1835. Find XOR Sum of All Pairs Bitwise AND

Description

The **XOR sum** of a list is the bitwise `XOR` of all its elements. If the list only contains one element, then its **XOR sum** will be equal to this element.

- For example, the **XOR sum** of `[1,2,3,4]` is equal to `1 XOR 2 XOR 3 XOR 4 = 4`, and the **XOR sum** of `[3]` is equal to `3`.

You are given two **0-indexed** arrays `arr1` and `arr2` that consist only of non-negative integers.

Consider the list containing the result of `arr1[i] AND arr2[j]` (bitwise `AND`) for every `(i, j)` pair where `0 <= i < arr1.length` and `0 <= j < arr2.length`.

Return *the **XOR sum** of the aforementioned list*.

Example 1:

```
Input: arr1 = [1,2,3], arr2 = [6,5]
Output: 0
Explanation: The list = [1 AND 6, 1 AND 5, 2 AND 6, 2 AND 5, 3 AND 6, 3 AND 5] = [0,1,2,0,2,1].
The XOR sum = 0 XOR 1 XOR 2 XOR 0 XOR 2 XOR 1 = 0.
```

Example 2:

```
Input: arr1 = [12], arr2 = [4]
Output: 4
Explanation: The list = [12 AND 4] = [4]. The XOR sum = 4.
```

Constraints:

- `1 <= arr1.length, arr2.length <= 10^5`
- `0 <= arr1[i], arr2[j] <= 10^9`