
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

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

Sample output

```
157
-35
99
```

Problem information

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