Wrong number
1 second, 256 MB

There is an *unknown* table with **N** rows and **N** columns (3<=**N**<=30); each cell in the table contains a positive integer. In this table, the sum of all cells in each row is equal and also the sum of all cells in each column is also equal.

However, one number in the table has been changed. You are given the table after that change has been made. Your task is to find that number.

Consider the following example with N = 3. Suppose the unknown table is the following:

11	4	6
8	1	12
2	16	3

Suppose the number in the lower left cell has been changed from 2 to 5, you get the following table.

11	4	6
8	1	12
5	16	3

This is the table that your program would received. Your program should output 5, the number on the cell which has been changed. Note that there is exactly one change in the table, and there is only one way to solve this problem.

Input
The first line contains an integer **N** (3<=**N**<=30). The next N lines contain the table. Each line denotes a row and contains **N** integers.

Output
Your program should output a single integer: the value of the table that have already be changed. It is guaranteed that there always a solution for this problem.

Example

Input	Output
3 11 4 6 8 1 12 5 16 3	5