

1913. Make the XOR of All Segments Equal to Zero

Difficulty : Hard

<https://leetcode.com/problems/make-the-xor-of-all-segments-equal-to-zero>

You are given an array `nums` and an integer `k`. The XOR of a segment `[left, right]` where `left <= right` is the XOR of all the elements with indices between `left` and `right`, inclusive: `nums[left] XOR nums[left+1] XOR ... XOR nums[right]`.

Return *the minimum number of elements to change in the array* such that the XOR of all segments of size `k` is equal to zero.

Example 1:

Input: `nums = [1,2,0,3,0]`, `k = 1`

Output: 3

Explanation: Modify the array from `[1,2,0,3,0]` to from `[0,0,0,0,0]`.

Example 2:

Input: `nums = [3,4,5,2,1,7,3,4,7]`, `k = 3`

Output: 3

Explanation: Modify the array from `[3,4,5,2,1,7,3,4,7]` to `[3,4,7,3,4,7,3,4,7]`.

Example 3:

Input: `nums = [1,2,4,1,2,5,1,2,6]`, `k = 3`

Output: 3

Explanation: Modify the array from `[1,2,4,1,2,5,1,2,6]` to `[1,2,3,1,2,3,1,2,3]`.

Constraints:

- $1 \leq k \leq \text{nums.length} \leq 2000$
- $0 \leq \text{nums}[i] < 2^{10}$