



COMPETITIE

PROG-A-THON

5: Debt galore

Level: intermediate

Time limit: 4.000 seconds

As students are currently not getting any money from the government, they frequently need to borrow money from each other. This is not different at **via**. However, as the end of the year is currently coming up the members of **via** are trying to get a grip on how much money they are owed. It seems that as soon as one member starts collecting its debt everyone will start to crumble...

There are n members at **via**. For each pair of members, (A, B) , the amount of money A owes to B can be expressed by an integer $d_{AB} = -d_{BA}$. If the balance of a member A is negative ($\sum_{i=1}^n D_{Ai} < 0$), the member may go bankrupt any moment. If a member A goes bankrupt, all debt to A is forgiven, and no money can ever be collected from A . Now another member with a negative balance may go bankrupt until all members are financially stable (at least for now).

Depending on which member goes bankrupt first, there might be only one member remaining at **via** which does not go bankrupt. We would like to know whether such a situation is possible.

Input

The first line of the input contains the number of test cases, T . The descriptions of the test cases follow: the description of each test case starts with a line containing the number of members at **via** ($1 \leq n \leq 20$). Then n lines follow, each containing n space-separated numbers. The number at index j at line i is the amount of euro cents that member i owes to member j .

A member cannot owe money to itself (i.e. $d_{ii} = 0$). Finally, the absolute value of d_{ij} is always smaller or equal to 10^6 for all i and j .

Output

In the same order as the input: print the answer to each test case. The answer to each test case is a line containing, in increasing order, the indices (using 1-based indexing of course) of the members that can become the only member not go bankrupt. If no such member exists, print a single number 0.

Sample input 1

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1
3
0 -3 1
3 0 -2
-1 2 0
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Sample output 1

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1 3
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