Laboratory Assignment 1

September 14, 2005

Before coming to lab, read Chapters 1, 2, 3, 6, 7, and 8 of the Anderson book Just Enough Unix. Working with your lab partners, discuss each question and do any computer work required. Be sure that all of the lab partners understand each step before moving on to the next one.

Bring both Shiflet and Anderson with you to lab on Wednesday.

1. Discuss each of the terms in Exercise 1 on page 15 of Anderson with your lab partners. If you have questions about any of them, be sure to bring it up in class on Friday.

2. Find a Macintosh or Windows computer (i.e. not a Unix workstation) in the CS lab and remote-login to your Unix account, change your password, and log out again. (Beginning next week you will generally use the X windows user interface on the Unix consoles when you are in the lab, but this remote login skill you learn today will enable you to work from remote locations as well as in the lab.) To do this you use telnet program (in place of the possibilities suggested in section 3.2 of Anderson). From a Macintosh running OS-X, choose the Terminal icon in the dock, and type “ssh <machine-name>”. Under Windows, double click the “putty” icon on the desktop. Whichever method you use, you will need to enter a machine name to connect to (altair, capella, castor, pollux, regulus, rigel, saiph, soleil, spica, vega or zaurak), and then your login ID and password, as detailed in section 3.3 of Anderson. If asked, use terminal type vt100.

To begin with, each team member should take a turn at the keyboard to change his or her password. This is done as discussed in Anderson section 3.8, except that our computers are configured to use the command nispasswd instead of passwd to allow you to change your password. (Unix is really a collection of many almost-the-same operating systems——you should learn to expect such minor variations in Unix system setups.) Each lab partner should do this for his or her own account. Pay particular attention to your choice of password (see Anderson section 2.3): it must be something you will remember, but not a simple word or anything else that is easily guessed or found by dictionary search, for instance. These computers are connected to the internet, and sadly there are a number of people in this world who spend their time breaking into computer accounts and doing mischief, possibly harming your account or all users of our computers.

Finally, log out as described in section 3.12.

3. Log into one team member’s accounts. Try out the commands in Anderson section 3.9, 3.11, and exercise 6 on page 33. Make sure as you do this that each member of the lab team understands what the commands do, and why. Then similarly try out the commands in sections 7.1-7.4, 7.6-7.10 (use lp as the print command), 7.12, and 8.2-8.11.

Write all of your names on the top of the printout from section 7.10, and turn it in when you get to class on Friday.

4. (optional) Someday when you get a chance, individually or as a team, similarly work through chapters 10 and 11 of Anderson. These chapters demonstrate Unix capabilities that you will find handy during the semester. These capabilities are one of the main reasons Unix remains so popular among computer professionals, and are the basis for much of the real power of this operating systems.