

Training Problems #6

15.1-4

Modify MEMOIZED-CUT-ROD to return not only the value but the actual solution, too.

16.1-3

Not just any greedy approach to the activity-selection problem produces a maximum-size set of mutually compatible activities. Give an example to show that the approach of selecting the activity of least duration from among those that are compatible with previously selected activities does not work. Do the same for the approaches of always selecting the compatible activity that overlaps the fewest other remaining activities and always selecting the compatible remaining activity with the earliest start time.

Provide the Fractional Knapsack algorithm. It must return both the resulting load and value in the knapsack.