

Problem 3152: Special Array II

Problem Information

Difficulty: Medium

Acceptance Rate: 45.71%

Paid Only: No

Tags: Array, Binary Search, Prefix Sum

Problem Description

An array is considered **“special”** if every pair of its adjacent elements contains two numbers with different parity.

You are given an array of integer `nums` and a 2D integer matrix `queries`, where for `queries[i] = [fromi, toi]` your task is to check that subarray `nums[fromi..toi]` is **“special”** or not.

Return an array of booleans `answer` such that `answer[i]` is `true` if `nums[fromi..toi]` is special.

Example 1:

Input: nums = [3,4,1,2,6], queries = [[0,4]]

Output: [false]

Explanation:

The subarray is `[3,4,1,2,6]`. 2 and 6 are both even.

Example 2:

Input: nums = [4,3,1,6], queries = [[0,2],[2,3]]

Output: [false,true]

****Explanation:****

1. The subarray is `[4,3,1]`. 3 and 1 are both odd. So the answer to this query is `false` . 2. The subarray is `[1,6]` . There is only one pair: `(1,6)` and it contains numbers with different parity. So the answer to this query is `true` .

****Constraints:****

```
* `1 <= nums.length <= 105` * `1 <= nums[i] <= 105` * `1 <= queries.length <= 105` *
`queries[i].length == 2` * `0 <= queries[i][0] <= queries[i][1] <= nums.length - 1`
```

Code Snippets

C++:

```
class Solution {
public:
vector<bool> isArraySpecial(vector<int>& nums, vector<vector<int>>& queries)
{
}
};
```

Java:

```
class Solution {
public boolean[] isArraySpecial(int[] nums, int[][] queries) {
}
}
```

Python3:

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