

Word Search

Given an $n \times m$ grid of characters board and a string *word*, return whether the given *word exists in the grid*.

The word can be constructed from letters of sequentially adjacent cells, where adjacent cells are horizontally or vertically neighboring. The same letter cell may not be used more than once.

Input:

- The first line contains two integers n and m ($1 \leq n, m \leq 6$) (the height and width of the board);
- The next n lines contain m uppercase characters each (the grid of characters);
- The following line contains an integer k ($1 \leq k \leq 9$), the size of *word*;
- Last line contains the string *word*, consisting of k uppercase characters.

Output:

- Output a single string: "Yes" or "No" (without quotes), with the answer to the problem.

Samples:

Input	Output
3 4 ABCE SFCS ADEE 6 ABCCED	Yes
3 4 ABCE SFCS ADEE 3 SEE	Yes
3 4 ABCE SFCS ADEE 4 ABCB	No

Explanation:

Sample 1:

A	B	C	E
S	F	C	S
A	D	E	E

Sample 2:

A	B	C	E
S	F	C	S
A	D	E	E

Sample 3:

A	B	C	E
S	F	C	S
A	D	E	E