

A. Game Outcome

time limit per test: 2 seconds

memory limit per test: 256 megabytes

input: standard input

output: standard output

Sherlock Holmes and Dr. Watson played some game on a checkered board $n \times n$ in size. During the game they put numbers on the board's squares by some tricky rules we don't know. However, the game is now over and each square of the board contains exactly one number. To understand who has won, they need to count the number of *winning* squares. To determine if the particular square is winning you should do the following. Calculate the sum of all numbers on the squares that share this column (including the given square) and separately calculate the sum of all numbers on the squares that share this row (including the given square). A square is considered *winning* if the sum of the column numbers is **strictly** greater than the sum of the row numbers.

For instance, let's game was ended like is shown in the picture. Then the purple cell is winning, because the sum of its column numbers equals $8 + 3 + 6 + 7 = 24$, sum of its row numbers equals $9 + 5 + 3 + 2 = 19$, and $24 > 19$.

Input

The first line contains an integer n ($1 \leq n \leq 30$). Each of the following n lines contain n space-separated integers. The j -th number on the i -th line represents the number on the square that belongs to the j -th column and the i -th row on the board. All number on the board are integers from 1 to 100.

Output

Print the single number — the number of the winning squares.

Examples

input	
1	1
output	
0	

input	
2	1 2
3	4
output	
2	

input	
4	5 7 8 4
9	5 3 2
1	6 6 4
9	5 7 3
output	
6	

Note

In the first example two upper squares are winning.

In the third example three left squares in the both middle rows are winning:

5 7 8 4

→ Attention

Package for this problem was not updated by the problem writer or Codeforces administration after we've upgraded the judging servers. To adjust the time limit constraint, solution execution time will be multiplied by 2. For example, if your solution works for 400 ms on judging servers, then value 800 ms will be displayed and used to determine the verdict.

Codeforces Round #110 (Div. 2)

Finished

→ Virtual participation

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Start virtual contest

→ Problem tags

brute force

No tag edit access

→ Contest materials

- Announcement

9 5 3 2
1 6 6 4
9 5 7 3

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