Jutge.org

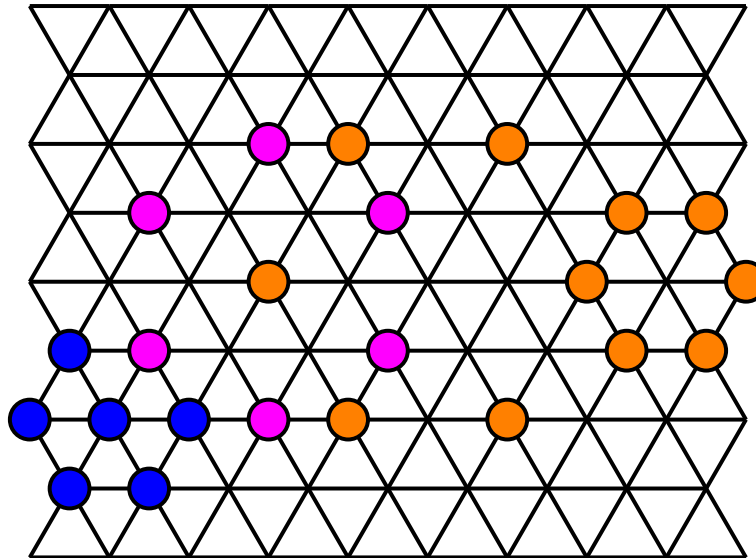The Virtual Learning Environment for Computer Programming

Big Hexagons X26557_en

Tokens of several colors have been placed on a hex grid.

Your task is count the number of regular hexagons whose all vertices are of the same color.

Input

The first line contains two numbers $X, Y, 2 \leq X, Y \leq 100$. X is the number of grid points in the first row, and Y is the number of rows. Odd-numbered rows contain X grid points and even-numbered rows contain $X - 1$ grid points.

The following Y lines contain a description of a board. A dot denotes an empty grid points, and colors are denoted by lowercase characters ('a'-'z'). See the example.

Output

Output the number of regular hexagons.

Sample input 1

```
10 9
. . . . . . . . . .
 . . . . . . . . .
. . . b a . a . . .
 . b . . b . . a a
. . . a . . . a . a
 c b . . b . . a a
c c c b a . a . . .
 c c . . . . . . .
. . . . . . . . . .
```

Sample output 1

```
3
```

Problem information

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Generation: 2026-01-25T14:44:10.659Z