Name: _____   Student ID #: _____

Lab #6: COMP 3000B (Operating Systems)
February 28 & March 2, 2006

1. (2 pts) What is the right syntax for msgget() that will create a private message queue with access only to the owner? What standard functions are used to send and receive messages on this message queue?

2. (2 pts) Use 'mknod' to create a name pipe called 'pipe-test' in your home directory. Run "more pipe-test". What does more do? How could you change this behavior without sending more a (manual) signal?

3. (2 pts) The most common way of writing data to a socket is using the write() system call defined like this: int write(int socket, char *buffer, int buflen). What values write( ) may return? If successful, does it mean all the date has arrived at the other end?

4. (4 pts) The program "pipe.c" is using a pipe to communicate data between a process and its child process. The parent reads input from the user, and sends it to the child via a pipe. The child prints the received data to the screen. Please implement function "dochild" and "doparent" in "pipe.c" using some combinations of the system calls open, read, write, close, and exit.