



## Objectives

This lab will give you review exercises in UNIX commands, file systems, processes, and shell scripting. This will help you prepare for the final exam.

## Forum

Browse to: <http://oslab.cis.cabrillo.edu/forum/>

Check the forum for any late breaking news about this lab. The forum is also the place to go if you get stuck, have a question or want to share something you have learned about this lab.

## Procedure

Log into your home directory on Opus, and make a subdirectory called *review*. Perform the following tasks and place the results of any steps of your work into this directory.

1. The UNIX operating system is often divided into three parts:
  - The kernel (*/boot/vmlinuz\**)
  - The shells (*/bin/\*sh*)
  - The commands (*/bin/\* /usr/bin/\**)

Make one file, called *unix*, that contains a long listing of all these files. Make sure this *unix* file ends up in your *review* directory. There should be no duplicates. Count the number of files in your long listing and append this count to the end of your *unix* file.

2. Copy the output of the man page for the banner command to a file called *banner*.
3. Find a way to list all the files in and under your home directory and save the output to a file called *myfiles*.
4. Find the all regular files in the */etc* branch of the file tree that were modified during the month of March 2010. Record their absolute pathnames in a file called, *doves*.
5. Using the */etc/passwd* file, mail yourself a list of just the UIDs for all the CIS 90 students. Then read your mail and save that message, with the mail headers, to a file called *mail90* in your *review* directory.

6. See if you can figure out a way to run the **banner** command on the output of the **date** command with the date formatted as the full weekday name (e.g. Sunday). Save the command you used and the output of the command to a file called *today*.
7. Save a list of all processes currently being run by root to a file called *processes*. **vi** this file and remove any lines that contain a process whose name does not end in the letter 'd'. For example you would keep the processes named [ksoftirqd/1], /usr/sbin/httpd and sshd:.
8. With one pipeline command make a sorted single column list of the inode numbers for all the poems in your *poems/* directory. Save the command you used and the output of the command to a file called *iPoems*.

### **Submittal**

You should now have 8 files in your *review* directory. Write a shell script, named *labx1*, that will let me view these files one at a time. The shell script should let me view the files as many times as I want before exiting the program. I want to be able to run this program from anywhere on the system.

Once you have tested and debugged this program, copy it to the directory */home/rsimms/turnin/cis90* naming it *labx1.\$LOGNAME*. Make sure it is executable for me and that I can read your files. (I am a member of the cis90 group).

### **Grading rubric (30 points maximum)**

2 points each for doing each step above correctly and completely.  
4 points for correct script submittal, permissions, and pathnames.