

5958. Number of Smooth Descent Periods of a Stock

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

User Accepted:	0
User Tried:	0
Total Accepted:	0
Total Submissions:	0
Difficulty:	Medium

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.

Example 2:

**Input:** `prices = [8,6,7,7]`  
**Output:** 4  
**Explanation:** There are 4 smooth descent periods: `[8]`, `[6]`, `[7]`, and `[7]`  
Note that `[8,6]` is not a smooth descent period as  $8 - 6 \neq 1$ .

Example 3:

**Input:** `prices = [1]`  
**Output:** 1  
**Explanation:** There is 1 smooth descent period: `[1]`

Constraints:

- $1 \leq \text{prices.length} \leq 10^5$
- $1 \leq \text{prices}[i] \leq 10^5$

JavaScript

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```
1 const cutMaxDecreasing = (a_or_s) => { let d = [], start = 0, n = a_or_s.length; for (let i = 0; i + 1 < n; i++) {
2   if (a_or_s[i + 1] !== a_or_s[i] - 1) { d.push(a_or_s.slice(start, i + 1)); start = i + 1; } }
3   d.push(a_or_s.slice(start)); return d; };
4 const toSubArray = (n) => { return n * (n + 1) / 2; };
5 const getDescentPeriods = (prices) => {
6   let a = cutMaxDecreasing(prices), res = 0;
7   for (const e of a) res += toSubArray(e.length);
8   return res;
9 }
```

☐ Custom Testcase

Use Example Testcases

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