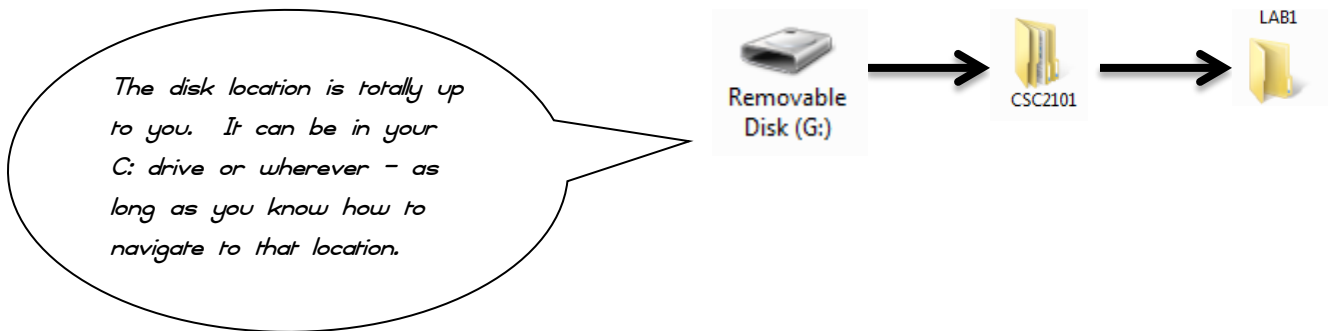


## LAB 1 (first program)

Thursday, January 22, 2015

1. Make sure your compiler & editor are installed on your laptop.
  - a. MAC users: Follow the **xcode-installation.pdf** document to install *Xcode* and *Text Wrangler*
  - b. PC user:
    - i. Follow the **mingw-installation.pdf** document to install MinGW.
    - ii. I recommend installing *Notepad++* to use as your text editor. It is free to download here:  
<http://notepad-plus-plus.org/download/v6.6.8.html>
2. Wherever you want to save your class data –on a jump drive or your hard drive, you will need to create a folder structure as follows. Create a folder named **CSC2101**. Then, inside this folder, create a folder named **LAB1**. For today's lab, I have created these folders on my jump drive, which happens to be drive G:



3. Use your text editor to write your first program **exactly** like the one below.  
Change the Author (line 3) to your name, Major (line 4) to your major, and on line 15, replace the name April to yours.

```
lab1.cpp
1  /*****
2  * File Name:  lab1.cpp
3  * Author:    April R Crockett
4  * Major:     CSC
5  * Date:      July 29, 2014
6  * Purpose:   My first C++ program!
7  *****/
8
9  #include <iostream>
10 using namespace std;
11
12 int main()
13 {
14     cout << endl;
15     cout << "Hello, my name is April.\n\n";
16     cout << "This is my first lab in CSC2100-001!\n\n";
17
18     return 0;
19 }
```

4. Save your program under the **LAB1** folder as **lab1.cpp**. My program is saved under G : /CSC2101/LAB1
5. Open either the Command Prompt (on WINDOWS) or the Terminal (on MAC).  
Please do not use an IDE for this assignment.

6. Using the appropriate DOS or LINUX commands, navigate to the location where your program is located on your computer.

- a. To change to a different drive letter, type the letter and then a colon. Example:

```
G:
```

- b. Now I am at my G: drive, but I need to get inside the CSC2101 folder and then the LAB1 folder. To change inside a directory, you type `cd` (stands for change directory) and then type the exact name of the folder you are changing to. If I just wanted to change to the CSC2101 directory, then I would type:

```
cd CSC2101
```

Then I can change inside the LAB1 folder by typing:

```
cd LAB1
```

You may also change directly inly LAB 1 from the G: drive by typing:

```
cd CSC2101/LAB1
```

If you ever need to back up one folder – lets say from CSC2101/LAB1 back to just CSC2101, then you use the following command:

```
cd ..
```

- c. Now that I am inside the LAB1 folder, I should be the folder that contains my source file, named `lab1.cpp`. To make sure, I can type:

```
WINDOWS- dir
```

```
MAC- ls
```

and this will list out the files and directories in my current folder. I can see by doing this that `lab1.cpp` is inside this directory.

7. Now I can compile. The compiler command to compile a single file into an executable (runnable) file is:

```
g++ sourcefilename.cpp -o executablefilename
```

Where `sourcefilename` is the name of the file you want to compile and `executablefilename` can be anything you want it to be. I usually name my executable file the same name as the source file. You can also leave off the `executablefilename` and your executable file will be created as `a.exe` on windows or `a.out` on a Mac. So, to compile I would type

```
g++ lab1.cpp -o lab1
```

If I typed `dir` now (or `ls`) then I will see both `lab1.cpp` and `lab1.exe` (Windows) or `lab1.out` (Mac).

8. Run your program.

MAC command to run program- `./executablefilename`

WINDOWS command to run program- `executablefilename`

For our first program, you will replace executablefilename with lab1:

MAC- `./lab1`

WINDOWS- `lab1`

9. Take a screen capture of your command prompt or terminal and then paste the screen capture in MS Word or other similar application. Save it.
- WINDOWS – To capture an active window then press Alt+PrtScn. PrtScn is a key usually in the top right of your keyboard. Then open MS Word. Right click on the blank document and click Paste. Then save the document as “**lab1screen**”.
  - MAC – Press the **Apple key** **⌘** + **Shift** + **4** all at the same time. You will see the cursor change to +. Drag a box around the section you want to copy and release the mouse. You will find a capture of the screen on your desktop again entitled ‘Picture \_’. You can then rename it to “**lab1screen**”.

## What to Turn In

You will need to zip your **LAB1** file, which should contain **lab1.cpp** & **lab1screen**. When I grade your lab, I will compile & run your file so you do not need to worry about including your executable files in your upload. Upload the zipped file to the ilearn drop box named **LAB ONE** by **Wednesday, January 28<sup>th</sup> by 11:59PM**. The drop box will close at midnight. If you do not know how to zip a file, please ask for help in doing this.

**DOUBLE CHECK THAT YOUR UPLOAD WAS SUCCESSFUL!!**

