152. Maximum Product Subarray

Difficulty : Medium

Given an integer array `nums`, find a subarray that has the largest product, and return *the product*.

The test cases are generated so that the answer will fit in a **32-bit** integer.

Example 1:

```
Input: nums = [2,3,-2,4]
Output: 6
Explanation: [2,3] has the largest product 6.
```

Example 2:

```
Input: nums = [-2,0,-1]
Output: 0
Explanation: The result cannot be 2, because [-2,-1] is not a subarray.
```

Constraints:

- `1 <= nums.length <= 2 * 10`^{4}
- `-10 <= nums[i] <= 10`
- The product of any prefix or suffix of `nums` is **guaranteed** to fit in a **32-bit** integer.