CSC373 Worksheet 3

July 28, 2020

Source: link

1. **CLRS 15.2-1:** Find an optimal parenthesization of a matrix-chain product whose sequence of dimension is $< 5, 10, 3, 12, 5, 50, 6 >$

2. **CLRS 15.2-2:** Give a recursive algorithm $MATRIX-CHAIN-MULTIPLY(A, s, i, j)$ that actually performs the optimal matrix-chain multiplication, given the sequence o matrices $< A_1, A_3, ..., A_n >$, the s table computed by $MATRIX - CHAIN - ORDER$, and the indices i and j. (The initial call would be $MATRIX-CHAIN-MULTIPLY(A, s, 1, n)$).