Given a sequence of positive integers. You need to find the number of triples in that sequence. For this problem, (x, y, z) constructs a triple if and only if x + y = z. So, (1, 2, 3) is a triple, where (3, 4, 5) is not.

Input

Each input set starts with a positive integer N. Next few lines contain N positive integers. Input is terminated by EOF.

Output

For each case, print the number of triples in a line.

Constraints

• $3 \le N \le 5000$

Sample Input

```
6

1 2 3 4 5 6

6

1 2 4 8 16 32

3

100000000 20000000 10000000

5

1 1 1 2 2
```

Sample Output

- 6 0 1
- 6