Given an array of integers arr.

We want to select three indices i, j and k where (0 <= i < j <= k < arr.length).

Let's define a and b as follows:

* a = arr[i] ^ arr[i + 1] ^ ... ^ arr[j - 1]
* b = arr[j] ^ arr[j + 1] ^ ... ^ arr[k]

Note that **^** denotes the **bitwise-xor** operation.

Return *the number of triplets* (i, j and k) Where a == b.

**Example 1:**

**Input:** arr = [2,3,1,6,7]

**Output:** 4

**Explanation:** The triplets are (0,1,2), (0,2,2), (2,3,4) and (2,4,4)

**Example 2:**

**Input:** arr = [1,1,1,1,1]

**Output:** 10

**Example 3:**

**Input:** arr = [2,3]

**Output:** 0

**Example 4:**

**Input:** arr = [1,3,5,7,9]

**Output:** 3

**Example 5:**

**Input:** arr = [7,11,12,9,5,2,7,17,22]

**Output:** 8

**Constraints:**

* 1 <= arr.length <= 300
* 1 <= arr[i] <= 10^8