CS 4/53201                    **Homework #2**                    **Operating Systems**

**Due in class on Friday 19 October 2001**

1. (Exercise 7.2 from OSC 6th edition, not in 5th edition)  Explain why spinlocks are not appropriate for uniprocessor systems yet may be suitable for multiprocessor systems.

2. In the Coke Machine example of Lecture 11, consider the code implementing ThirstyPerson.  If the order of the fullSlot.P( ) and mutex.P( ) statements were reversed, would the code still work?  Explain your answer.

3. (Exercise 15.2 from OSC 5th and 6th editions)  Why do most WANS…

4. (Exercise 15.6 from OSC 5th and 6th editions)  Explain why the doubling of the speed…

5. Consider five processes that arrive into the ready list at the same time in the following order, with the CPU burst times shown:  P0 (350), P1 (125), P2 (475), P3 (250), P4 (75).  Draw a Gantt chart illustrating the execution of these processes using a **FCFS** algorithm, and then compute the average turnaround time (show your work in this computation).