CIS15 Spring 2009
Getting Started with C++ programming in UNIX

1. Start the Terminal application

   - Find the **Terminal** application on the Mac. It should be located in the *dock* (bottom menu bar). It looks like this:

     

   - If it's not there, then click on the **Finder** in the *dock*.
     Then double-click on **Applications** from the left-hand column.
     Then double-click on the **Utilities** folder.
     Then double-click on **Terminal**.
   - When Terminal starts up, it will open a window where you are given a "prompt". You type commands at the prompt, such as **ls** to list the files in the folder (directory) or **pwd** to print the name of the current "working directory" (i.e., where you are).

2. Familiarise yourself with Unix.

   - Look at the "Unix Introduction and Quick Reference" sheet.
   - Try out some of the commands.
   - Move around the file system using **cd**.
   - Print the directory name using **pwd**
   - List the directory contents using **ls**
   - Create a directory/folder using **mkdir**

3. Edit your program using your choice of editor

   To use Textedit, find the icon in **Applications**.

   To use Nano, type **nano** at the terminal prompt (it is pretty self-explanatory, and there are instructions on screen).

   To use Emacs:

   - Type **emacs** at the terminal prompt and press return (enter).
   - Your terminal window will now be running an editing program called **emacs**.
   - Refer to the "Quick and Dirty emacs" handout distributed in class for instructions on using Emacs.

4. Compile your program

   - When you are done editing, exit emacs (using C-X C-C) or nano (using C-X).
   - At the unix prompt, type **g++ myfile.cpp -o myfile.exe**, substituting the name of the C++ source code file that you want to compile for "myfile.cpp" and substituting the name that you want for your executable program for **myfile.exe**.
   - If there are compiler errors, start up emacs again and edit your file. You can enter **emacs myfile.cpp** (substituting with your file name) to start up the emacs editor with your file already in its "buffer".

5. Run your program

   - In order to run and test your program, from the unix prompt, type: **./myfile.exe** (substituting with the name of your program).