

Rotating Letters

Problem Description

An artist wants to construct a sign.

Each letter on the sign will rotate about its centre.

Only letters that are not changed by rotation of 180 degrees can be used:

I, O, S, H, Z, X, and N

Write a program that reads a word and determines whether the word can be used on the sign.

Input Specification

Input should be processed only if it consists of all uppercase letters, with no spaces.

The input text can have a length ranging between 1 and 30 characters, inclusive.

If invalid input is received, the prompt should simply be repeated.

Output Specification

Output YES if the input word can be used on the sign; otherwise, output NO.

Sample Input/Output Session – 1 (user input is in **bold**)

Input word is? **SHINS**
YES

Sample Input/Output Session – 2 (user input is in **bold**)

Input word is? **BIG ROCK**
Input word is? **IAM24YEARSOLD**
Input word is? **mangos**
Input word is? **BIG**
NO

Sample Input/Output Session – 3 (user input is in **bold**)

Input word is? **NOISE**
NO