Stupid Little Monkey

Problem description

Stupid little monkey's vocabulary is very small, every time doing English multiple choice questions made him very headache. But he found a way, and it proved to be a very efficient to get it right!

The method is described as follows: Assume that maxn is the number of occurrences of the most frequent letter in a word, and minn is the number of occurrences of the least frequent letter in a word. If maxn-minn is a prime number, the stupid little monkey thinks it is a "Lucky Word", and this word is likely to be the correct answer.

Input

The input file contains one word in which only lowercase letters may appear and is less than 100 in length.

Output

The output file consists of two lines. The first line is a string. If the input word is a Lucky Word, output "Lucky Word", otherwise output "No Answer".

The second line is an integer that prints the value of maxn-minn if the input word is a Lucky Word, and 0 otherwise.

Sample Input 1
error

Sample Output 1
Lucky Word
2

Sample Input 2
olympic

Sample Output 2
No Answer
0

Hint
[Explanation of Sample 1]
The most frequent letter "r" in the word "error" appears three times, and the least frequent letter appears once. 3-1=2, and 2 is a prime number.

[Explanation of Sample 2]
The most frequent letter "i" in the word olympic appears once, and the least frequent letter

appears once. 1-1=0, 0 is not a prime number.