1567. Maximum Length of Subarray With Positive Product

Description

Given an array of integers `nums`, find the maximum length of a subarray where the product of all its elements is positive.

A subarray of an array is a consecutive sequence of zero or more values taken out of that array.

Return *the maximum length of a subarray with positive product*.

Example 1:

```
Input: nums = [1,-2,-3,4]
Output: 4
Explanation: The array nums already has a positive product of 24.
```

Example 2:

```
Input: nums = [0,1,-2,-3,-4]
Output: 3
Explanation: The longest subarray with positive product is [1,-2,-3] which has a product of 6.
Notice that we cannot include 0 in the subarray since that'll make the product 0 which is not positive.
```

Example 3:

```
Input: nums = [-1,-2,-3,0,1]
Output: 2
Explanation: The longest subarray with positive product is [-1,-2] or [-2,-3].
```

Constraints:

- `1 <= nums.length <= 10^5`
- `-10^9 <= nums[i] <= 10^9`