Problem 1464: Maximum Product of Two Elements in an Array

Problem Information

Difficulty: Easy
Acceptance Rate: 83.45%
Paid Only: No
Tags: Array, Sorting, Heap (Priority Queue)

Problem Description

Given the array of integers `nums`, you will choose two different indices `i` and `j` of that array. _Return the maximum value of_ `(nums[i]-1)*(nums[j]-1)`.

Example 1:

Input: nums = [3,4,5,2] **Output:** 12 **Explanation:** If you choose the indices i=1 and j=2 (indexed from 0), you will get the maximum value, that is, (nums[1]-1)*(nums[2]-1) = (4-1)*(5-1) = 3*4 = 12.

Example 2:

Input: nums = [1,5,4,5] **Output:** 16 **Explanation:** Choosing the indices i=1 and j=3 (indexed from 0), you will get the maximum value of (5-1)*(5-1) = 16.

Example 3:

Input: nums = [3,7] **Output:** 12

Constraints:

* `2 <= nums.length <= 500` * `1 <= nums[i] <= 10^3`

Code Snippets

C++:

```
class Solution {
public:
int maxProduct(vector<int>& nums) {

}
};
```

Java:

```
class Solution {
public int maxProduct(int[] nums) {

}
}
```

Python3:

```
class Solution:
def maxProduct(self, nums: List[int]) -> int:
```