

2207 - Grid Rotation

Description

Given two grids **A** and **B**, of **NxN** characters '+' or 'o'... can you find out whether **A** can be transformed in **B** or not, if you know that only 90-degree rotations are allowed? Of course, you can make several rotations to a single grid.

Input specification

First a integer number $1 \leq N \leq 100$.

The following **N** lines contain **N** characters corresponding to the grid **A**.

Then follow a integer number $1 \leq Q \leq 100$, the total number of questions.

For each question follow **N** lines containing **N** characters corresponding to the **B-th** grid.

Output specification

You must print **Q** lines, saying *YES* if **A** can be transformed in **B**, or *NO* otherwise.

Sample input

```

2
+o
oo
6
+o
oo
o+
oo
oo
o+
oo
+o
+o
o+
++
++

```

Sample output

YES

YES

YES

YES

NO

NO

Hint(s)

Source	Yonny Mondelo Hernández
Added by	ymondelo20
Addition date	2013-01-14
Time limit (ms)	10000
Test limit (ms)	1000
Memory limit (kb)	130000
Output limit (mb)	64
Size limit (bytes)	15000
Enabled languages	Bash C C# C++ Java Pascal Perl PHP Python Ruby Text