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: tux.cs.unlv.edu/AccountApplication/ 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 CS 135 Lab Manual).

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.cpp yourfilename.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 Using SSH to Remotely Access Computer Science 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.

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