## Triomino Game

## English

$X$ and $Y$ are playing the following game: They start with an empty $2 x N$ board and move alternately. X moves first. In a move, a player must place an Ltriomino (shown on the right), in any of the 4 possible orientations, on the board. The piece placed must not overlap with a piece that has already been placed. The player that is unable to make a valid move loses.

Given the size of the board, find out who will win the game assuming that both $X$ and $Y$ play optimally

## Input

Input consists of multiple test-cases. The first line contains a single integer T , the number of test cases. ( $\mathrm{T}<=50$ )

Each test-case consists of a single line containing a single integer $N$, the size of the board.
( $\mathrm{N}<=800$ )

## Output

For each test-case, output a single line containing "X" or "Y" depending on who wins that game.

## Example

Input:
2
3
4
Output:
X
Y

