123. Best Time to Buy and Sell Stock III

Description

You are given an array `prices` where `prices[i]` is the price of a given stock on the `i th` day.

Find the maximum profit you can achieve. You may complete **at most two transactions**.

Note: You may not engage in multiple transactions simultaneously (i.e., you must sell the stock before you buy again).

Example 1:

```
Input: prices = [3,3,5,0,0,3,1,4]
Output: 6
Explanation: Buy on day 4 (price = 0) and sell on day 6 (price = 3), profit = 3-0 = 3.
Then buy on day 7 (price = 1) and sell on day 8 (price = 4), profit = 4-1 = 3.
```

Example 2:

```
Input: prices = [1,2,3,4,5]
Output: 4
Explanation: Buy on day 1 (price = 1) and sell on day 5 (price = 5), profit = 5-1 = 4.
Note that you cannot buy on day 1, buy on day 2 and sell them later, as you are engaging multiple transactions at the same time. You must sell
before buying again.
```

Example 3:

```
Input: prices = [7,6,4,3,1]
Output: 0
Explanation: In this case, no transaction is done, i.e. max profit = 0.
```

Constraints:

- `1 <= prices.length <= 10` ^{5}
- `0 <= prices[i] <= 10` ^{5}