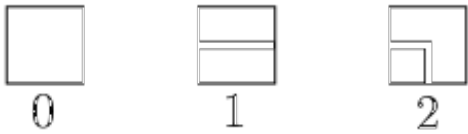


# The Long and Narrow Maze

Consider a maze consisting of 3 rows of  $n$  square blocks each. The passageways in every block match one of three possible patterns, numbered 0 (empty), 1 (straight) and 2 (bent), as depicted below.



Your task is to determine whether it is possible to create a passage in a given maze, with an entrance at the left end and an outlet at the right end of the maze, only by rotating some of the squares of the maze by a multiple of 90 degrees.

## Input

The input begins with the integer  $t$ , the number of test cases. Then  $t$  test cases follow.

Each test case begins with a line containing a single integer  $n$  - the number of squares in one row of the maze ( $1 \leq n \leq 200000$ ). The next  $n$  lines contain three integers each, denoting the types of blocks in consecutive columns of the maze. A column description is of the form  $a b c$  ( $0 \leq a, b, c \leq 2$ ), where  $a$  represents the type of the block in the first row,  $b$  - in the second row and  $c$  - in the third row.

## Output

For each test case output the word `yes` if it is possible to rotate the squares so as to form a connection between the left and right edge, and the word `no` in the opposite case.

## Example

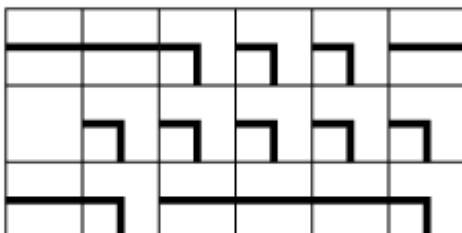
### Sample input:

```
1
6
1 0 1
1 2 2
2 2 1
2 2 1
2 2 1
1 2 2
```

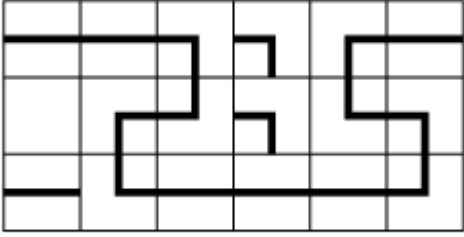
### Sample output:

```
yes
```

Indeed, the sample input corresponds to the following maze:



for which there exists a correct solution to the problem:



**Warning: large Input/Output data, be careful with certain languages**