The first line of the input file contains the number N – the number of vertices ($1 \le N \le 100$). Next are the N lines. The second row contains a description of all edges descending from the i-th vertex. The description begins with the number of outgoing edges. The following are the numbers of the vertices to which these edges go. All vertices are numbered by natural numbers from 1 to N. It is guaranteed that the i-th adjacency list does not contain the number i, and all lists do not contain duplicate numbers.

Derive the adjacency matrix of the directed graph.

Sample input:

3

 $2\ 2\ 3$

0

1 2

Sample output:

0 1 1

 $0\ 0\ 0$

 $0\ 1\ 0$