Homework #6

Due Date: *****

Reading Assignment

- The slides posted on the course website on operations scheduling.
- The excerpt from Nahmias on Operations Scheduling posted on the library electronic reserves.
- Your notes from the class lectures.
- I also recommend that you read the paper by P.R. Kumar on semiconductor manufacturing scheduling posted on the library electronic reserves (you will not be responsible for this paper in the final exam, but it is an interesting reading since it connects and extends the material to be covered in class to a more specific and quite important application context).

Problem set:
Solve problems 4, 5, 6, 9, 16 and 19 in the excerpt from Nahmias’ book on operations scheduling that is posted on the library electronic reserves.

For problem 16 essentially use the schedule representation of Gantt charts to simulate the execution of the two jobs on the two machines under each of the two possible orderings for the jobs.

Extra Credit (15%)
Read the material on Lawler’s algorithm for solving some single-machine scheduling problems with precedence constraints in the posted excerpt from Nahmias, and solve problem 8 in that posted material.