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 99999999999999999999999 + 11 first number too big result too big