

Homework Assignment #8

Note

This assignment is due 2:10PM Monday, December 4, 2017. 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 15.15 (It suffices to give just the recursive definitions, without closed-form solutions.)
2. Exercise 15.20 (for non-empty binary trees, i.e., $n \geq 1$)
3. Exercise 16.14 (Use pseudocode; apply the `visit` function to each node exactly once and in level-order)
4. Exercise 16.17b (Use C++)
5. Exercise 17.14 (implement the revision in C++, list your code, and provide some test cases)