901. Online Stock Span

Medium Topics Companies

Design an algorithm that collects daily price quotes for some stock and returns **the span** of that stock's price for the current day.

The **span** of the stock's price in one day is the maximum number of consecutive days (starting from that day and going backward) for which

- For example, if the prices of the stock in the last four days is `[7,2,1,2]` and the price of the stock today is `2`, then the span of today is
- Also, if the prices of the stock in the last four days is `[7,34,1,2]` and the price of the stock today is `8`, then the span of today is `3` beca

Implement the `StockSpanner` class:

- `StockSpanner()` Initializes the object of the class.
- `int next(int price)` Returns the **span** of the stock's price given that today's price is `price`.

Example 1:

```
Input
["StockSpanner", "next", "next", "next", "next", "next", "next", "next"]
[[], [100], [80], [60], [70], [60], [75], [85]]
Output
[null, 1, 1, 1, 2, 1, 4, 6]

Explanation
StockSpanner stockSpanner = new StockSpanner();
stockSpanner.next(100); // return 1
stockSpanner.next(80);  // return 1
stockSpanner.next(60);  // return 1
stockSpanner.next(70);  // return 2
stockSpanner.next(60);  // return 1
stockSpanner.next(75);  // return 4, because the last 4 prices (including today's price of 75) were
stockSpanner.next(85);  // return 6
```

Constraints:

- $1 \leq price \leq 10^5$
- At most 10^4 calls will be made to `next`.

Seen this question in a real interview before? 1/4

Yes No

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