A 2-D grid contains numbers greater than or equal to 1.

Traverse the grid from the top row's left-most element to the bottom row's right-most element. Traversal from one grid element to the other can only happen towards the right (horizontally) or down (vertically). While traversal, the value of every new element encountered will be multiplied to the value of previous elements.

\*\*The aim is to minimise the number of trailing zeros of the product when you reach the bottom row's right-most element. The expected output of this program is the number of trailing zeros of the product with minimal trailing zeros.\*\*

\*\*Input description\*\*

The first line will have 2 numbers M (rows) and N (columns)

Next M lines will have N numbers each, and will represent the rows of the grid.

\*\*Output Description\*\*

A single number which is the number of trailing zeros in the product with minimal trailing zeros for the grid.

For the sample test case, path with minimum trailing zeros product is 10, 12, 14, 16, 20. Hence the expected output is \*\*2\*\*.

Sample Input

3 3

10 12 14

15 30 16

12 10 20

Sample Output

2

Sample Input 2

20 20

100 54 66 10 65 19 48 87 97 74 69 78 74 22 13 75 41 51 16 13

6 37 20 96 90 21 38 2 10 87 85 48 67 5 47 13 22 42 81 44

1 5 36 20 69 57 18 48 11 73 16 54 32 56 63 90 42 66 54 20

30 96 10 37 92 1 2 35 81 47 19 14 95 47 68 78 46 34 18 75

15 97 9 95 98 44 30 77 33 48 90 50 39 100 97 5 97 27 47 75

30 84 24 83 42 62 86 25 96 5 12 25 100 47 35 15 39 30 39 9

8 76 24 16 5 97 89 11 40 41 57 84 95 84 66 72 4 70 12 82

34 92 50 85 72 11 38 4 68 85 70 98 51 82 83 99 67 22 97 31

18 92 47 78 74 88 46 69 80 15 26 63 43 58 6 88 34 62 7 64

9 55 89 12 22 26 100 85 44 23 40 67 15 28 44 68 35 63 28 5

24 91 63 33 30 63 50 6 6 27 55 82 19 81 1 98 12 74 93 15

52 47 31 73 73 40 97 94 65 7 41 32 21 43 22 48 99 93 17 39

79 45 5 64 54 88 29 48 45 69 75 86 2 38 73 64 34 31 7 18

91 4 97 13 84 12 20 3 17 29 72 60 35 70 25 88 30 42 58 91

21 24 98 75 97 71 72 9 29 94 35 62 17 39 45 3 6 88 36 44

46 63 78 71 5 19 56 79 17 15 57 57 96 74 83 83 51 94 27 15

20 78 20 63 82 63 22 13 97 62 28 10 87 83 34 39 90 90 77 38

63 25 42 32 89 69 87 69 58 43 93 60 70 23 67 91 91 89 46 58

30 81 51 47 88 74 88 6 7 35 29 18 100 13 99 78 29 17 85 24

34 24 35 79 50 2 100 46 36 87 1 38 64 13 58 33 62 94 44 35

Sample Output 2

3