# 02. 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 **[-231...231]**
* **Count of the array elements** will be in the range **[2...100]**
* **Indexes** **will be always in the range of the array**

## Examples

|  |  |  |
| --- | --- | --- |
| **Input JavaScript** | **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 |
| [  '1 2 3 4',  'swap 0 1',  'swap 1 2',  'swap 2 3',  'multiply 1 2',  'decrease',  'end'] | 1, 11, 3, 0 |  |

function arrayModifier(arr) {

    arr.pop()

    let modifiedArr = arr.shift().split(` `).map(Number)

    while (arr.length > 0) {

        let [command, firstIndex, secondIndex] = arr.shift().split(` `)

        if (command === `swap`) {

            firstEl = modifiedArr[firstIndex];

            secondEl = modifiedArr[secondIndex];

           modifiedArr.splice(Number(firstIndex), 1, secondEl)

           modifiedArr.splice(Number(secondIndex), 1, firstEl)

        }

        if (command === `multiply`){

let multiply = modifiedArr[Number(firstIndex)] \* modifiedArr[Number(secondIndex)]

            modifiedArr.splice(Number(firstIndex),1,multiply)

        }

        if (command === `decrease`){

            for (let i = 0; i < modifiedArr.length; i++) {

                modifiedArr.splice(i,1, modifiedArr[i]-1)

             }

        }

    }

console.log(modifiedArr.join(`, `))

}

arrayModifier([`23 -2 321 87 42 90 -123`,

    `swap 1 3`, `swap 3 6`, `swap 1 0`, `multiply 1 2`,

    `multiply 2 1`, `decrease`, `end`]);