Homework 2

Points: 100 **Due Date**: Monday, October 25, 1999 at 11:59PM

1. (*16 points*) Chapter 20, exercise 1
2. (*16 points*) Chapter 20, exercise 2
3. (*10 points*) Chapter 20, exercise 9
4. (*10 points*) Chapter 2, exercise 2
5. (*10 points*) Chapter 2, exercise 3
6. (*38 points*) Write a program called *where* that takes one or more command names as an argument. On output, it prints the full path names of all programs with the command name in the user's path. Output should look like:

```
dec24 % where mail sh
mail: /usr/bin/mail* /usr/ucb/mail* /var/spool/mail
sh: /bin/sh@ -> /sbin/sh*
```

If the user could execute a listed program, put a "`*`" after it (as above). If any of the files are symbolic links, put "`@ -> `" followed by what it refers to. Please use this format *exactly*; we will use an automated script for grading, and you will lose points if you don't! Also, you **must** use C or C++ for this program. (*Hint:* You do not need to worry about aliases.)

Extra Credit

7. (*20 points*) Chapter 2, exercise 7
8. (*15 points)* Modify your program in problem 6 to handle C shell aliases.
9. (*15 points*) Modify your program in problem 6 to handle Korn shell aliases.