Prefix expression   P59813_en

Write a program that reads a prefix expression, and prints the result of evaluate it. The possible operators are sum, subtraction and multiplication. The operands are natural numbers between 0 and 9 (both included).

Input

Input is a prefix expression. It means that always appears the operator before its operands. For instance, the expression $4 + 3$ would be:

```
+ 4 3
```

The expression $8 * (4 + 3)$ would be:

```
* 8 + 4 3
```

The expression $(2 - 8) * (4 + 3)$ would be:

```
* - 2 8 + 4 3
```

Output

Your program must print an integer: the result of evaluate the expression.

Observation

Use recursion (not tables). Notice that an expression or is a digit, or is an operator followed by an expression followed by another expression.

Sample input 1	Sample output 1
`+ 4 3`	`7`

Sample input 2	Sample output 2
`* 8 + 4 3`	`56`

Sample input 3	Sample output 3
`* - 2 8 + 4 3`	`-42`

Problem information

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