

Lab 1 - developing programs in JGrasp.

Follow the instructions EXACTLY as stated. Please do this lab exercise one step at a time, and understand each step before moving on to the next. Make sure your results match the instructions. Although Lab 1 will not be graded, some future labs will be, and you should practice submitting this lab to UB Learns.

Before coming to lab, make sure you have a UB account. If you have trouble logging in during a lab session: (as per

http://www.sens.buffalo.edu/assistance/getting_started/#Password):

Your initial password is your person number, 8 digits without any punctuation. The link for seeking access is

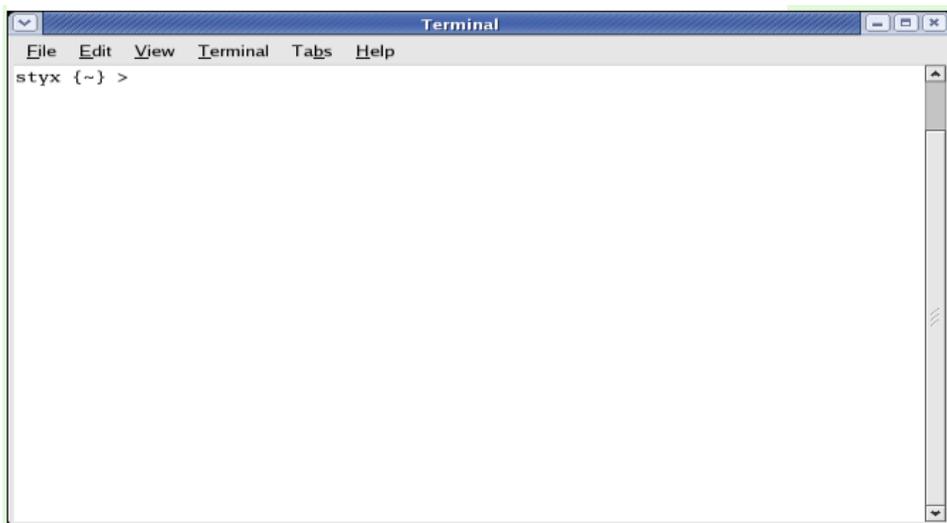
<http://www.sens.buffalo.edu/accounts/>

1. If you're doing this in the Lab or any of the CSE Labs (Bell 101, Bell 340, etc.) / PC/Mac Instructions start at #2.

1.1. Log into your computer and create a Terminal session. Here are two ways to bring up a terminal:

1. Right click on an empty space on your desktop and select "Open Terminal" from the menu.
2. Click on the "Accessories" menu, then click on "Terminal".

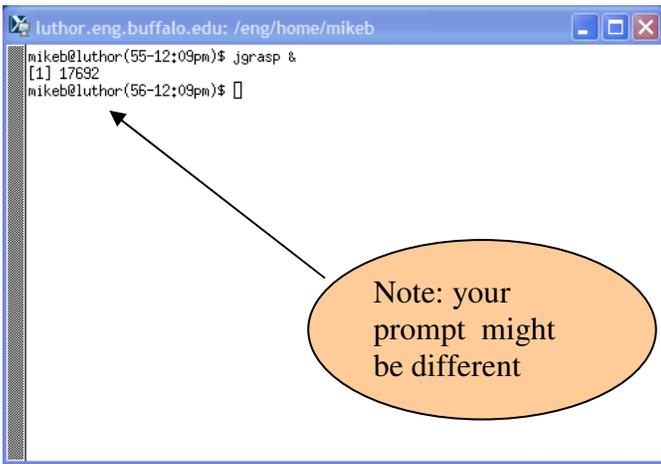
You will see a terminal window that will look like this (the words you see may be different, but you will get a prompt ">"):



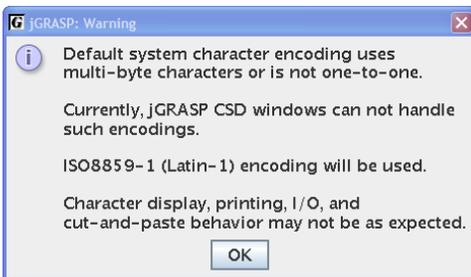
1.2. In the terminal, type

jgrasp &

and hit the enter key. As below.

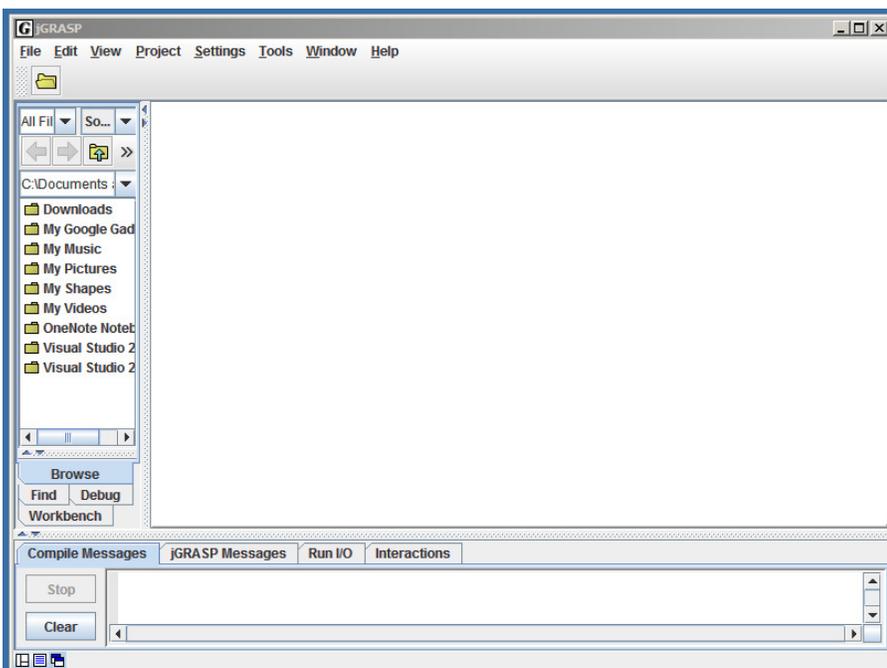


You "might" get the following error. Just ignore it.

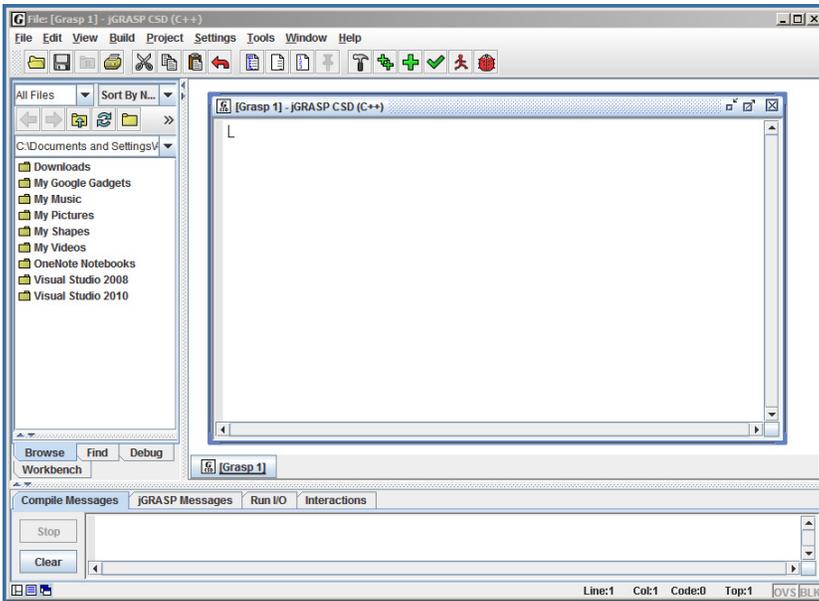


2. If you're doing this on a Mac or Windows PC, start up JGrasp. You should have followed the class instructions for installing JGrasp, the Java JDK, and the C++ compiler at <http://www.cse.buffalo.edu/~mikeb/EAS230Instructions2.htm>

3. JGrasp should start up



4. Select **File - New - C++** an editable file should show up on the right side

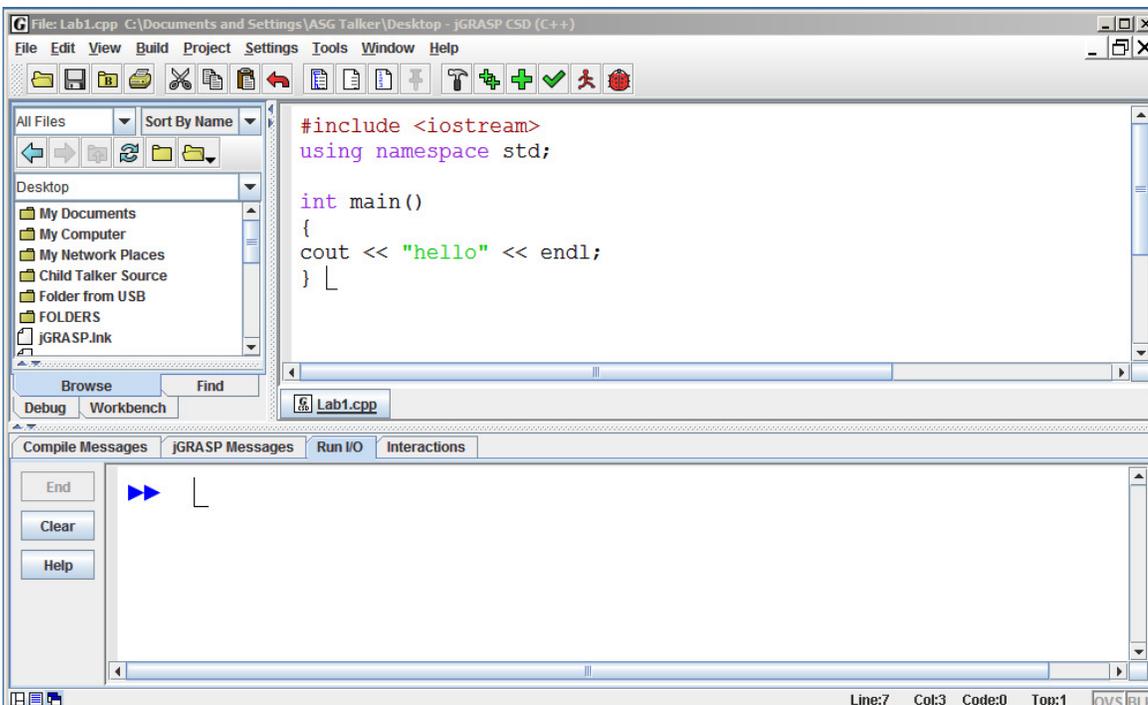


In the file edit window, type everything exactly as it appears:

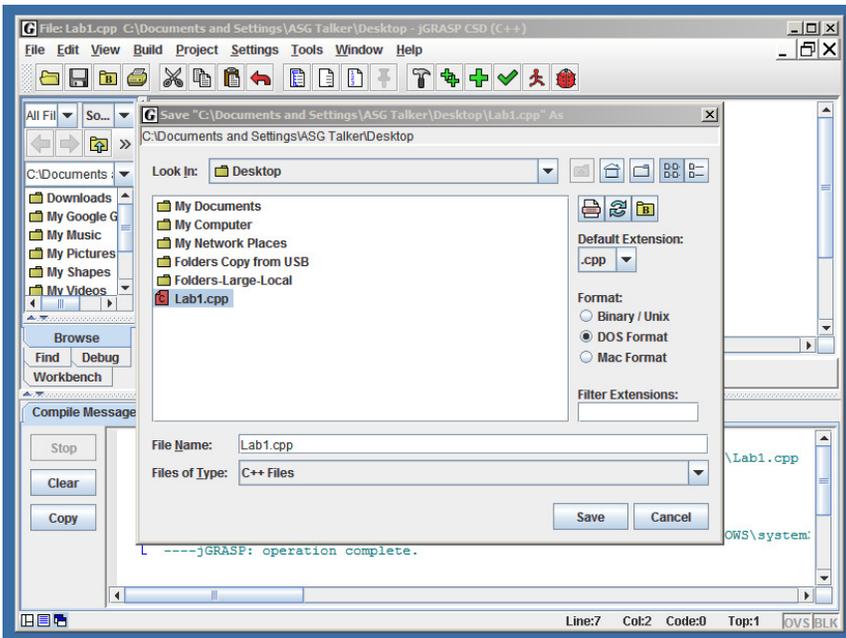
```
#include <iostream>
using namespace std;

int main()
{
cout << "hello" << endl;
}
```

It should look like this:

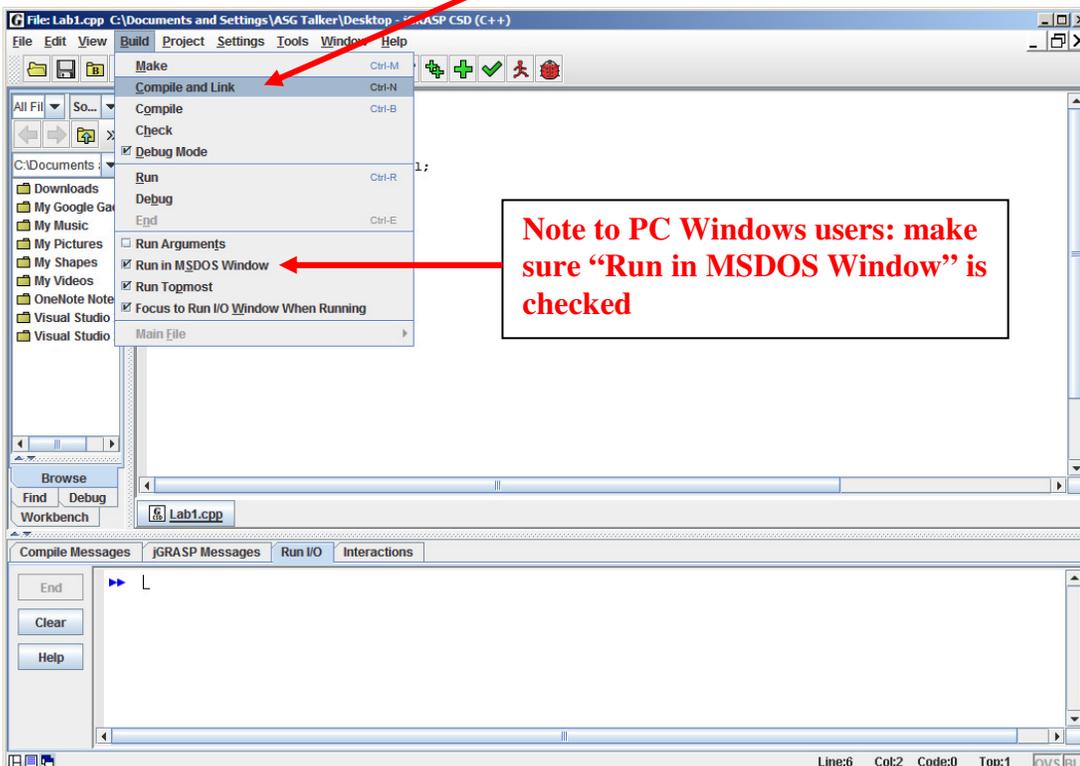


5. When you're finished typing it in, save it to a file named *Lab1 . cpp*
Select **File - Save As....** and enter *Lab1.cpp* as the filename.



Don't forget the **.cpp** extension.

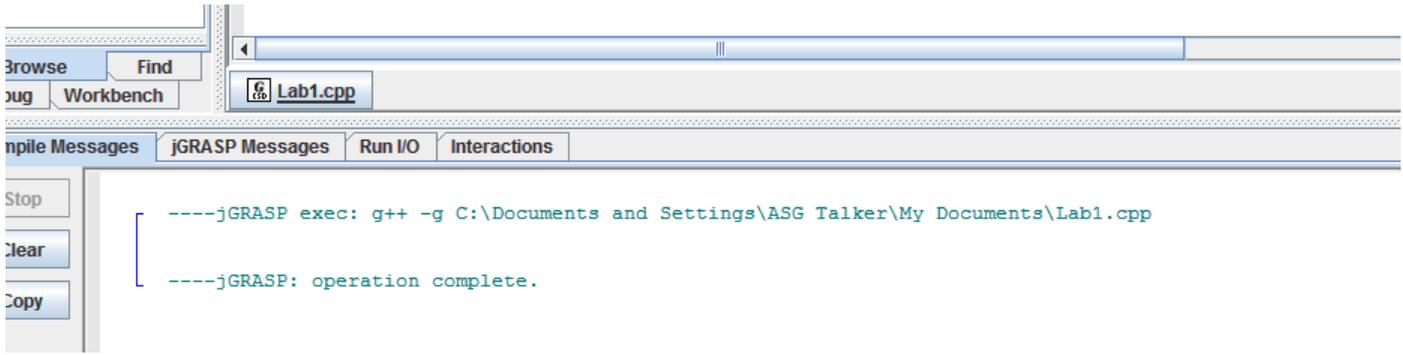
6. Once the file is saved, click on **Build – Compile and Link**



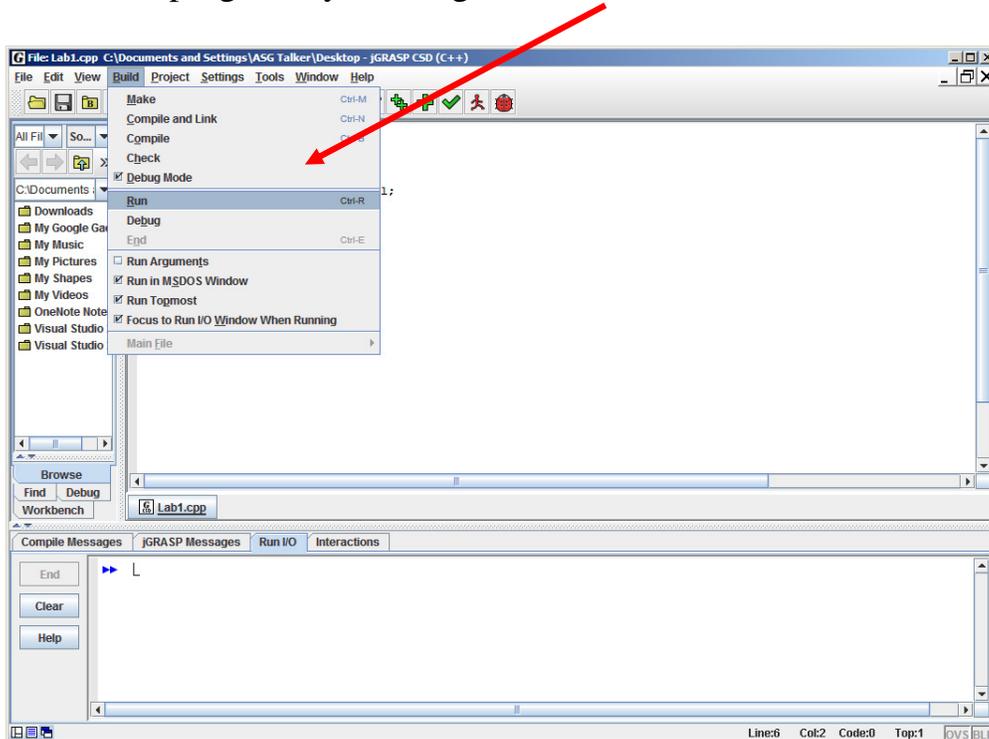
7. You may have syntax errors. Correct any syntax errors and re-Compile and Link. Repeat this procedure until the program is void of all syntax errors and the program compiles properly.

Hints: Unless a bracket follows, all statements must end in a semi-colon.
Brackets must be in pairs.
All variables names must be consistent in spelling and case.

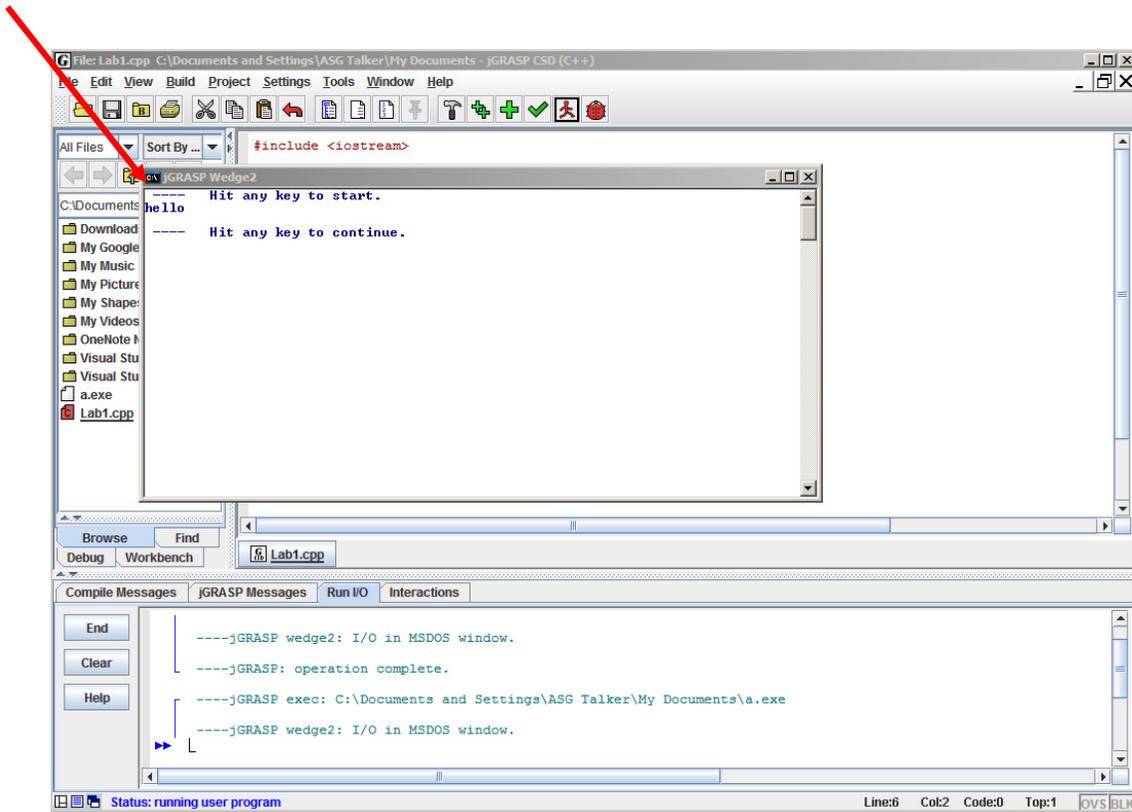
The small message window at the bottom of JGrasp will display your errors. If the program has no errors, the window will look like this:



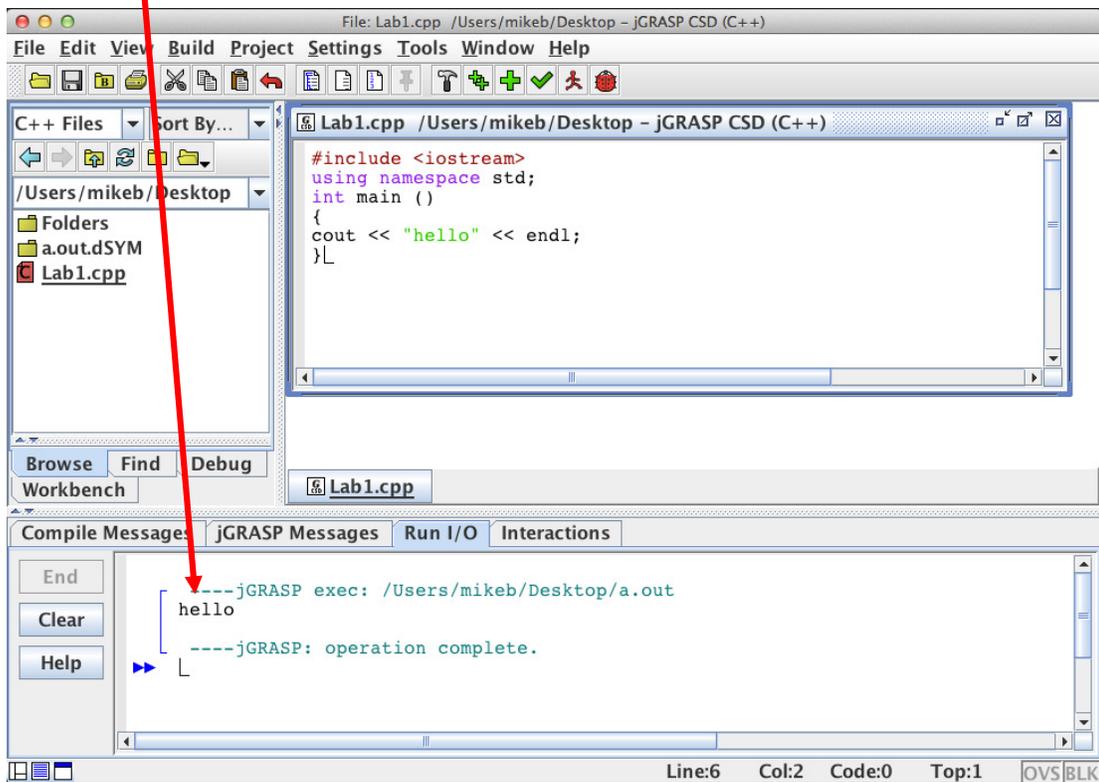
8. Run the program by clicking on Build - Run



9. The program's output ("hello") will appear , like this:
On a PC (remember, select **Build - Run in MSDOS Window** first)



On a Mac or in Lab: the output appears at the bottom.



10. Although Lab 1 will not be graded, some future labs will be, and you should practice submitting your lab to UB Learns. **Practice submitting your file to UB Learns by following the instructions at:** <http://www.cse.buffalo.edu/~mikeb/UBlearns.doc>