

Algorithms Fall 2016 Homework 4

Due Mon. Oct. 11, in Class

October 4, 2016

Related reading:

Chapter 17

Either typewrite or handwrite your answers clearly. You will lose points if the TA cannot read your handwriting.

Problem 1: (10 points)

Problem 17.1-1 (page 456).

Problem 2: (25 points)

Exercise 17.4-3 (page 471)

Problem 3: (65 points)

Exercise 17-2 (page 473)

Moreover: (1) For (b), give two methods of amortized analysis (e.g., aggregate method and accounting method) which should produce the same result. (2) For (c), show that interleaving insert and delete operations results in an amortized cost that is no better than the worst-case cost per operation.