

Problem 2 - Array Modifier

Problem for exam preparation for the [Programming Fundamentals Course @SoftUni](#).
Submit your solutions in the SoftUni judge system at <https://judge.softuni.org/Contests/Practice/Index/2474#1>.

You are given an array with integers. Write a program to modify the elements after receiving the following commands:

- "swap {index1} {index2}" takes two elements and swap their places.
- "multiply {index1} {index2}" takes element at the 1st index and multiply it with the element at 2nd index. Save the product at the 1st index.
- "decrease" decreases all elements in the array with 1.

Input

On the first input line, you will be given the initial array values separated by a single space.

On the next lines you will receive commands until you receive the command "end". The commands are as follow:

- "swap {index1} {index2}"
- "multiply {index1} {index2}"
- "decrease"

Output

The output should be printed on the console and consist of elements of the modified array – separated by a comma and a single space ", ".

Constraints

- Elements of the array will be integer numbers in the range $[-2^{31}...2^{31}]$
- Count of the array elements will be in the range $[2...100]$
- Indexes will be always in the range of the array

Examples

Input	Output	Comments
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<pre> 23 -2 321 87 42 90 -123 swap 1 3 swap 3 6 swap 1 0 multiply 1 2 multiply 2 1 decrease end </pre>	<pre> 86, 7382, 2369942, -124, 41, 89, -3 </pre>	<pre> 23 -2 321 87 42 90 -123 – initial values swap 1(-2) and 3(87) ▼ 23 87 321 -2 42 90 -123 swap 3(-2) and 6(-123) ▼ 23 87 321 -123 42 90 -2 swap 1(87) and 0(23) ▼ 87 23 321 -123 42 90 -2 multiply 1(23) 2(321) = 7383 ▼ 87 7383 321 -123 42 90 -2 multiply 2(321) 1(7383) = 2369943 ▼ 87 7383 2369943 -123 42 90 -2 decrease – all - 1 ▼ 86 7383 2369942 -124 41 89 -3 </pre>
<pre> 1 2 3 4 swap 0 1 swap 1 2 swap 2 3 multiply 1 2 decrease end </pre>	<pre> 1, 11, 3, 0 </pre>	

JS Examples

Input	Output	Comments
<pre> ['23 -2 321 87 42 90 -123', 'swap 1 3', 'swap 3 6', 'swap 1 0', 'multiply 1 2', 'multiply 2 1', 'decrease', 'end'] </pre>	<pre> 86, 7382, 2369942, -124, 41, 89, -3 </pre>	<pre> 23 -2 321 87 42 90 -123 – initial values swap 1(-2) and 3(87) ▼ 23 87 321 -2 42 90 -123 swap 3(-2) and 6(-123) ▼ 23 87 321 -123 42 90 -2 swap 1(87) and 0(23) ▼ 87 23 321 -123 42 90 -2 multiply 1(23) 2(321) = 7383 ▼ 87 7383 321 -123 42 90 -2 multiply 2(321) 1(7383) = 2369943 ▼ 87 7383 2369943 -123 42 90 -2 decrease – all - 1 ▼ 86 7383 2369942 -124 41 89 -3 </pre>
<pre> ['1 2 3 4', 'swap 0 1', 'swap 1 2', 'swap 2 3', 'multiply 1 2', 'decrease', 'end'] </pre>	<pre> 1, 11, 3, 0 </pre>	