

Homework Assignment #7

Note

This assignment is due 2:10PM Monday, December 5, 2016. Please write or type your answers on A4 (or similar size) paper. Drop your homework by the due time in Yih-Kuen Tsay's mail box on the first floor of Management Building 2. Late submission will be penalized by 20% for each working day overdue. You may discuss the problems with others, but copying answers is strictly forbidden.

Problems

There are five problems in this assignment, each accounting for 20 points unless otherwise marked. "Exercise A.B" in the following means Exercise B of Chapter A in [Carrano and Henry 2013] (International Edition).

1. Exercise 13.11 with the following input (Note that the customer being served is not part of the queue representing the waiting line.)

5	8
9	6
13	4
25	5
28	6
32	4

2. Exercise 13.14
3. Exercise 14.7
4. Exercise 15.10
5. Exercise 15.11 (Draw the tree resulted from inserting 90, 45, 65, 27, 57, and 10 in that order and also the tree from inserting the same nodes but in the reversed order. Show just the final result; no need to draw the intermediate trees.)