

## Assignment 3 — CLRS

- CLRS 15.1-3 : Consider a modification of the rod-cutting problem in which, in addition to a price  $p_j$  for each rod, each cut incurs a fixed cost of  $c$ . The revenue associated with a solution is now the sum of the prices minus the costs of making the cuts. Give a dynamic-programming algorithm to solve this modified problem.
- CLRS 15.4-5 : Give an  $O(n^2)$ -time algorithm to find the longest monotonically increasing subsequence of a sequence of  $n$  numbers.