
Reverse Polish notation**P52023_en**

Evaluate arithmetic expressions given in the so-called reverse Polish notation. For instance, the expression

3 + 154

in reverse Polish notation is given as

3 154 +

That is, the two operands are given first, and afterwards comes the corresponding operator. A more complicated expression like

$((3 + 4) * (2 - 8)) + (2 + 5)$

is given as

3 4 + 2 8 - * 2 5 + +

Input

Input consists of several arithmetic expressions in reverse Polish notation, one per line. The operands are natural numbers. The possible operators, all binary, are '+', '-' and '*'.

Output

For every expression, print the result of its evaluation.

Sample input 1

3 154 +
3 4 + 2 8 - * 2 5 + +
99

Sample output 1

157
-35
99

Problem information

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