

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]:
```