

Hello Recursion

You will be given an array of N integers. Write a recursive function to calculate its summation.

Input

Input starts with an integer T ($T \leq 100$), the number of test cases.

Each of the next T lines will start with an integer N ($1 \leq N \leq 100$), number of integers followed by N space separated. Each of these N integers will be between -1000 and 1000 (inclusive).

Output

For each test case, output one line in the format "Case x: a" (quotes for clarity), where x is the case number and a is the summation of the integers.

Example

Input:

```
2
5 10 5 -2 3 0
3 100 -10 34
```

Output:

```
Case 1: 16
Case 2: 124
```