



(/en/),  
v1.1.0

## CSD Testing System

(/en/)

# From adjacency matrix to adjacency list

Cost: 4 | Solved: 139

**Memory limit:** 256 MBs

**Time limit:** 1 s

**Input:** input.txt

**Output:** output.txt

### Task:

A graph is given by adjacency matrix.

Output its representation in the form of adjacency list.

### Input:

The first line contains a natural  $n$  ( $1 \leq n \leq 100$ ) – the quantity of the graph's vertexes.

The next  $n$  lines contain  $n$  numbers (adjacency matrix), each is equal to either 0 or 1 (0 means no edge, 1 means the edge exists).

### Output:

The adjacency list of the given graph in the format " $i$ : a b c", where " $i$ " is the index of a vertex, "a b c" – indices of adjacent vertexes.

*Indices of vertexes and adjacent vertexes should go in ascending order.*

### Example:

Input	Output
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5	
0 1 1 1 0	1: 2 3 4
1 0 0 1 1	2: 1 4 5
1 0 0 1 0	3: 1 4
1 1 1 0 1	4: 1 2 3 5
0 1 0 1 0	5: 2 4