Bingo 3

Input file:	`standard input`
Output file:	`standard output`
Time limit:	1 second
Memory limit:	1024 megabytes

In this problem, you will need to construct a grid with n rows and n columns. Each cell of the grid has an integer in it, where $a_{i,j}$ indicates the integer in the cell located at the i-th row and the j-th column. Each integer from 1 to n^2 (both inclusive) appears exactly once in the grid.

We say an integer x is a "bingo integer" of this grid, if at least one of the two following conditions is satisfied.

- There is at least one row, where all integers in the cells of that row are less than or equal to x.
- There is at least one column, where all integers in the cells of that column are less than or equal to x.

It is easy to see that a grid may have multiple bingo integers, however in this problem, we're only interested in the smallest bingo integer.

Given integers n and k, construct a grid with n rows and n columns, such that its smallest bingo integer is exactly k.

Input

There are multiple test cases. The first line of the input contains an integer T ($1 \leq T \leq 50$) indicating the number of test cases. For each test case:

The first and only line contains two integers n and k ($1 \leq n \leq 50$, $1 \leq k \leq n^2$).

Output

For each test case:

- If it is possible to construct a grid with n rows and n columns, such that its smallest bingo integer is k, first output `Yes` in one line. Then output n lines, where the i-th line contains n integers $a_{i,1}, a_{i,2}, \cdots, a_{i,n}$ separated by a space, indicating the integers on the i-th row of the grid. Don't forget that each integer from 1 to n^2 (both inclusive) must appear exactly once in the grid. If there are multiple valid answers, you can output any of them.
- If it is impossible to find an answer, just output `No` in one line.

Example

standard input	standard output
4 3 5 4 10 5 2 1 1	Yes 4 2 5 7 1 9 8 6 3 Yes 14 9 2 13 1 11 16 8 10 3 7 5 6 15 4 12 No Yes 1