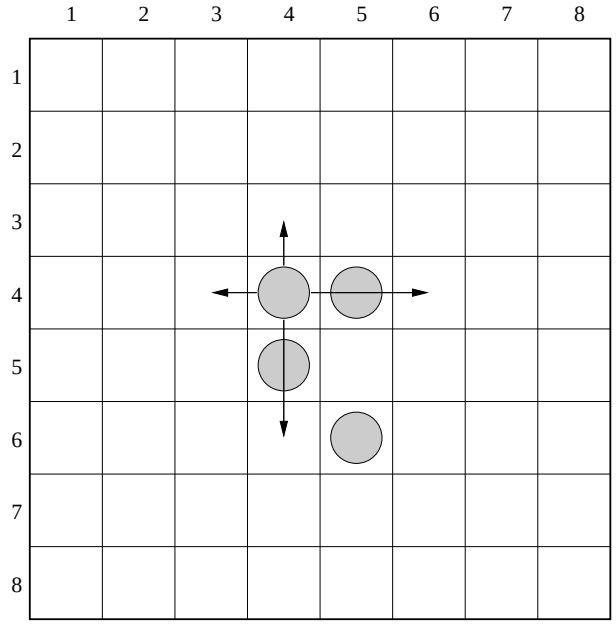
Problem A

Solitaire

Solitaire is a game played on a chessboard 8x8. The rows and columns of the chessboard are numbered from 1 to 8, from the top to the bottom and from left to right respectively.

There are four identical pieces on the board. In one move it is allowed to:

- move a piece to an empty neighboring field (up, down, left or right),
- jump over one neighboring piece to an empty field (up, down, left or right).



There are 4 moves allowed for each piece in the configuration shown above. As an example let's consider a piece placed in the row 4, column 4. It can be moved one row up, two rows down, one column left or two columns right.

Problem

Write a program that:

- reads two chessboard configurations from the standard input,
- verifies whether the second one is reachable from the first one in at most 8 moves,
- writes the result to the standard output.

Input

Each of two input lines contains 8 integers $a_1, a_2, \ldots, a_8$ separated by single spaces and describes one configuration of pieces on the chessboard. Integers a_{2j-1} and a_{2j} $(1 \leq j \leq 4)$ describe the position of one piece — the row number and the column number respectively.

Output

The output should contain one word YES if a configuration described in the second input line is reachable from the configuration described in the first input line in at most 8 moves, or one word NO otherwise.

Sample Input

```
4 4 4 5 5 4 6 5
2 4 3 3 3 6 4 6
```

Sample Output

```
YES
```