Fields P45829_en

A rectangular field of size $m \times n$ contains mn square areas. Some of the areas are occupied by a determinated growing (tomatoes, carrots, etc.) that is identified by a natural number strictly positive. It is known that growings are grouped in different disjointed rectangles and that a growing always is separated of another one by areas without grownings, identify by the value 0.

Write a program that reads fields and prints the number of rectangular growings.

Input

Input consists in a sequence of fields. For each field, it is given two natural numbers m and n with $m \geq 1$ and $n \geq 1$ that represent the size of the field. Then, it is given m rows, each one with n natural numbers that represent the growing of the area. The fields follow the hypotheses described previously.

Output

For each fielf of the input, print in a line the number of rectangular growings.

Sample input 1

```
6 10
1 1 1 0 3 3 3 0 2 2
1 1 1 0 3 3 3 0 2 2
0 0 0 0 3 3 3 0 0 0
2 2 0 0 3 3 3 0 4 4
0 0 0 0 0 0 0 0 0 0
1 1 1 1 1 0 4 4 4 0

3 3
0 0 0
0 9 0
0 0 0
```

Sample output 1

```
7
1
```

Problem information

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