

6651 Comments on lecture 4

Yaqiao Li

Janunary to April, 2023

1. today's lecture maybe a little difficult, some parts maybe not so clear. don't worry too much about it, as long as you get a rough idea of what dynamic programming is doing, is good enough. Next lecture we will continue on this topic, and learn a little more detail, with more examples.
2. You are encouraged to do the following with classmates: imagine that you are teaching other people, for divide-and-conquer, greedy, dynamic programming strategies,
 - (a) describe what they are, what are the main steps and/or difficulties in each of them,
 - (b) discuss their differences (any differences that you can think of)
3. for the LIS (longest-increasing-subsequence) problem, we discussed DP and given a greedy algorithm (call it \mathcal{G}) for it, and pointed out that the greedy algorithm \mathcal{G} does not always give optimal solution.
Try to apply divide-and-conquer on LIS? Are there any issues?