A. IQ Test

time limit per test: 2 seconds
memory limit per test: 256 megabytes
input: standard input
output: standard output

In the city of Ultima Thule job applicants are often offered an IQ test.

The test is as follows: the person gets a piece of squared paper with a 4×4 square painted on it. Some of the square's cells are painted black and others are painted white. Your task is to repaint **at most one** cell the other color so that the picture has a 2×2 square, completely consisting of cells of the same color. If the initial picture already has such a square, the person should just say so and the test will be completed.

Your task is to write a program that determines whether it is possible to pass the test. You cannot pass the test if either repainting any cell or no action doesn't result in a 2×2 square, consisting of cells of the same color.

Input

Four lines contain four characters each: the j-th character of the i-th line equals "." if the cell in the i-th row and the j-th column of the square is painted white, and "#", if the cell is black.

Output

Print "YES" (without the quotes), if the test can be passed and "NO" (without the quotes) otherwise.

Examples

input
```
####
.#..
####
....
```
output
```
YES
```

input
```
####
....
####
....
```
output
```
NO
```

Note

In the first test sample it is enough to repaint the first cell in the second row. After such repainting the required 2×2 square is on the intersection of the 1-st and 2-nd row with the 1-st and 2-nd column.

Codeforces Round #176 (Div. 2)

Finished

→ **Virtual participation**

Virtual contest is a way to take part in past contest, as close as possible to participation on time. It is supported only ACM-ICPC mode for virtual contests. If you've seen these problems, a virtual contest is not for you - solve these problems in the archive. If you just want to solve some problem from a contest, a virtual contest is not for you - solve this problem in the archive. Never use someone else's code, read the tutorials or communicate with other person during a virtual contest.

Start virtual contest

→ **Problem tags**

brute force   implementation
No tag edit access

→ **Contest materials**

- Announcement   ✕
- Tutorial   ✕