

## A. Collecting Beats is Fun

time limit per test: 1 second

memory limit per test: 256 megabytes

input: standard input

output: standard output

Cucumber boy is fan of Kyubeat, a famous music game.

Kyubeat has **16** panels for playing arranged in  $4 \times 4$  table. When a panel lights up, he has to press that panel.

Each panel has a **timing** to press (the preferred time when a player should press it), and Cucumber boy is able to press at most  $k$  panels in a time with his one hand. Cucumber boy is trying to press all panels in perfect timing, that is he wants to press each panel exactly in its preferred time. If he cannot press the panels with his **two hands** in perfect timing, his challenge to press all the panels in perfect timing will fail.

You are given one scene of Kyubeat's panel from the music Cucumber boy is trying. Tell him if he is able to press all the panels in perfect timing.

### Input

The first line contains a single integer  $k$  ( $1 \leq k \leq 5$ ) — the number of panels Cucumber boy can press with his one hand.

Next 4 lines contain 4 characters each (digits from 1 to 9, or period) — table of panels. If a digit  $i$  was written on the panel, it means the boy has to press that panel in time  $i$ . If period was written on the panel, he doesn't have to press that panel.

### Output

Output "YES" (without quotes), if he is able to press all the panels in perfect timing. If not, output "NO" (without quotes).

### Examples

input
<pre>1 .135 1247 3468 5789</pre>
output
<pre>YES</pre>
input
<pre>5 ..1. 1111 ..1. ..1.</pre>
output
<pre>YES</pre>
input
<pre>1 .... 12.1 .2.. .2..</pre>
output
<pre>NO</pre>

### Codeforces Round #219 (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

implementation

No tag edit access

#### → Contest materials

- Announcement 
- Tutorial 

**Note**

In the third sample boy cannot press all panels in perfect timing. He can press all the panels in timing in time 1, but he cannot press the panels in time 2 in timing with his two hands.