### Count the triplets

Given an array of distinct integers. The task is to count all the triplets such that sum of two elements equals the third element.

**Example 1:**

**Input:**

N = 4

arr[] = {1, 5, 3, 2}

**Output:** 2

**Explanation**: There are 2 triplets:

1 + 2 = 3 and 3 +2 = 5

**Example 2:**

**Input**:

N = 3

arr[] = {2, 3, 4}

**Output:** 0

**Explanation**: No such triplet exits

**Expected Time Complexity:** O(N2)  
**Expected Auxiliary Space:** O(1)  
  
**Constraints:**  
1 ≤ N ≤ 103  
1 ≤ arr[i] ≤ 105

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Java Code

import java.io.\*;

import java.util.\*;

class CodingMaxima {

public static void main(String args[]) throws IOException {

BufferedReader read =

new BufferedReader(new InputStreamReader(System.in));

int t = Integer.parseInt(read.readLine());

while (t-- > 0) {

int n = Integer.parseInt(read.readLine());

String input[] = read.readLine().split(" ");

int arr[] = new int[n];

for(int i = 0;i<n;i++){

arr[i] = Integer.parseInt(input[i]);

}

Solution ob = new Solution();

System.out.println(ob.countTriplet(arr, n));

}

}

}

class Solution {

int countTriplet(int arr[], int n) {

// code here

HashSet<Integer> hs=new HashSet<Integer>();

for(int i=0;i<n;i++){

hs.add(arr[i]);

}

int c=0;

for(int i=0;i<n;i++){

for(int j=i+1;j<n;j++){

if(hs.contains(arr[i]+arr[j])){

c++;

}

}

}

return c;

}

}