Problem C. Checkers 2

Input file:	checkers2.in
Output file:	checkers2.out
Time limit:	2 seconds
Memory limit:	256 megabytes

Read the **Checkers** problem.

With your help Vasya solved Peter's problem without any troubles. Vasya asked himself why he can't solve the problem without your help. Maybe one of his moves was incorrect. Vasya doesn't remember his moves. He remembers only initial and final positions. He wonders whether it is possible to get one position from the other.

Input

The first line of the input file contains N and M ($1 \le N, M \le 400$) — dimentions of the first picture. Following N lines describe the first picture. Each line contain M symbols '.' or '#'. '.' means that cell is empty and '#' means that cell is occupied by checker. Description of the second picture in the same format follows immediately after first picture.

Output

Print "Yes" if it is possible to get one picture from another and "No" otherwise.

Examples

checkers2.in	checkers2.out
1 2 .# 1 1 #	No
2 2 #. .# 1 3 #.#	Yes