#### LACS-Elite-Combination-Part001

Solved Challenges 1/2

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**Combination Zero Sum** 

#### ID:11076 **Solved By 693 Users**

The program must accept N integers as the input. The program must print the number of combinations of the integers (among the N integers) which add up to 0 as the output.

# **Boundary Condition(s):**

```
2 <= N <= 15
-100 <= Each integer value <= 100
```

### **Input Format:**

The first line contains N.

The second line contains N integers separated by a space.

# **Output Format:**

The first line contains the number of combinations of the integers (among the N integers) which add up to 0.

# **Example Input/Output 1:**

Input:

10 -5 5 -15 20

Output:

3

#### Explanation:

The three combinations which add up to 0 are

10, 5, -15

20, -5, -15

-5, 5

# **Example Input/Output 2:**

Input:

10 -5 5 -15 20 5 10

Output: 10

#### **Max Execution Time Limit: 500 millisecs**

```
Ambiance
                                                                   Java (12.0)
                                                                        Reset
  1
      import java.util.*;
      public class Hello {
  2
  3
  4
          public static void main(String[] args) {
  5
               Scanner in = new Scanner(System.in);
  6
               int N = in.nextInt();
  7
               Integer arr[] = new Integer[N];
  8
  9
               for(int index=0;index<N;index++)</pre>
 10
               {
                   arr[index] = in.nextInt();
 11
 12
 13
               int counter = 0;
 14
               for(int ctr=1;ctr<(1<<N);ctr++)</pre>
 15
 16
                   int sum = 0;
                   for(int bmi=0;bmi<N;bmi++)</pre>
 17
 18
                        if((ctr & (1<<bmi)) !=0)
 19
 20
                        {
 21
                            sum = sum + arr[bmi];
 22
 23
                   if(sum == 0)
 24
 25
                   counter++;
 26
 27
               System.out.println(counter);
 28
          }
 29
      }
Custom test case has passed.
```

