## Problem B. Battleship

$\begin{array}{ll}\text { Time limit: } & 1 \text { second } \\ \text { Memory limit: } & 512 \text { megabytes }\end{array}$
Let's consider the classic game of Battleship.
According to the rules, each player has a $10 \times 10$ field on which they must place 10 ships: one «Battleship» (occupies $1 \times 4$ cells), two «Cruisers» (size $1 \times 3$ cells each), three «Destroyers» (size $1 \times 2$ cells each), and four «Submarines» (size $1 \times 1$ cells each). The following conditions must be met:

- All ships must be placed on the field;
- Each ship must fit entirely within the grid;
- The set of cells occupied by each ship must form a rectangle of the corresponding size;
- Each ship must be oriented either vertically or horizontally;
- Any two cells occupied by different ships cannot coincide or touch each other by side or corner.

We will describe the placement of ships using a $10 \times 10$ table, where each element contains the symbol ' $\#$ ' if the corresponding cell is occupied by a ship, and '.' otherwise.

Your task is to determine, given a $10 \times 10$ field, whether it corresponds to a valid ship placement that follows the rules of Battleship.

## Input

The input consists of 10 lines, separated by line breaks, with 10 characters each - the description of the field. It is guaranteed that each character in the grid is either ' $\#$ ' or ' $\because$ '.

## Output

Print «YES» if the grid described in the input corresponds to a valid ship placement in the game of Battleship, and «NO» otherwise.

## Examples

| standard input | standard output |
| :---: | :---: |
| \#. \#. \#. . . . <br> . . . . . . \#\# . <br> . \# . . \# . . . . . <br> . \# . . . . . . . . <br> .\# . . \#\# . <br> \#\#\#\#... \#. <br> . . . . . . $\#$. <br> . . . . . . . \#. <br> \#\# . | YES |
| \#\# . . \# . . . . . . . . . . . \#\# . . \# . . \# . . . . \# . \#. $\qquad$ . \# . . . . . . . . $\qquad$ \#\#\#\# . . . \# . . $\qquad$ $\qquad$ \#\# . . . . . . . \# | NO |

