

2110. Number of Smooth Descent Periods of a Stock

Medium Topics Companies Hint

You are given an integer array `prices` representing the daily price history of a stock, where `prices[i]` is the stock price on the i^{th} day.

A **smooth descent period** of a stock consists of one or more contiguous days such that the price on each day is lower than the price on the preceding day by exactly 1. The first day of the period is exempted from this rule.

Return the number of smooth descent periods.

Example 1:

Input: `prices = [3,2,1,4]`

Output: 7

Explanation: There are 7 smooth descent periods:

`[3], [2], [1], [4], [3,2], [2,1], and [3,2,1]`

Note that a period with one day is a smooth descent period by the definition.

```
1 class Solution:
2     def getDescentPeriods(self, prices: List[int]) -> int:
3         n = len(prices)
4         res = 0
5
6         for i in range(n):
7             curr = prices[i]
8             res += 1
9             for j in range(i+1, n):
10                 if prices[j] == curr - 1:
11                     res += 1
12                     curr = prices[j]
13                 else:
14                     break
15
16         return res
17
```

成功 - TB 跟踪

```
1 class Solution:
2     def getDescentPeriods(self, prices: List[int]) -> int:
3         n = len(prices)
4         res = 1
5         prev = 1
6
7         for i in range(1, n):
8             if prices[i] == prices[i-1] - 1:
9                 prev += 1
10            else:
11                prev = 1
12            res += prev
13
14         return res
15
```

curr 且 prev = 1 时为起始。
只需遍历并累加 descent