# **Problem E - Prime Words**

#### **Time Limit: 1 second**

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  $1 \le L \le 20$ . 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**

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# **Sample Output**

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It is a prime word.

It is not a prime word.

It is not a prime word.
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