We have an array A of integers, and an array queries of queries.

For the i-th query val = queries[i][0], index = queries[i][1], we add val to A[index].  Then, the answer to the i-th query is the sum of the even values of A.

*(Here, the given index = queries[i][1] is a 0-based index, and each query permanently modifies the array A.)*

Return the answer to all queries.  Your answer array should have answer[i] as the answer to the i-th query.

**Example 1:**

**Input:** A = [1,2,3,4], queries = [[1,0],[-3,1],[-4,0],[2,3]]

**Output:** [8,6,2,4]

**Explanation:**

At the beginning, the array is [1,2,3,4].

After adding 1 to A[0], the array is [2,2,3,4], and the sum of even values is 2 + 2 + 4 = 8.

After adding -3 to A[1], the array is [2,-1,3,4], and the sum of even values is 2 + 4 = 6.

After adding -4 to A[0], the array is [-2,-1,3,4], and the sum of even values is -2 + 4 = 2.

After adding 2 to A[3], the array is [-2,-1,3,6], and the sum of even values is -2 + 6 = 4.

**Note:**

1. 1 <= A.length <= 10000
2. -10000 <= A[i] <= 10000
3. 1 <= queries.length <= 10000
4. -10000 <= queries[i][0] <= 10000
5. 0 <= queries[i][1] < A.length