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	

nput	
*##	
 !##	
••	
utput	

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.