

CS 561, HW4

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Due: November 4th

1. Find the optimal parenthesization for a matrix-chain product whose sequence of dimensions is: $(2, 3, 2, 2, 1)$. (Don't forget to include the table used to compute your result)
2. Exercise 15.2-5 (Counting number of ways to Parenthesizing)
3. Exercise 15.4-1 ("Determine an LCS")
4. Exercise 15.4-5 (note: monotonically increasing means non-decreasing, e.g. 1, 2, 2, 4, 5, 5, 7)
5. Exercise 15.4-6 (note: you can combine your solutions to this problem and the previous one, but solving the previous problem first will help with this problem.)
6. Problem 15-4
7. Problem 15-5
8. Exercise 16.1-4
9. Exercise 16.2-4
10. Exercise 16.2-5