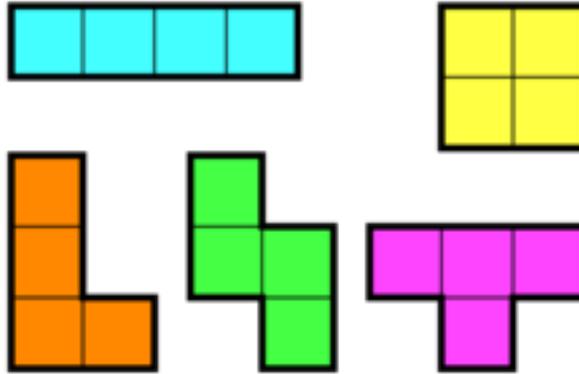


Problem G. Geometric shapes

Input file: standard input
Output file: standard output
Time limit: 1 second
Memory limit: 256 megabytes

You have to tile all cells of the grid $n \times m$ with shapes from tetris (tetromino) except for one cell with coordinates (r, c) .

There are the following tetromino shapes:



And also their turns and reflections.

Input

The first line contains a single integer t — the number of testcases. The following t lines contain four space-separated integers $n_i m_i r_i c_i$, denoting the size of the grid and coordinates of the cell, which you don't have to tile, respectively.

$$1 \leq r_i \leq n_i$$

$$1 \leq c_i \leq m_i$$

$$\sum n_i * m_i \leq 10^5$$

Output

For each test case print "YES" if tiling is possible. Next, print $n_i \times m_i$ numbers denoting the tiling. Each of the numbers correspond to the number of the figure to which the cell belongs. The cell (r_i, c_i) has to contain 0, and the remaining figures should be numbered sequentially starting with 1. If tiling is impossible, then print "NO" in a single line.

Example

standard input	standard output
2	YES
3 3 2 2	1 1 1
4 4 1 2	1 0 2
	2 2 2
	NO