# String Rotation

## Problem Description

Rotate a given String in the specified direction by specified magnitude.

After each rotation make a note of the first character of the rotated String, after all rotation are performed the accumulated first character as noted previously will form another string, say **FIRSTCHARSTRING**.

Check If **FIRSTCHARSTRING** is an Anagram of any substring of the Original string.

If yes print "YES" otherwise "NO". Input

The first line contains the original string s. The second line contains a single integer q. The ith of the next q lines contains character d[i] denoting direction and integer r[i] denoting the magnitude.

## Constraints
1 <= Length of original string <= 30

1<= q <= 10

## Output
YES or NO

## Explanation

## Example 1
### Input
carrace

 3

 L 2

 R 2

 L 3

## Output
NO

## Explanation
 After applying all the rotations, the **FIRSTCHARSTRING** string will be "rcr" which is not anagram of any sub string of original string "carrace".