

cis1.5, spring 2009, Mac Command Line “how to”

1. Start up Terminal

There are two ways to start up the **Terminal** application, which is part of the Mac OS X operating system:

(a)

The **Terminal** icon may appear on your Desktop or in your Dock. The **Terminal** icon looks like this:

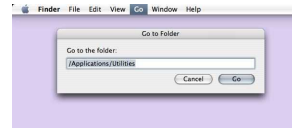
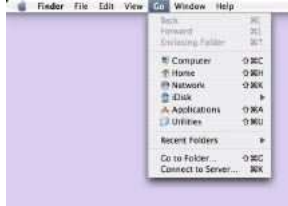


Terminal

Double-click on it and **Terminal** will start up.

(b)

From the Finder, select the **Go – Go to Folder** option:



and type **/Applications/Utilities** in the “Go to Folder” window that pops up.

Then find the **Terminal** icon in the “Applications - Utilities” window that looks like this:



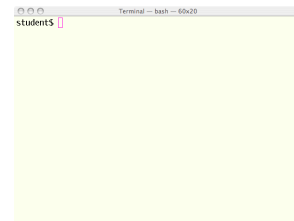
Terminal

Double-click on it and **Terminal** will start up.

When the Terminal application starts up, it opens a window that looks something like this:

There is a “*prompt*” (the text that probably says something like `student$`) and a “*cursor*” (the solid rectangular thing after the prompt).

This is called a “*command window*”. In it, you type commands that tell the computer what to do. When you type, what you type will appear to the right of the prompt.

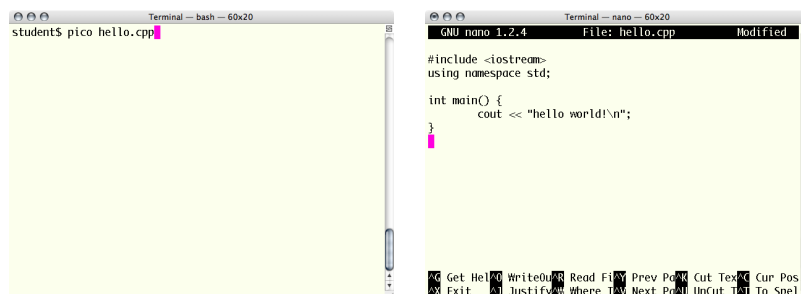


2. Edit the program

At the prompt in the Terminal window, type:

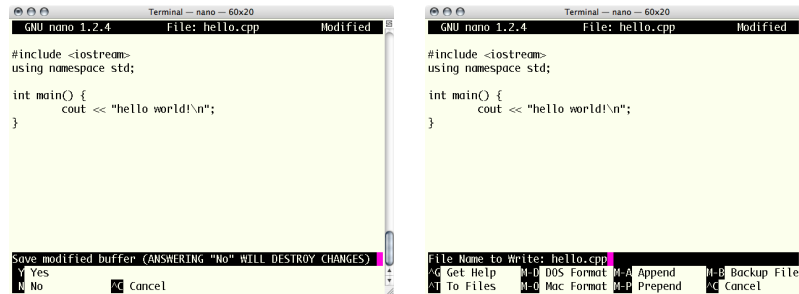
```
student$ pico hello.cpp
```

Your screen should now look like this:



Pico is a “*text editor*”. All the commands are effected by holding down the **ctrl** key in conjunction with other keys (instead of using a mouse to pulldown menus and select options, which is what you are probably used to doing). For example, to exit pico, click on the **ctrl** and **X** keys at the same time. Pico is a fairly standard simple text editor for use on UNIX-based systems.

Type your program in pico. When you are done, click on the **ctrl** and **X** keys at the same time to save your program and exit pico. Pico will ask if you would like to save your work (**Save modified buffer**), to which you should enter **Y** followed by pressing the **return** key.



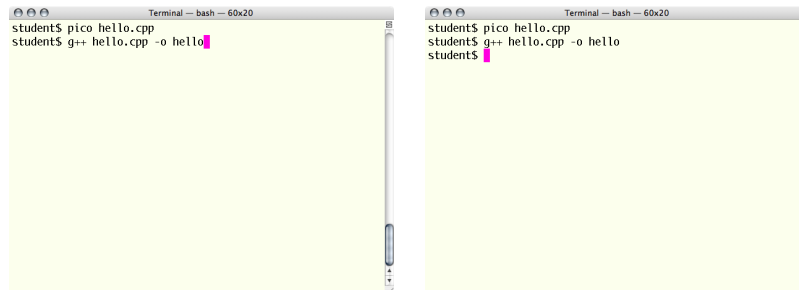
If you do not want to save your work, you can enter **N**, followed by **return**. Note that if you did not make any changes to the file (what pico refers to as a “buffer”), then you will not be asked if you wish to save. Pico will exit and return you to the Terminal prompt.

3. Compile your program

At the prompt in the Terminal window, type:

```
student$ g++ hello.cpp -o hello
```

Your screen should now look like this:



If there are no errors in your code, then the compiler will return to the Terminal prompt, as shown above. If there are errors in your code, then the compiler will display error messages in the Terminal window. In this case, go back to the “editing” step by running **pico** again on your source code file. Fix your errors and try compiling again.

When your code is error free, you are ready to run your program!

4. Run the program

At the prompt in the Terminal window, type:

```
student$ ./hello
```

and your program will run. The program's output will be displayed in the Terminal window.

