ISyE 3104 - Homework 12
Due: November 20, 2007
(25 points)

1. (8 points) There are four jobs, where each job must be processed on machine A first, and after its processing on machine A is completed, processed on machine B. The processing times of the jobs on the machines are given below. Assuming the jobs are processed in the sequence 1-2-3-4 on both machines, draw a Gantt chart that indicates the start and end times of the jobs on both machines.

Job	1	2	3	4
Machine A	7	3	3	5
Machine B	2	6	4	3

2. (12 points) For the following data (assuming jobs are numbered in the order of their arrival), find the mean flow time, mean lateness, mean tardiness, maximum tardiness, and the number of tardy jobs.

a. Using First Come First Serve (FCFS)
b. Using Shortest Processing Time (SPT)
c. Using Earliest Due Date (EDD)
d. Using Critical Ratio (CR)

Job	1	2	3	4	5
Processing time	5	3	9	7	15
Due date	10	8	11	16	22

3. (5 points) For the example in Question 3, apply Moore's algorithm and find the sequence that minimizes the number of tardy jobs.