

Logging in computers in labs

Username:

- First 2 letters of last name followed by
- First 2 letters of first name followed by
- Last 4 digits of CUNYFirst ID
- (all lowercase)

Password:

- 8 digits of CUNYFirst ID

EX:

A student with name **Yizhi Jiang**, her CUNYFirst ID is **12345678**. Then her user name is **jiyi5678** and her password is **12345678**

Venus account

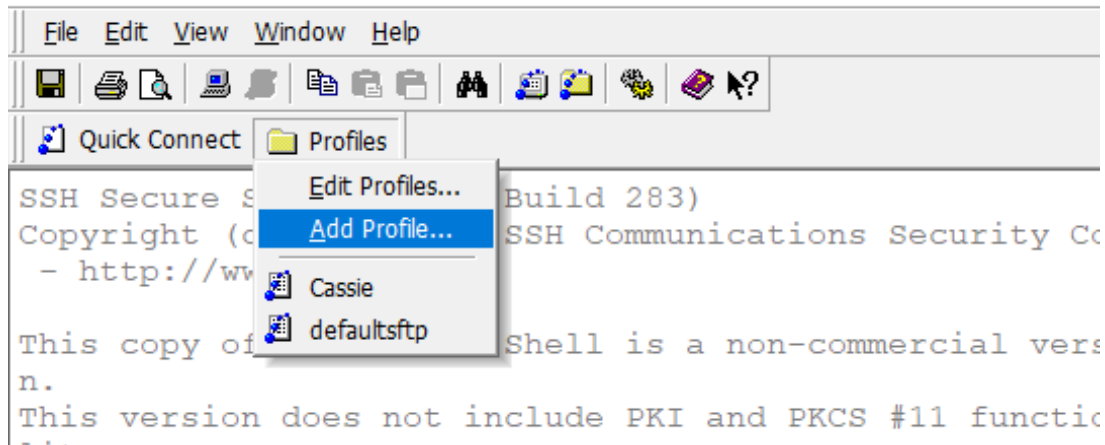
Venus is the CS department's server, which runs the operating system Unix. On Venus you will be able to compile and run your programs. The account has been setup for all the students who are enrolling in CS 111.

Using SSH Secure Shell Client (for Windows)



Download and install [SSH](#) and then run the program. If you're on the school computer, no need to install SSH, its on the desktop. Open the program.

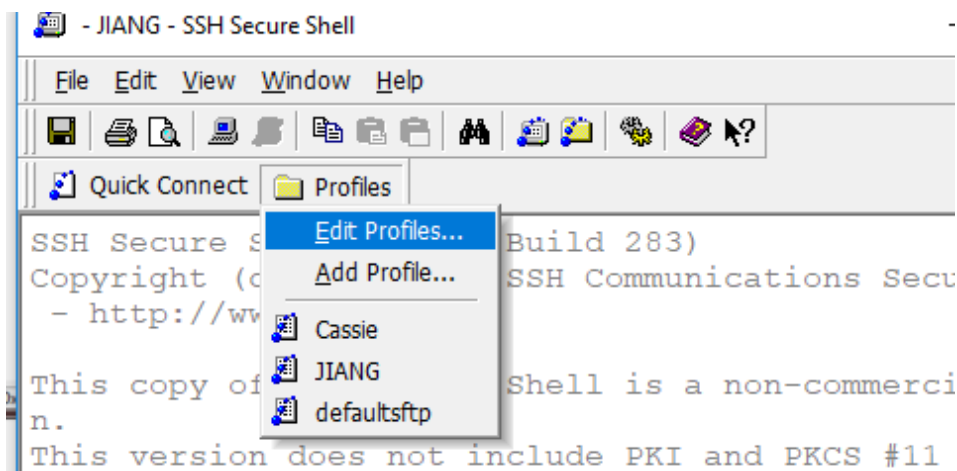
- Click on [Profile], select [Add Profiles...]



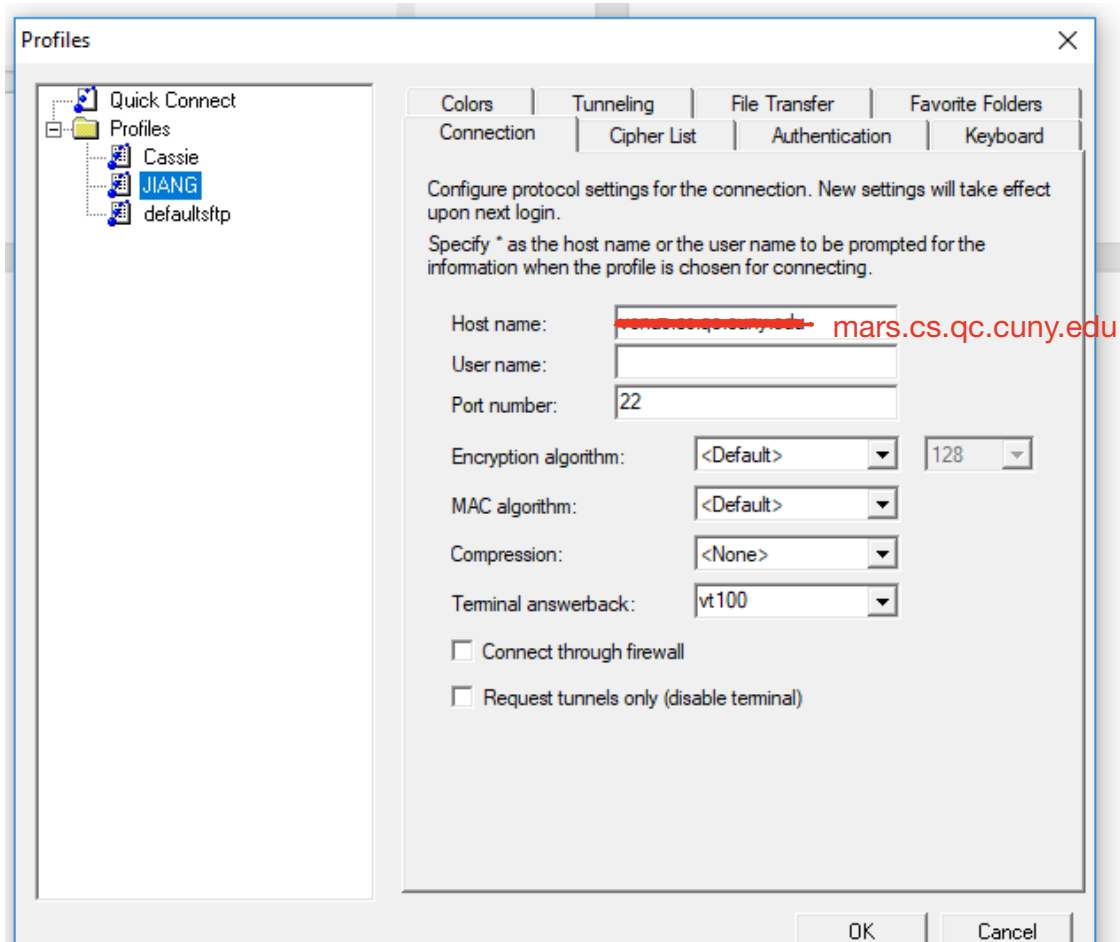
- Type in the profile name (whatever you want) in the text box.
Click [Add to Profile]



- Click on [Profile], select [Edit Profiles...]

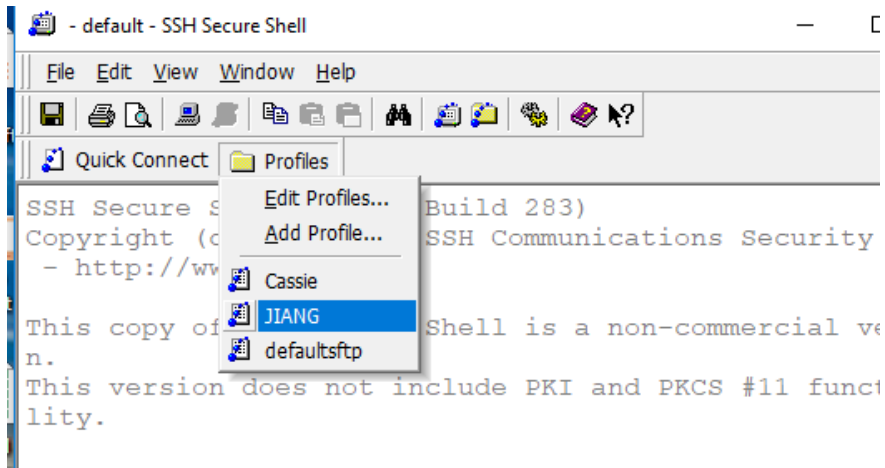


- Select your profile name which listed under [Add Profile...]

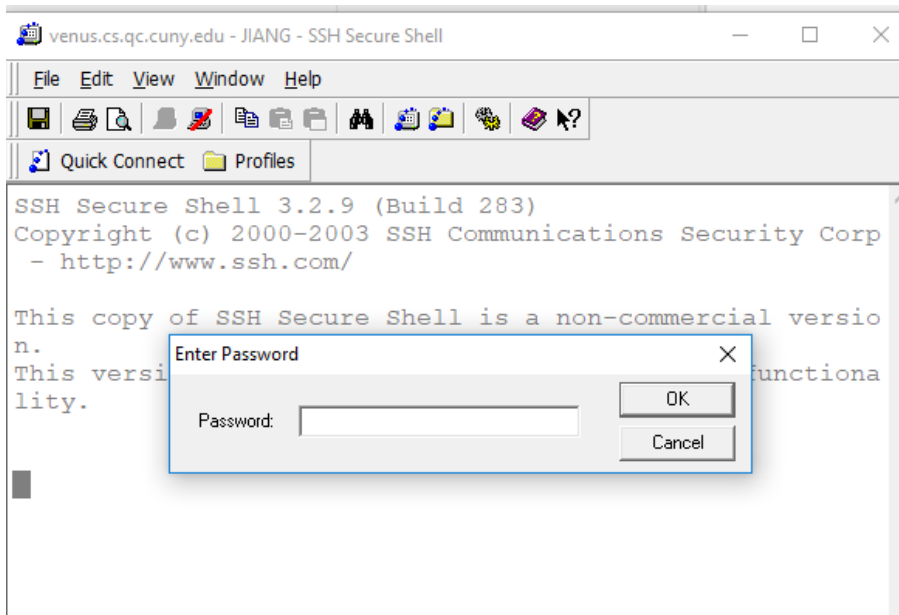


- Host name: ~~XXXXXXXXXX~~ mars.cs.qc.cuny.edu
- User name: (same as the log in name)
 - First 2 letters of last name followed by
 - First 2 letters of first name followed by
 - Last 4 digits of CUNYFirst ID
 - (all lowercase)
- Click OK.

- Click on [Profile] select the profile name you just created under [Add Profile]

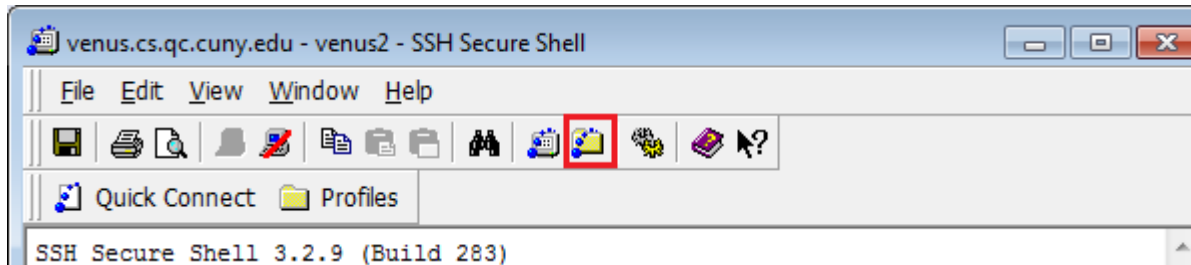


- Password: 8 digits of CUNYFirst ID

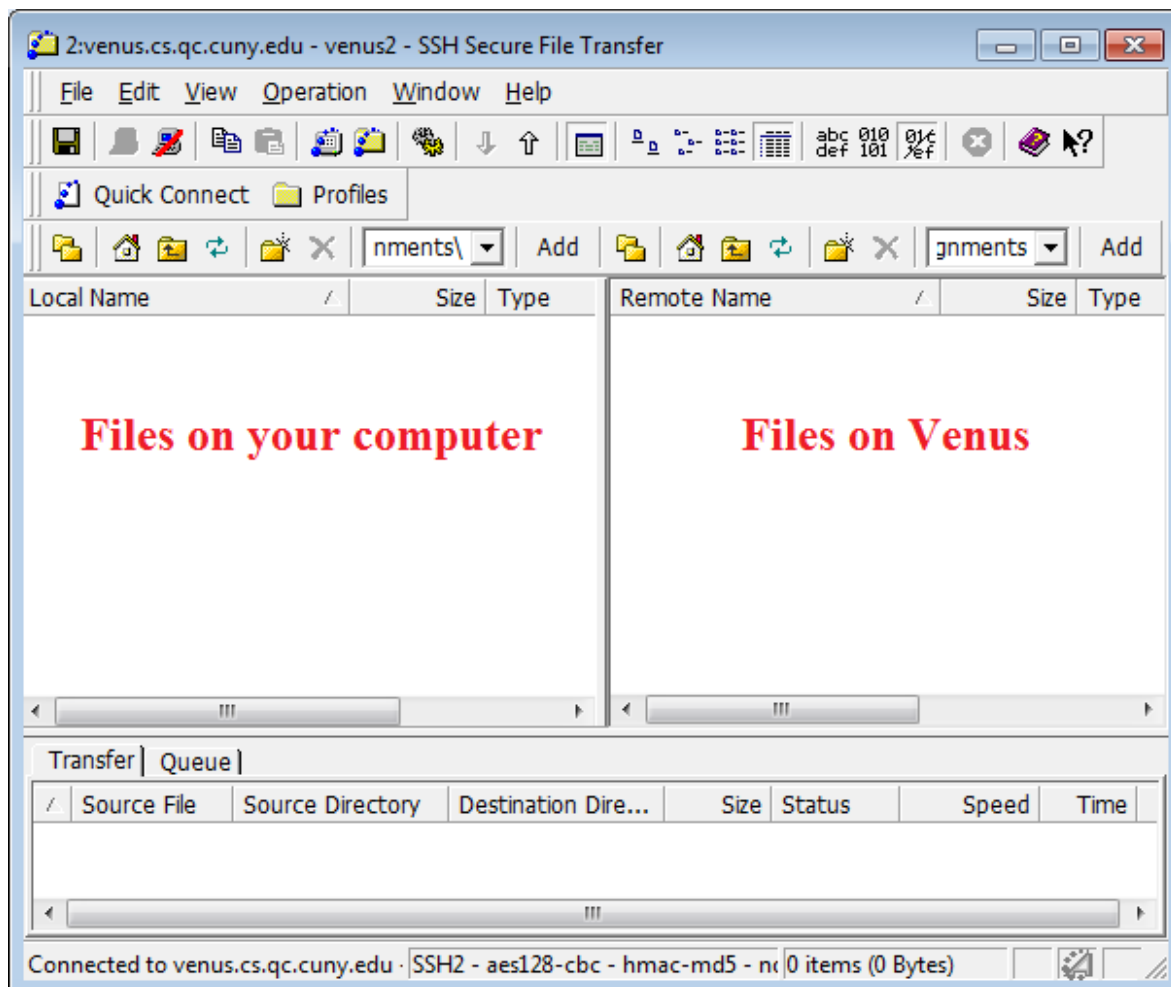


Transferring files (windows)

- **After logging in, click the New File Transfer button**



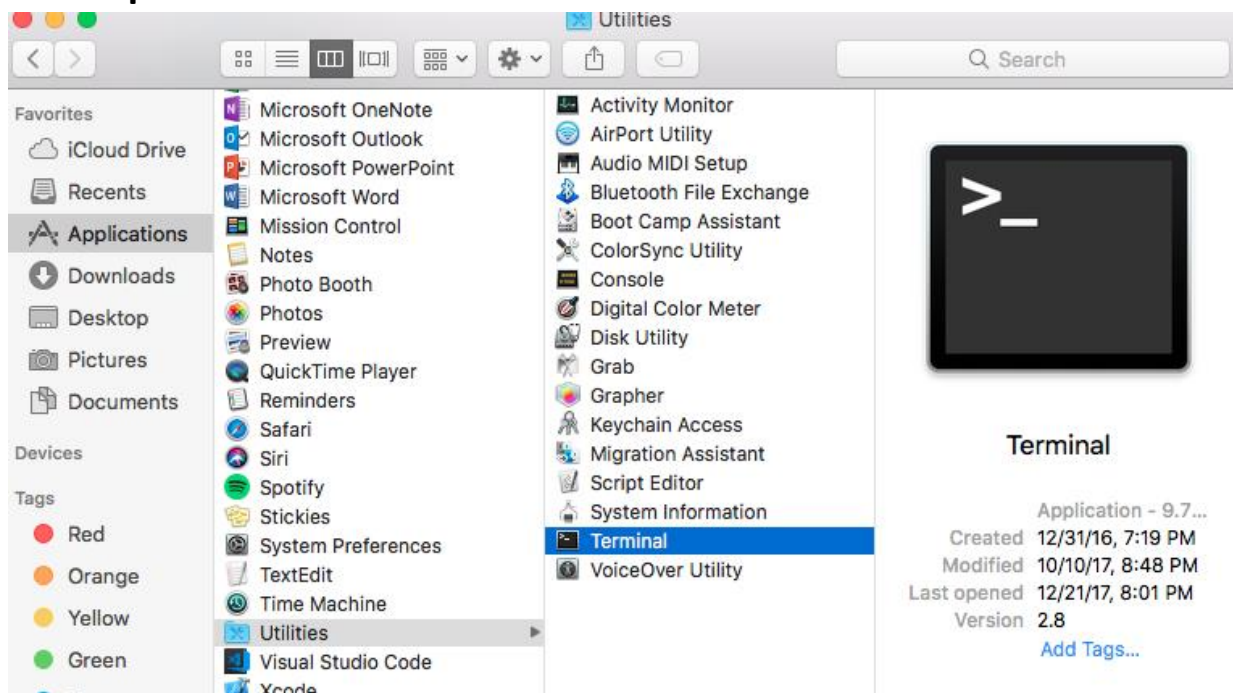
- **The left side shows files on your computer. The right side shows files on Venus. You can drag and drop to upload/download files. You can also drag and drop from the SSH window to either your desktop or Windows Explorer.**



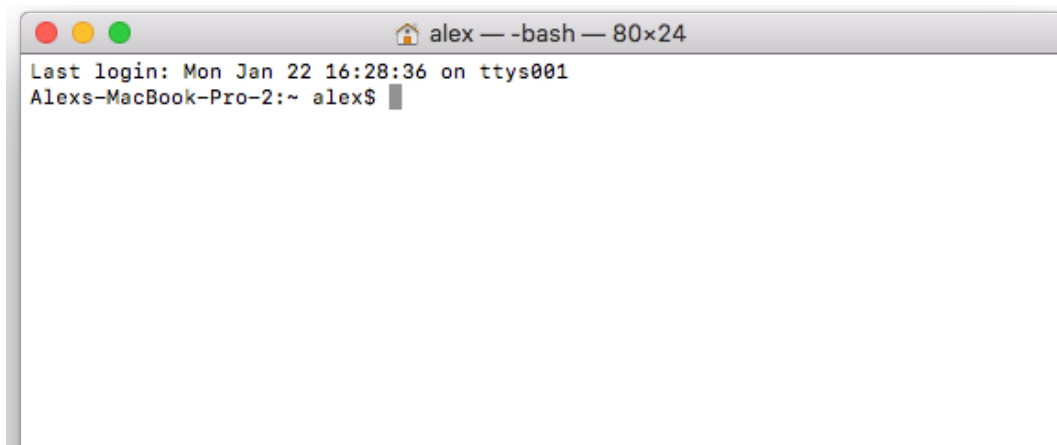
Mac Users

You can compile and run your source code locally on your machine without logging into Venus. Access to your file is straight forward and you can submit whatever files that you have created locally with ease.

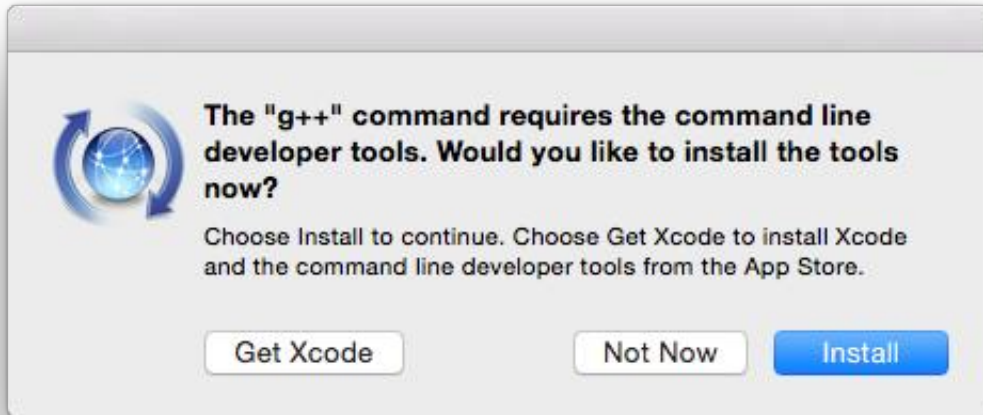
- **Go to Applications/Utilities folder. There you will find Terminal, open it.**



- **Once in terminal, you can use any Unix command. See below.**



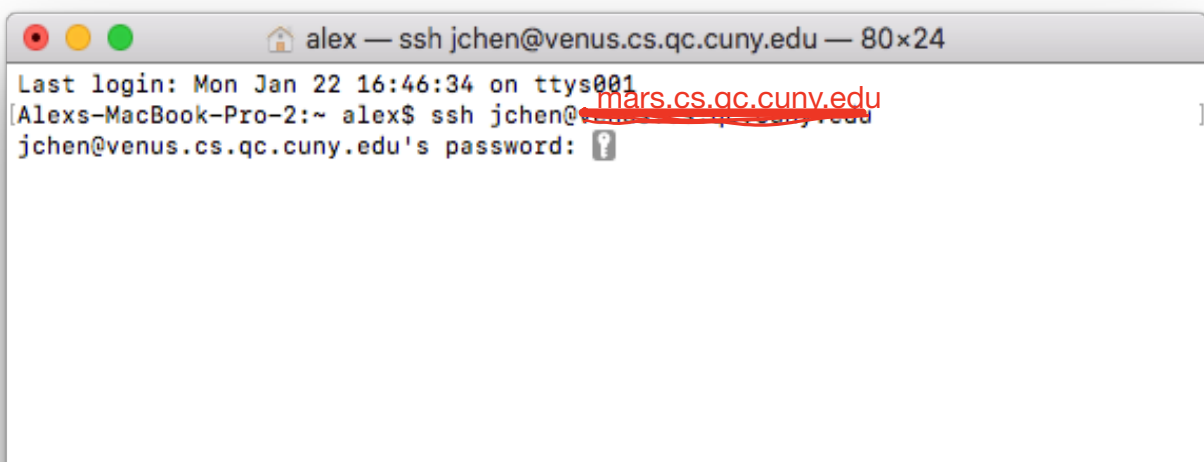
- If this is the first time you are using your Terminal, chances are you haven't installed Command Line Developer Tools yet. There will be a pop up like this below.



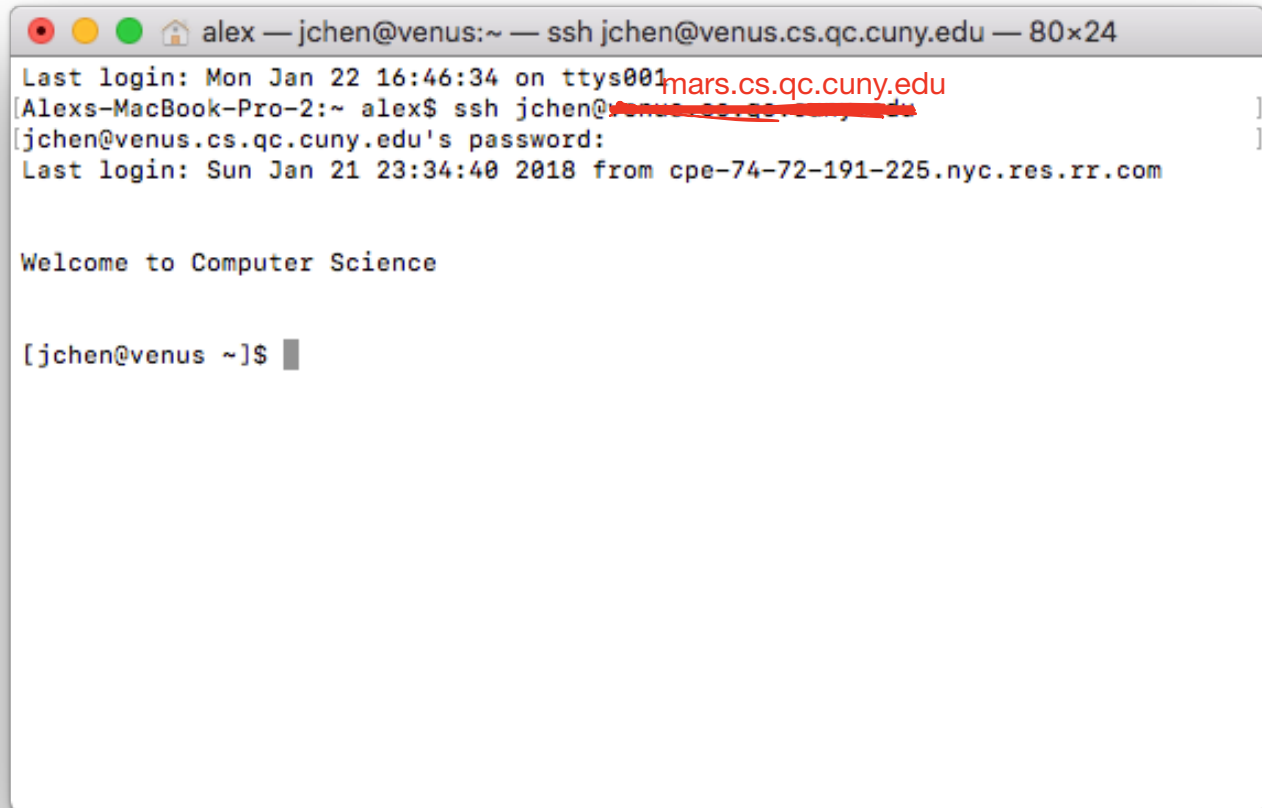
- Click on Install. There is no need to get Xcode.
- You are ready to create and compile your C++ source code using the same Unix commands that you used in class.

Login onto Venus on Mac

- Use the command **ssh** to login into `mars.cs.qc.cuny.edu`
`ssh your_username@venus.cs.qc.cuny.edu`



It will prompt you for your password. **NOTICE** when you type your password, nothing shows. That normal your computer did not freeze. Enter your password and hit enter. This screen should display.



```
alex — jchen@venus:~ — ssh jchen@venus.cs.qc.cuny.edu — 80x24
Last login: Mon Jan 22 16:46:34 on ttys001mars.cs.qc.cuny.edu
[Alexs-MacBook-Pro-2:~ alex$ ssh jchen@venus.cs.qc.cuny.edu
[jchen@venus.cs.qc.cuny.edu's password:
Last login: Sun Jan 21 23:34:40 2018 from cpe-74-72-191-225.nyc.res.rr.com

Welcome to Computer Science

[jchen@venus ~]$
```


Unix Commands

Below are some common Unix commands.

Files and Navigation:

<code>cd [folderName]</code>	Change the current directory
<code>cd ..</code>	Go to parent directory
<code>ls</code>	List the files in the current directory
<code>mkdir [folderName]</code>	Create a new folder
<code>pwd [fileName]</code>	Print the path of the current directory
<code>rm [fileName]</code>	Delete a file
<code>rmdir [folderName]</code>	Delete an empty folder
up key	Previous command (press up multiple times to see your command history)
<code>touch [fileName]</code>	Creates a file in your current directory with fileName

Compiling and Running:

<code>g++ [sourceFile]</code>	Compile a source code file and create an executable named a.out
<code>g++ -std=c++11 [sourceFile]</code>	
<code>./a.out</code>	Run the file named a.out
<code>g++ [sourceFile] -o [exeFile]</code>	Same as above, but you can specify the name of the executable
<code>g++ -std=c++11 [sourceFile] -o [exeFile]</code>	
<code>./[exeFile]</code>	Run the file with the specified name
<code>ctrl C</code>	Kill the process (you can use this to exit a program if you are stuck in an infinite loop)

Text Editors: pico

<code>pico [fileName]</code>	Open a file (or create a new file if the file does not exist)
<code>ctrl O</code>	Save the file (without closing)
<code>ctrl X</code>	Close the file (it will ask if you want to save)