Largest Non-Coprime Submatrix

Given a matrix you need to find the submatrix with the largest number of elements, where the GCD (Greatest Common Divisor) of its elements is greater than one. A submatrix of the matrix is a sub-section composed of contiguous rows and columns of the original matrix.

Input Two numbers n,m in the first line. Followed by n lines with m numbers in each line.

Constraints

1<=N,M<=200
1<=numbers<=10000

Output Just a largest area where GCD is greater than 1.

Sample Input

```
3 3
2 6 8
4 8 3
6 9 4
```

Sample Output

```
4
```

If you observe the following submatrix:

```
2 6
4 8
```

The GCD is 2. There is no matrix larger than this with a GCD > 1.