



### Problem A The Table

Input File: A.IN

Output File: standard output

Program Source File: A.C, A.CPP, A.JAVA

Consider the table of 32-bit signed integers with  $n$  rows and  $m$  columns. The columns are numbered from 1 to  $m$  beginning from the left side of the table. Let  $A_i$  ( $1 \leq i \leq m$ ) is the product of all numbers in the  $i$ -th column. Find the maximum of these products and print the column number where this maximum product is achieved. If there are many such columns, print the largest number of the column.

**Input.** Consists of multiple tests. Each test begins with a line with two integers  $m$  and  $n$  ( $1 \leq m \leq 20$ ,  $1 \leq n \leq 1000$ ). Each of the next  $n$  lines contains  $m$  32-bit signed integers.

**Output.** For each test case print on a separate line the column number with the maximum product. If there are several of them – print the largest number of such column.

#### Sample Input

```
3 3
20 10 30
15 20 20
30 30 20
3 2
2 -2 2
2 -2 2
```

#### Sample Output

```
3
3
```