
Junior Division - Prefix Evaluation

PROBLEM: Evaluate a prefix expression. The operands in the expression are single digit whole numbers. The operators are binary addition (+), subtraction (-), and multiplication (*), and a trinary operator “switcher” (@). The @ operator of a , b , and c returns b when a is positive; otherwise, it returns c .

Example 1: * + 4 5 - 3 1 simplifies to * 9 2, which has a value of 18.

Example 2: @ - 8 9 7 + 4 2 simplifies to @ -1 7 6, which has a value of 6.

INPUT: Five lines of data. Each line is a string, ≤ 128 characters. The string is a valid prefix expression with single digit whole number operands, and uses the operators +, -, * and @. All operands and operators are separated by at least one space.

OUTPUT: Evaluate each prefix expression and print the answer.

SAMPLE INPUT (<http://www.datafiles.acsl.org/2019/contest3/jr-sample-input.txt>):

```
* + 4 5 - 3 1
@ - 8 9 7 + 4 2
@ - 3 5 - * 2 4 1 0
* 4 @ - 5 7 * 3 2 + 1 9
* + @ 4 6 9 @ - 3 8 1 7 2
```

SAMPLE OUTPUT:

```
#1. 18
#2. 6
#3. 0
#4. 40
#5 26
```