Problem Link:

<https://leetcode.com/problems/bitwise-xor-of-all-pairings/submissions/1510443113/?envType=daily-question&envId=2025-01-16>

Solution:

class Solution {

public:

int xorAllNums(vector<int>& nums1, vector<int>& nums2) {

int res = 0, m = nums1.size(), n = nums2.size();

for(int bit = 0; bit < 31; ++bit)

{

int c1 = 0;

for(int num : nums1)

{

if(num & (1 << bit))

{

c1++;

}

}

int c2 = 0;

for (int num : nums2) {

if (num & (1 << bit)) {

c2++;

}

}

int c = c1 \* (n - c2) + (m - c1) \* c2;

if(c % 2 == 1)

{

res |= (1 << bit);

}

}

return res;

}

};