**Problem Name: Count pairs with given sum**

**Topics:**

**Companies:**

**Level:** Easy

**Language:** C++

**Problem Statement**:

**Input Format:**

First line of the input contain integer n (size of list)

Second line contain n space separated integer list values.

Last line contain integer value pos representing value of node to delete.

Ex:

5

1 2 3 4 5

1

**Output Format:** Print linked list after removing node having value pos

**Constraints:**

**Examples:**

**Brute force Solution:**

# Explanation: iterate through the loop one by one in nested loop and test the given condition for all possible combination, if found then increase the counter.

**Code:**

**Time Complexity**: O(n^2)

**Space Complexity:** O(1)

**Optimized Solution:**

# Explanation:

Since nums[i] is in the [1...100] range, we can count each number using an array.

Now, we can sweep the counts, and accumulate the product of k-apart counts.

**Code:**

**Time Complexity**: O(n)

**Space Complexity:** O(1)