

A prime number is a number that has only two divisors: itself and the number one. Examples of prime numbers are: 1, 2, 3, 5, 17, 101 and 10007.

In this problem you should read a set of words, each word is composed only by letters in the range a-z and A-Z. Each letter has a specific value, the letter a is worth 1, letter b is worth 2 and so on until letter z that is worth 26. In the same way, letter A is worth 27, letter B is worth 28 and letter Z is worth 52.

You should write a program to determine if a word is a prime word or not. A word is a prime word if the sum of its letters is a prime number.

## Input

The input consists of a set of words. Each word is in a line by itself and has  $L$  letters, where  $1 \leq L \leq 20$ . The input is terminated by enf of file (EOF).

## Output

For each word you should print: 'It is a prime word.', if the sum of the letters of the word is a prime number, otherwise you should print: 'It is not a prime word.'

## Sample Input

```
UFRN
contest
AcM
```

## Sample Output

```
It is a prime word.
It is not a prime word.
It is not a prime word.
```