

451 Algorithm Analysis Assignment #3

The questions are from the textbook.

"Introduction to the Design and Analysis of Algorithms, Anany Levitin, Addison Wesley; 2nd edition, 2006"

Q1) 50 pts.

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For the problem explained in this question:

- i) Write a pseudocode for the decrease-and-conquer algorithm for this problem.
- ii) Set up and solve a recurrence for the number of glass moves made by your algorithm
- iii) Write a pseudocode for the brute-force algorithm for this problem? Find the efficiency class.
- iv) How does this algorithm compare with the brute-force algorithm for this problem?

Q2) 50 pts.

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