Hangman

Problem ID: hangman
CPU Time limit: 1 secon
Memory limit: 1024 MB
Difficulty: 1.6

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Source: Mount Allison Programming Showdowr 2019)

Hangman is a (somewhat macabre) word-guessing game that can be played by two people. Player 1 thinks of a word consisting of n letters, and draws a row of n dashes on a piece of paper. These dashes correspond to the letters of the word, in the same order. Player 2 then attempts to discover the word by making a sequence of letter guesses. For each letter guessed by Player 2:

- If the letter occurs one or more times in the word, Player 1 writes the letter above each corresponding dash.
- If the letter does not occur in the word, Player 1 adds one component to a drawing of a stick-figure man hanging on a gallows. The drawing (initially empty) has 10 possible components: base, vertical beam, horizontal beam, rope, head, torso, right leg, left leg, right arm, left arm.

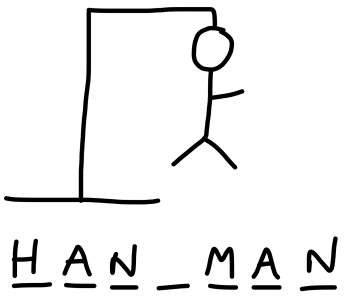

Image by Victoria M. Gardner (Shutterstock), Used under license

If Player 2 guesses all the letters in the word before the drawing of the hanging man is complete, then Player 2 wins (and Player 1 loses). Otherwise, Player 2 loses (and Player 1 wins).

Ned loves playing hangman, especially as Player 2, but he finds that he is not a very good letter guesser. To improve his chances, he decides to adopt a new strategy. For each word selected by Player 1, Ned chooses a random permutation of the letters of the alphabet, and then simply guesses letters in that order until he either wins or loses. Given the word and Ned's permutation of the alphabet, determine the outcome of the game.

Input

The input consists of two lines representing a single game of Hangman. The first line contains the word to be guessed, a non-empty string of uppercase English alphabet letters (`A`–`Z`) of maximum length 16. The second line contains a permutation of the 26 letters of the English alphabet, also uppercase.

Output

If Ned wins the game by guessing letters in the order given by the permutation (proceeding from left to right), output "`WIN`". Otherwise, output "`LOSE`".

Sample Input 1

```
HANGMAN
ABCDEFGHIJKLMNOPQRSTUVWXYZ
```

Sample Output 1

```
WIN
```

Sample Input 2

```
BANANA
ABCDEFGHIJKLMNOPQRSTUVWXYZ
```

Sample Output 2

```
LOSE
```

Sample Input 3

```
RAINBOWS
USIANBVLOJRKWXZCTQGHPFMYDE
```

Sample Output 3

```
WIN
```