13.5
How to come up with dynamic programming algorithm: summary
Dynamic Programming

1. Find a “smart” recursion for the problem in which the number of distinct subproblems is small; polynomial in the original problem size.

2. Estimate the number of subproblems, the time to evaluate each subproblem and the space needed to store the value.

3. This gives an upper bound on the total running time if we use automatic/explicit memoization.


5. Eliminate recursion and find an iterative algorithm.

6. ...need to find the right way or order the subproblems evaluation. This leads to a dynamic programming algorithm.

7. Optimize the resulting algorithm further

8. ...

9. Get rich!
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THE END
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(for now)