

Postfix Notation

Implementation Practice 1

We are familiar with infix notation for representing expressions, where the operator is placed infix between the operands, as in `5 * 5`. Given an expression in postfix notation, such as `5 5 *`, evaluate the expression and print it to standard output, rounded to one decimal place.

Valid operands are `*` (multiplication), `/` (division), `+` (addition), `-` (subtraction), `%` (mod), and `^` (exponentiation).

Input Format

A valid postfix expression. The input will have no more than 50 characters, and the value of each number in the input and each intermediate result will be less than or equal to 1000.

Output Format

The result of the evaluation. The answer will be considered correct if its absolute or relative error does not exceed 10^{-1} .

Sample Input

```
5 5 +
```

Sample Output

```
10.0
```

Sample Input

```
5 5 + 6 * 8 -
```

Sample Output

```
52.0
```