Lookability

Time limit: 2 sec.
Memory limit: 512MB

Description

Minkyu's hobby is to look. He looks at the nature, flowers, trees, animals, stars, people, and computer monitors, of course.

Because he is a thoughtful man, he is looking after his friends' belongings. He is in a classroom, and there are n * m tables in n rows and in m columns. He decided to look toward the front, the left, the right, and the back from his seat because he loves rook in chess the most. There are computers on some tables. Because computers block his view, he cannot look beyond.

Given a configuration of classroom and his seat, find the number of tables he can look at except his seat.

Input

The first line contains two integers n and m, the number of rows and columns in the classroom, respectively. $(1 \le n, m \le 1,000)$ The second line contains two integers x and y, the row number and the column number of his seat, respectively. $(1 \le x \le n, 1 \le y \le m)$ Then, the following n lines contains m integers each. These integers are either 0 or 1 meaning empty and nonempty table, respectively.

It is guaranteed his seat is always empty.

Output

Print the number of tables he can look at except his seat in a single line.

Sample I/O

Input(s)	Output(s)
4 5	4
2 3	
01010	
10011	
01001	
10001	

Note:

01+10

1+x11

01+01

10+01

For the example, his seat is marked by "x" and the tables he can look at by "+". He can look at 1 table in front of him, 1 on his left, 0 on his right, and 2 on his back. So, he can look at 4 tables except his seat. Therefore, he can look at 4 tables.