Homework 2

Due Date: January 28, 2002 **100 Points**

1. (*15 points*) Chapter 19, exercise 4
2. (*15 points*) Chapter 19, exercise 6
3. (*70 points*) Read the manual page for *popen*(3). However, your version will differ from the system version in the following ways:
   a. All environment variables should be deleted, except for **PATH**, **IFS**, **TZ**, and **SHELL**. These shold be set as follows: **PATH** to "/bin:/usr/bin:/usr/local/bin:/pkg/bin"; **IFS** to "\t\n "; **TZ** to "PST8PDT"; and **SHELL** to the user's login shell.
   b. All file descriptors except 0, 1, and 2 should be closed.
   c. The *umask* should be set to 077.

   Please turn in a tar file containing a source file *popen.c* with the source of *popen* and a *README* file. We will untar it, copy a Makefile, a test program, and a driver into the directory, and compile and test your routine. ***Your routine must be in the single file popen.c.***