Homework Assignment #7

Note

This assignment is due 2:10PM Monday, December 7, 2015. 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. Write a C++ function that, given as input two objects of a class that implements the ADT list, returns a new list obtained from concatenating the two lists (by appending the second to the end of the first). The function should behave like a client of the ADT list, independent from its implementation.

2. Exercise 10.5 (count only the number of comparisons between two entries of the array)

3. Exercise 10.9

4. Exercise 11.2 (show which pair of entries are compared and which pair are exchanged as the algorithm executes.)

5. Exercise 11.10