Assignment 3
CSC 4320 /6320 Operating Systems
Spring 2010

a printed hardcopy at class, Due: Tuesday, 3/2/2010

Note: Please type in the solution clearly, then print it out.
A hand-written submission is not accepted.

Goal: Learn how to solve new problems using the new knowledge independently

1. (100 points) (CSc 4320, Undergraduate Students): Please use semaphores to design another Philosophers Synchronization Algorithm (which is different from the algorithm in introduced in the lecture slide), and compare your algorithm with the algorithm in terms of deadlocks.

2. (100 points) (CSc 6320, Graduate Students): Please use semaphores to design a new algorithm for the 2nd readers-writers problem (i.e., once a writer is ready, that writer performs its write as soon as possible. In other words, if a writer is waiting to access the object, no new readers may start reading).