

Problem 1822: Sign of the Product of an Array

Problem Information

Difficulty: Easy

Acceptance Rate: 64.88%

Paid Only: No

Tags: Array, Math

Problem Description

Implement a function `signFunc(x)` that returns:

* `1` if `x` is positive. * `-1` if `x` is negative. * `0` if `x` is equal to `0`.

You are given an integer array `nums`. Let `product` be the product of all values in the array `nums`.

Return `signFunc(product)`.

Example 1:

Input: nums = [-1,-2,-3,-4,3,2,1] **Output:** 1 **Explanation:** The product of all values in the array is 144, and signFunc(144) = 1

Example 2:

Input: nums = [1,5,0,2,-3] **Output:** 0 **Explanation:** The product of all values in the array is 0, and signFunc(0) = 0

Example 3:

Input: nums = [-1,1,-1,1,-1] **Output:** -1 **Explanation:** The product of all values in the array is -1, and signFunc(-1) = -1

Constraints:

```
* `1 <= nums.length <= 1000` * `-100 <= nums[i] <= 100`
```

Code Snippets

C++:

```
class Solution {
public:
    int arraySign(vector<int>& nums) {
        }
};
```

Java:

```
class Solution {
    public int arraySign(int[] nums) {
        }
}
```

Python3:

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