Contestants who won the combination

Programming contest is organized with M competition rounds. All together N contestant participated in the competition, but not all of them participated in all rounds. In each competition round maximum 100 points could be achieved. For each competition round there was a limit that must be obtained by a contestant in order to count her/him in the combination rank list.

Task

Write a program that computes all contestants who won the combination.

Input

The first line of the *standard input* contains two integers separated by space. The first number is the number of contestants ($1 \leq N \leq 100$), the second number is the number of competition rounds ($1 \leq M \leq 100$). The contest rounds are identified by the numbers 1,…,M and the contestants are identified by the numbers 1,…,N. The second line contains exactly M integers. The i-th number in the line is the minimal point for the i-th competition round. Each of the next M line contains N space separated integers. The i-th number in the line is the points obtained by the i-th contestant. If a contestant not participated in a competition round, then the value -1 is present instead of the points.

Output

Your program must write two lines to the *standard output*. The first line must contain the number of contestants who won the combination. The second line must contain the identifiers of the contestants who won the combination. The numbers must be given in ascending order and separated by single space.

Example

sample input

```
5 3
10 7 10
10 30 10 10 -1
-1 10 10 20 6
70 20 30 30 50
```

sample output

```
2
2 4
```

Limits

Time limit: 0.1 sec.

Memory limit: 32 MiB