

# Problem A. Computer Game

**Time limit** 2000 ms

**Mem limit** 262144 kB

Monocarp is playing a computer game. Now he wants to complete the first level of this game.

A level is a rectangular grid of 2 rows and  $n$  columns. Monocarp controls a character, which starts in cell  $(1, 1)$  — at the intersection of the 1-st row and the 1-st column.

Monocarp's character can move from one cell to another in one step if the cells are adjacent by side and/or corner. Formally, it is possible to move from cell  $(x_1, y_1)$  to cell  $(x_2, y_2)$  in one step if  $|x_1 - x_2| \leq 1$  and  $|y_1 - y_2| \leq 1$ . Obviously, it is prohibited to go outside the grid.

There are traps in some cells. If Monocarp's character finds himself in such a cell, he dies, and the game ends.

To complete a level, Monocarp's character should reach cell  $(2, n)$  — at the intersection of row 2 and column  $n$ .

Help Monocarp determine if it is possible to complete the level.

## Input

The first line contains a single integer  $t$  ( $1 \leq t \leq 100$ ) — the number of test cases. Then the test cases follow. Each test case consists of three lines.

The first line contains a single integer  $n$  ( $3 \leq n \leq 100$ ) — the number of columns.

The next two lines describe the level. The  $i$ -th of these lines describes the  $i$ -th line of the level — the line consists of the characters '0' and '1'. The character '0' corresponds to a safe cell, the character '1' corresponds to a trap cell.

Additional constraint on the input: cells  $(1, 1)$  and  $(2, n)$  are safe.

## Output

For each test case, output YES if it is possible to complete the level, and NO otherwise.

## Examples

Input	Output
4	YES
3	YES
000	NO
000	YES
4	
0011	
1100	
4	
0111	
1110	
6	
010101	
101010	

## Note

Consider the example from the statement.

In the first test case, one of the possible paths is  $(1, 1) \rightarrow (2, 2) \rightarrow (2, 3)$ .

In the second test case, one of the possible paths is  $(1, 1) \rightarrow (1, 2) \rightarrow (2, 3) \rightarrow (2, 4)$ .

In the fourth test case, one of the possible paths is

$(1, 1) \rightarrow (2, 2) \rightarrow (1, 3) \rightarrow (2, 4) \rightarrow (1, 5) \rightarrow (2, 6)$ .