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Description

Solution

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Ruby

1310. XOR Queries of a Subarray

Medium

197

10

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Given the array `arr` of positive integers and the array `queries` where `queries[i] = [Li, Ri]`, for each query `i` compute the **XOR** of elements from `Li` to `Ri` (that is, `arr[Li] xor arr[Li+1] xor ... xor arr[Ri]`). Return an array containing the result for the given `queries`.

Example 1:

Input: `arr = [1,3,4,8]`, `queries = [[0,1],[1,2],[0,3],[3,3]]`

Output: `[2,7,14,8]`

Explanation:

The binary representation of the elements in the array are:

1 = 0001

3 = 0011

4 = 0100

8 = 1000

The XOR values for queries are:

`[0,1] = 1 xor 3 = 2`

`[1,2] = 3 xor 4 = 7`

`[0,3] = 1 xor 3 xor 4 xor 8 = 14`

`[3,3] = 8`

Example 2:

Input: `arr = [4,8,2,10]`, `queries = [[2,3],[1,3],[0,0],[0,3]]`

Output: `[8,0,4,4]`

```
1  # @param {Integer[]} arr
2  # @param {Integer[][]} queries
3  # @return {Integer[]}
4  def xor_queries(arr, queries)
5
6  end
```

Problems

Pick One

< Prev

1310/1474

Next >

Console ▾

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