

Programming for Beginners – 24 April 2016

Problem 4. Array Modifier

You are given an array with integers. Write a program to modify the elements after receive the commands “swap”, “multiply” or “decrease”.

- “swap {index1} {index2}” take two elements and swap their places.
- “multiply {index1} {index2}” take element at the 1st index and multiply it with 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 element of the modified array – separated by “,” (“comma and single space”).

Constraints

- Commands will be: “swap”, “multiply”, “decrease” and “end”
- 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
23 -2 321 87 42 90 -123 swap 1 3 swap 3 6 swap 1 0 multiply 1 2 multiply 2 1 decrease end	86, 7382, 2369942, -124, 41, 89, -3	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 42 290 -2 multiply 2(321) 1(7383) = 2369943 ▼ 87 7383 2369943 -123 42 90 -2 decrease – all - 1 ▼ 86 7383 2369942 -124 41 89 -3