

# Sherlock and Array



## Problem Statement

[Русский](#) \| [中文](#)

Watson gives an array  $A_1, A_2, \dots, A_N$  to Sherlock. Then he asks him to find if there exists an element in the array, such that, the sum of elements on its left is equal to the sum of elements on its right. If there are no elements to left/right, then sum is considered to be zero.

Formally, find an  $i$ , such that,  $A_1 + A_2 + \dots + A_{i-1} = A_{i+1} + A_{i+2} + \dots + A_N$ .

## Input Format

The first line contains  $T$ , the number of test cases. For each test case, the first line contains  $N$ , the number of elements in the array  $A$ . The second line for each testcase contains  $N$  space separated integers, denoting the array  $A$ .

## Output Format

For each test case, print **YES** if there exists an element in the array, such that, the sum of elements on its left is equal to the sum of elements on its right, else print **NO**.

## Constraints

$$1 \leq T \leq 10$$

$$1 \leq N \leq 10^5$$

$$1 \leq A_i \leq 2 \cdot 10^4 \text{ for } 1 \leq i \leq N$$

## Sample Input

```
2
3
1 2 3
4
1 2 3 3
```

## Sample Output

```
NO
YES
```

## Explanation

For test case 1, no such index exists.

For test case 2,  $A[1] + A[2] = A[4]$ , therefore index 3 satisfies.