Algorithm Homework - Week 14

1. Find an optimal parenthesization of a matrix-chain product whose sequence of dimensions is <5, 10, 3, 12, 5, 50>.
2. Consider a variant of the matrix-chain multiplication problem in which the goal is to parenthesize the sequence of matrices so as to maximize, rather than minimize, the number of scalar multiplications. Does this problem exhibit optimal substructure? Justify your answer.
3. Prove the optimal substructure property of the knapsack problem in the case where the optimal subset does not contain a_n.
4. Programming Assignment 2: p.405 15-4 Printing neatly. Please finish it on the OJ website:

   http://en.thusaac.com/#/contest/33

Problem 1, 2, 3 are due **Dec 17, 2020, 23:59 PST (Dec 18, 2020, 15:59 Beijing Time)**.

Problem 4 (PA 2) is due **Jan 5, 2021, 23:59 PST (Jan 6, 2021, 15:59 Beijing Time)**.