CS 135

Exercise #1

Point value: 10

Date due: hand in printed listing of program to your lab instructor by end of 2nd lab meeting Jan 24-27 (labs 1004-9,1012-15), Jan 30 (lab 1011)

This exercise is designed to introduce you to

- using the CS computer lab
- changing your CS password
- the Linux cp command
- compiling and running a C++ program
- editing and saving a file using emacs
- the Linux lpr command
- remote login using ssh

Change your CS password

- Check your Rebelmail for a message with your CS account information. This account will allow you to login to the CS Computer lab machines (TBE B361) and the CS department's remote servers.
- If you did not receive an email with your CS account information, it is because you already have a CS account or added the class after new accounts were generated.
 - Go to the CS Account Application web page: <u>tux.cs.unlv.edu/AccountApplication/</u> to request an account or to reset your password.
- Read the Changing CS Account Password handout.
- Follow the instructions for changing your password.
- Test your new password.

Logging into bobby.cs.unlv.edu

- In TBE B361, make sure the computer is booted to Linux.
- Login to your CS account (follow the instructions given by lab instructor or read page 4 of the <u>CS 135 Lab Manual</u>).

Compiling and Executing a C++ Program (Linux)

 The file, exercise1.cpp is located in the following directory: ~lee/cs135labs.

- Use the following command to copy the file into your account:
 - cp ~lee/cs135labs/exercise1.cppyourfilename.cpp (press Enter)
- (you may choose what you want to call the file, but make sure the name ends with .cpp)
- Use the more or cat command to look at what is in the file.
- Compile the program with the command: g++ yourfilename.cpp (press Enter)
- To execute (run) the program, type: ./a.out (press Enter)

Editing a Program File Using Emacs

- Open a new terminal window (page 5 of lab manual).
- Start emacs by typing the command: emacs yourfilename.cpp (press Enter)
- A comment is a non-executable statement that provides information about a program to a reader. A comment begins with two forward slashes (//). The remainder of the line will be ignored by the compiler (g++).
- Place a comment at the **start of the program file**. The comment should contain your name, lecture and lab section #s, and the exercise #.
- Save your changes (Ctrl-x, Ctrl-s).
- Move back to the other terminal window and try to compile the program.
- If it does not compile, read the error message(s) and go back to the terminal window with emacs. Make the appropriate changes and save. Continue this process until the program compiles.
- Run your program to confirm that it still works.
- Print a copy of your program file to hand in to your lab instructor. If in TBE B361, the command: lpr yourfilename.cpp will send the print job to ponderosa (the student printer). Do NOT issue this command if working from home. It will not send the file to your local printer.

- When you have finished editing your file, exit emacs with (Ctrl-x, Ctrl-c).
- When you have finished working on your exercise/ assignment, always remember to log out of your account.
- The printed listing of your program is due by the end of the 2nd meeting of your lab section.

Download/Install SSH - Remote Login

- Read the <u>Using SSH to Remotely Access Computer Science</u> Servers handout.
- If you are a Windows user, follow the instructions to download and install SSH onto your personal computer (not the lab machine).
- If you are a Mac user, SSH is pre-installed. Follow the instructions to locate and use it.
- Use SSH to login to bobby.cs.unlv.edu using your cs login name and new password.
- When you are finished with your terminal session, make sure you logout (type logout or Ctrl-d at the command prompt) before closing the terminal window.