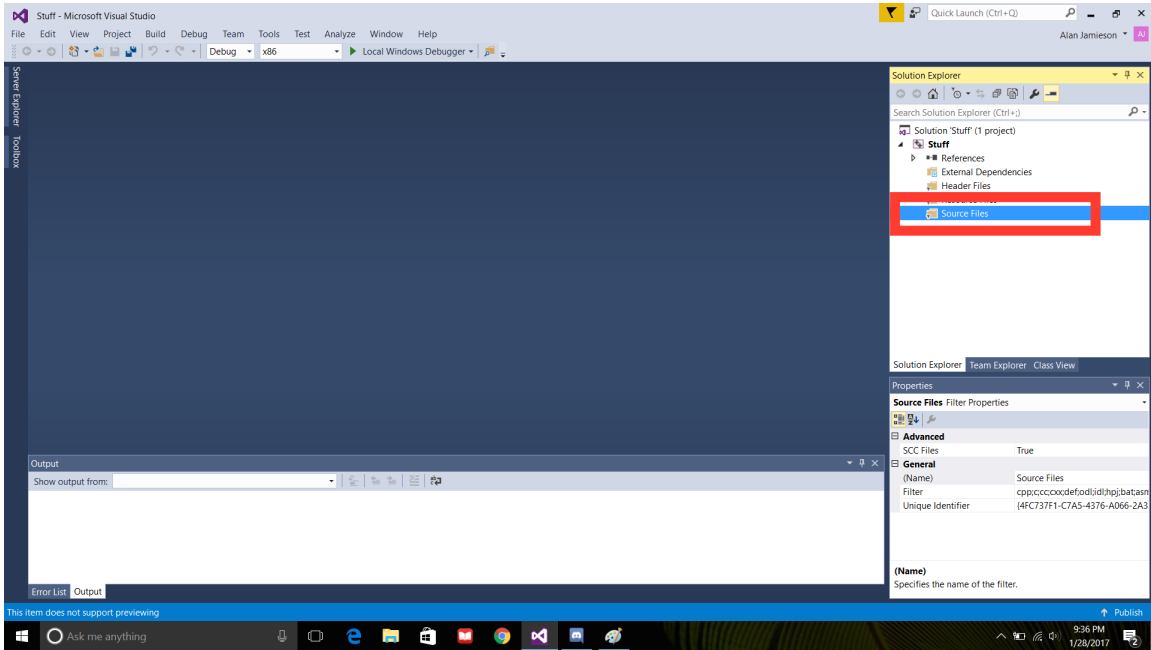
2.) Select New Project, and when the screen pops up, select Visual C++ under templates, and Win32 Console Application. Give the project a name then click OK. Pay attention to the location of your project. If you are using one of the college's computers, you should make sure you store your projects on the Desktop.



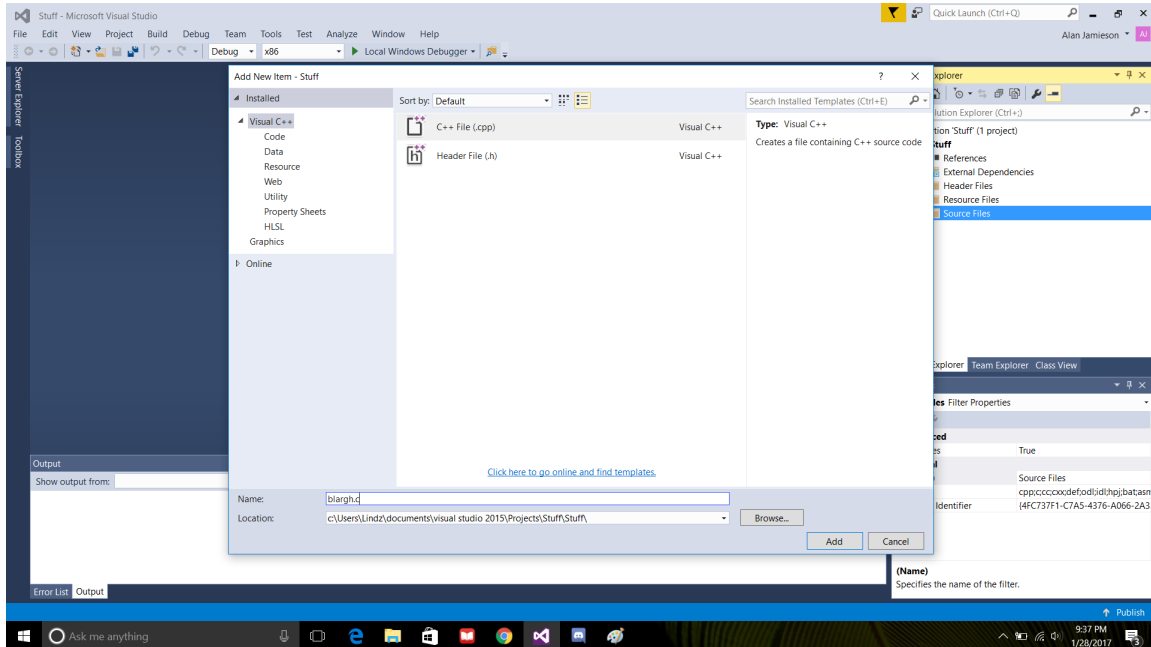
3.) In the next wizard, click Next, then check the box for Empty Project under Additional Options. Then click Finish.



4.) Once the project loads, you'll see the project explorer on the left side. Right click source files, then click Add -> Add Item.



5.) In the next screen, choose C++ file. If you are creating a C source file, be sure to add .c to the end of your file name. If you are creating a C++ source file, use .cpp.



When you go to create header files for C++, you'll follow a similar procedure, right clicking on Header Files instead, and adding a Header File from the Add New Item screen.

6.) Code and go! To hold the window open after your program terminates, you can run your program using CTRL-F5.

### For Mac:

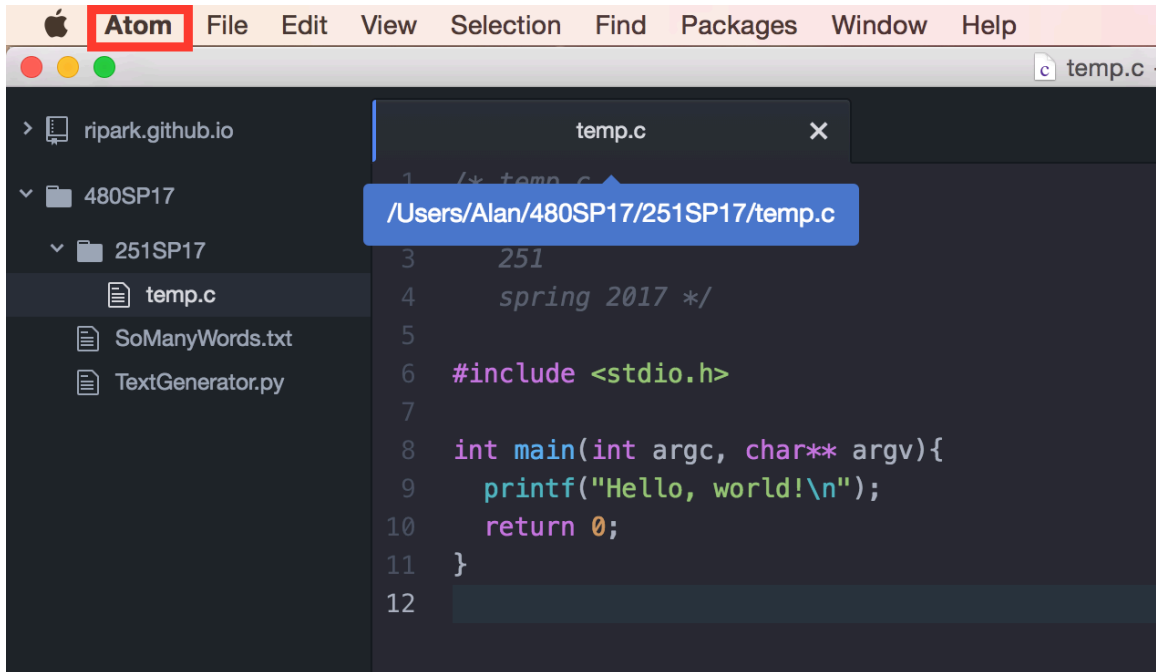
In Terminal (press **⌘-spacebar** then type **Terminal** and hit enter) type **gcc** and hit enter. If you have the XCode command line tools already installed, it will give you a clang error. If you do not, it will prompt you to install them. If you have an older version of OS X, you may need to download and install XCode through the App Store first.

Setting up atom:

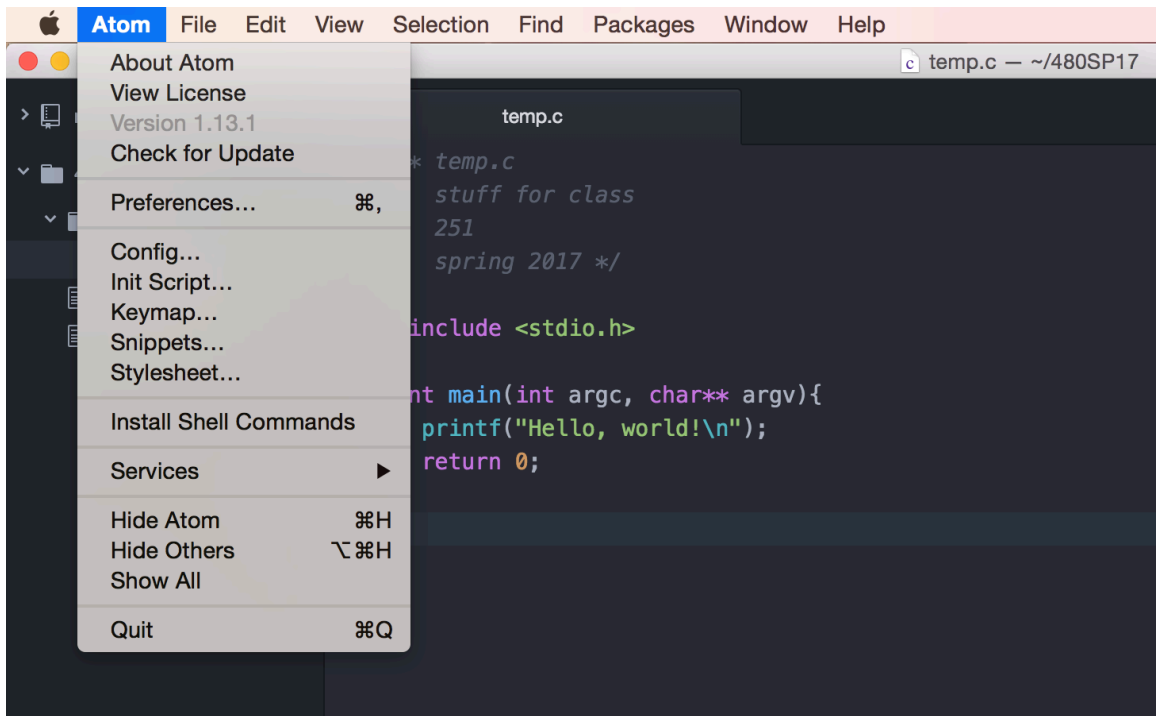
1.) Download atom from atom.io

2.) Run atom and find the package manager:

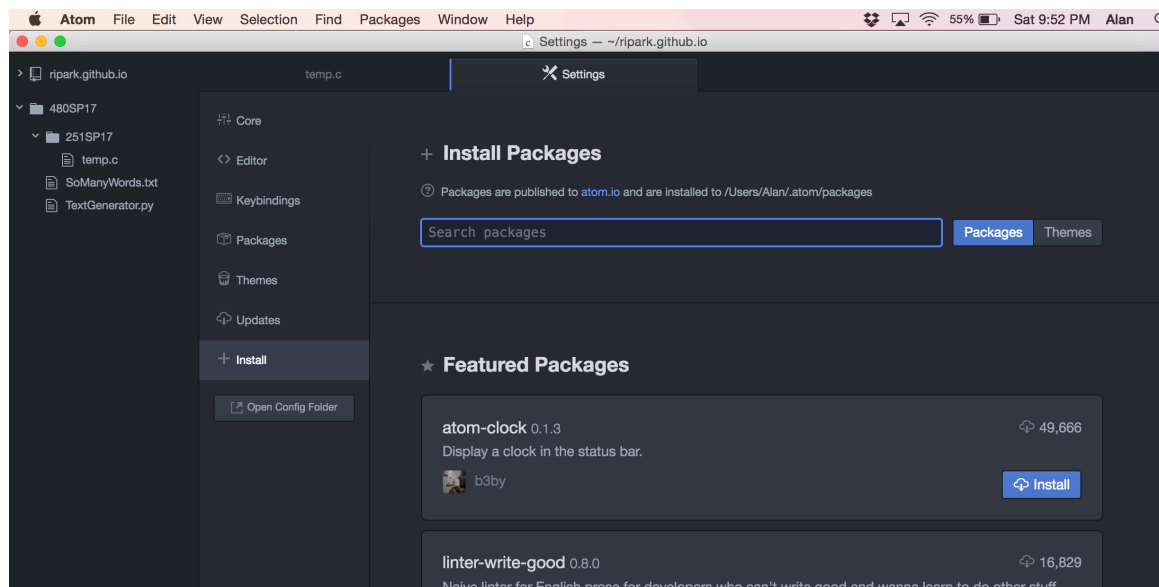
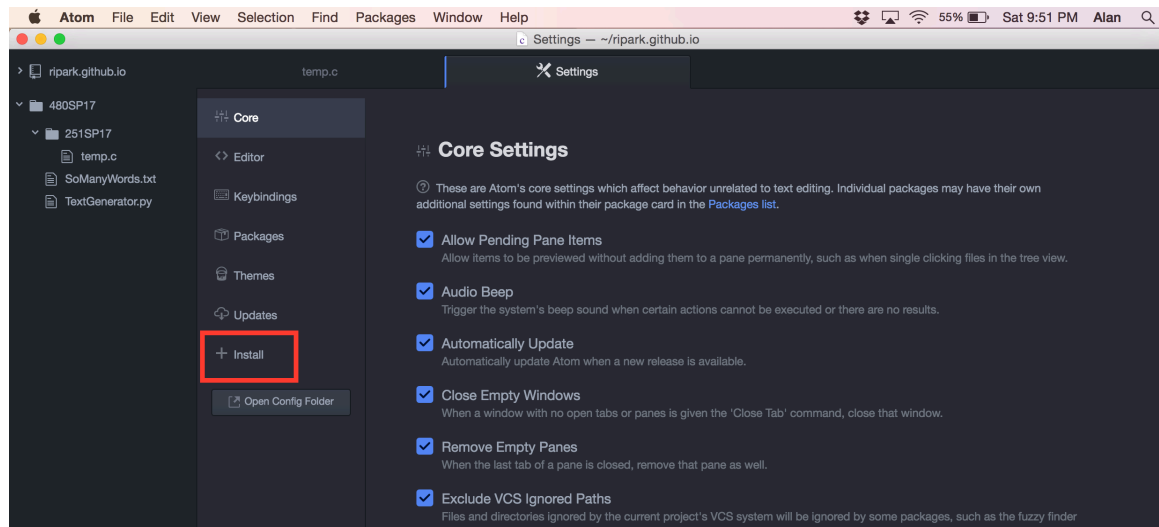
Click on Atom in the upper left corner.



Select Preferences:



Click Install:



3.) In the “search packages” search bar, search for and install the following packages:

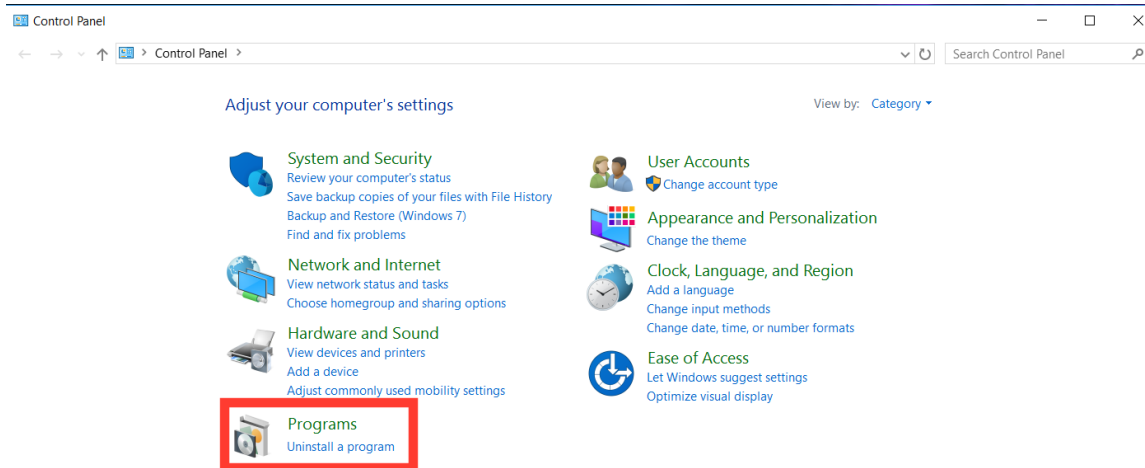
autocomplete-clang  
gpp-compiler  
script

4.) Restart atom and you should be good to go!

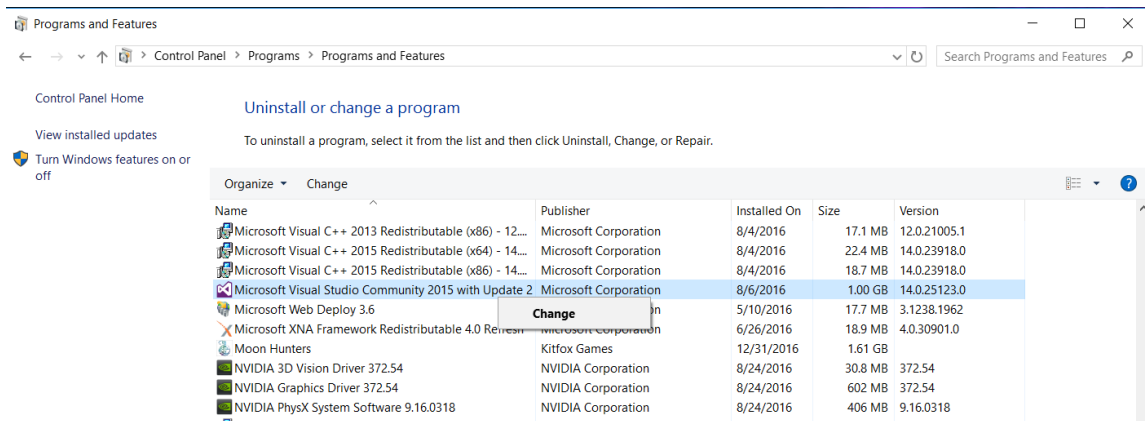
# I installed Visual Studio, but goofed and forgot to select the C++ tools!

No biggie.

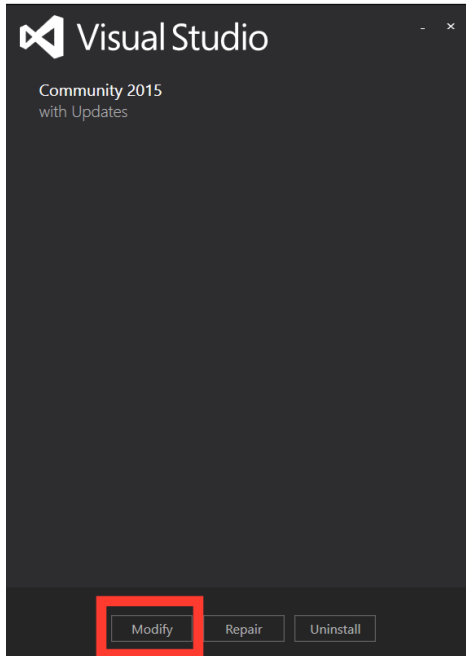
1.) Open Windows Control Panel. Select Uninstall a program.



2.) Find Visual Studio and right click and select Change:



3.) In the screen that opens up, select Modify.



4.) In the next screen check the box Visual C++ under Programming Languages, then click Update.

