AlgoExpert Quad Layout Java 12px Sublime Monokai 00:00:00

Prompt Scratchpad Our Solution(s) Video Explanation Run Code

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Solution 1 Solution 2
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1\, // Copyright @ 2020 AlgoExpert, LLC. All rights reserved.
 3 class Program {
      // O(nk) time | O(nk) space
       public static int maxProfitWithKTransactions(int[] prices, int k) {
          if (prices.length == 0) {
           return 0;
          int[][] profits = new int[k + 1][prices.length];
for (int t = 1; t < k + 1; t++) {</pre>
9
10
           int maxThusFar = Integer.MIN_VALUE;
11
            for (int d = 1; d < prices.length; d++) {</pre>
12
             maxThusFar = Math.max(maxThusFar, profits[t - 1][d - 1] - prices[d - 1]);
profits[t][d] = Math.max(profits[t][d - 1], maxThusFar + prices[d]);
13
14
15
16
          return profits[k][prices.length - 1];
17
18
19 }
20
```