

# Interesting or Not

Krishna, the math geek of our class thinks that the number 41312432 is interesting.

This is because of the following property:

There is exactly 1 digit between the two 1s, there are exactly 2 digits between the two 2s, and so on.

Formally, Krishna thinks that a number  $X$  is interesting if the following property is satisfied:

For each  $D$  between 0 and 9, inclusive,  $X$  either does not contain the digit  $D$  at all, or it contains exactly two digits  $D$ , and there are precisely  $D$  other digits between them.

You are given a String  $X$  that contains the digits of a positive integer. Print "Interesting" if that integer is interesting, otherwise print "Not interesting" ( Quotes for clarity ).

## Input

First line contains a single integer  $T$ , the number of test cases. It is followed by  $T$  cases each of which contains one string.

## Output

For each test case output a single line containing "Interesting" (without quotes) if it is an interesting integer or "Not interesting" (without quotes) if it is not interesting.

## Constraints

$$1 \leq T \leq 50$$

The length of the string will not exceed 20.

## Example

### Input:

3

2002

1001

41312432

### Output:

Interesting

Not interesting

Interesting

**Explanation for test case #1:**

There are 0 digits between the two 0s, and 2 digits between the two 2s, so interesting.

**Explanation for test case #2:**

There should be 1 digit between the two 1s, but there are 2 digits between the two 1s, so not interesting.