Write a program that reads an expression consisting of two non-negative integer and an operator. Determine if either integer or the result of the expression is too large to be represented as a "normal" signed integer (type integer if you are working Pascal, type int if you are working in C).

## Input

An unspecified number of lines. Each line will contain an integer, one of the two operators ' + ' or '*', and another integer.

## Output

For each line of input, print the input followed by $0-3$ lines containing as many of these three messages as are appropriate: 'first number too big', 'second number too big', 'result too big'.

## Sample Input

$300+3$
$9999999999999999999999+11$

## Sample Output

$300+3$
$9999999999999999999999+11$
first number too big
result too big

