2233. Number of Smooth Descent Periods of a Stock

Difficulty : Medium

https://leetcode.com/problems/number-of-smooth-descent-periods-of-a-stock

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.
```

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 ≠ 1.
```

Example 3:

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

Constraints:

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