

# Not Aqre

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

Given an  $n \times m$  matrix, where  $n \times m$  is divisible by 3. You need to fill the matrix with 0, 1, and 2, each appearing exactly  $\frac{nm}{3}$  times, such that:

- No three identical numbers appear consecutively in a horizontal or vertical direction.
- All cells filled with 0 form an 8-connected region<sup>†</sup>, all cells filled with 1 form an 8-connected region, and all cells filled with 2 form an 8-connected region.

<sup>†</sup> Two cells are 8-adjacent if they share a side or a corner. A set of cells is 8-connected if for any two cells in the set, there exists a path connecting them entirely within the set, and each step moves to an 8-adjacent cell.

## Input

Each test file contains multiple test cases. The first line contains the number of test cases  $T$  ( $1 \leq T \leq 10^3$ ). The description of the test cases follows.

The first line of each test case contains two integers  $n$  and  $m$  ( $1 \leq n, m \leq 10^3$ ,  $n \times m$  is divisible by 3), representing the number of rows and columns of the matrix.

For each test file, it is guaranteed that the sum of  $n \times m$  over all test cases does not exceed  $10^6$ .

## Output

For each test case, if it is impossible to construct a matrix satisfying the conditions, output a single line “No”.

Otherwise, output “Yes” on the first line, followed by the matrix with  $n$  lines, each containing  $m$  numbers. If there are multiple solutions, you may output any one of them.

## Example

standard input	standard output
2	Yes
3 4	0012
1 12	0021
	2211
	No