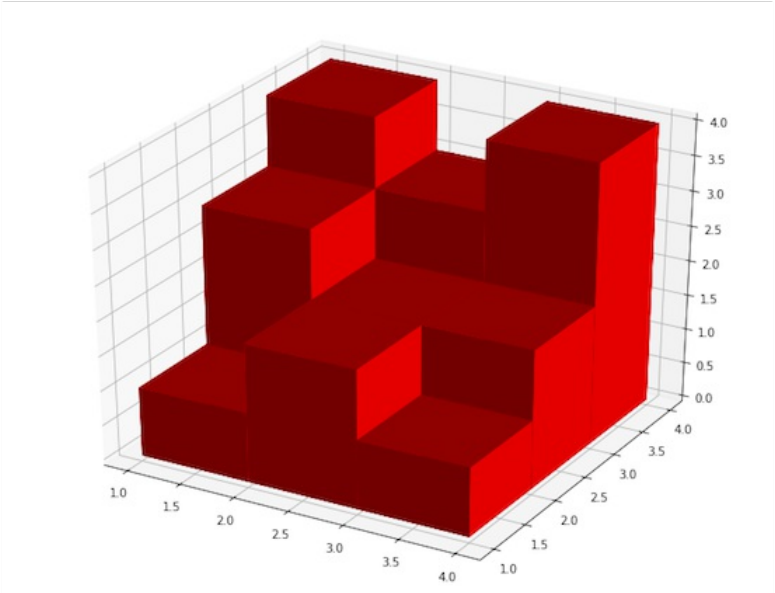
3D Surface Area

Jugnu, the little girl is fond of toys. Her friend Majnu works in a toy factory which creates toys. Majnu has a 2D board A of size $H \times W$ with H rows and W columns. The board is divided into cells of size 1×1 which are described by their coordinate (i, j). The cell (i, j) has an integer $A[i][j]$ written on it. To create the toy Majnu stacks $A[i][j]$ cubes of size $1 \times 1 \times 1$ on the cell (i, j). The price of the toy is equal to its total surface area. Given the description of the board as $A[i][j]$ find it's price.



Input Format

The first line contains two space-separated integers H and W the height and the width of the board respectively.

Then H lines follow.

Each line contains W space-separated integers. j^{th} integer in i^{th} line denotes $A[i][j]$

Constraints

- $1 \leq H, W \leq 100$
- $1 \leq A[i][j] \leq 100$

Output Format

Print the required answer in one line.

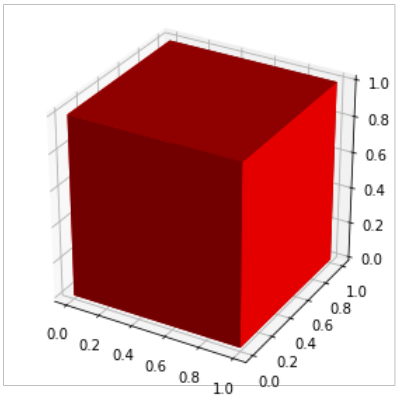
Sample Input 0

```
1 1
1
```

Sample Output 0

```
6
```

Explanation 0



The surface area of $1 \times 1 \times 1$ cube is 6.

Sample Input 1

```
3 3
1 3 4
2 2 3
1 2 4
```

Sample Output 1

```
60
```

Explanation 1

The sample input corresponds to the figure described in problem statement.