**Java List**

<https://www.hackerrank.com/challenges/java-list/problem>

For this problem, we have *2* types of queries you can perform on a [List](https://docs.oracle.com/javase/7/docs/api/java/util/List.html):

1. Insert *y* at index *x*:

Insert

x y

1. Delete the element at index *x*:

Delete

x

Given a list, *L*, of *N* integers, perform *Q* queries on the list. Once all queries are completed, print the modified list as a single line of space-separated integers.

**Input Format**

The first line contains an integer, *N* (the initial number of elements in *L*).  
The second line contains *N* space-separated integers describing *L*.  
The third line contains an integer, *Q* (the number of queries).  
The *2Q* subsequent lines describe the queries, and each query is described over two lines:

* If the first line of a query contains the String **Insert**, then the second line contains two space separated integers *x y*, and the value *y* must be inserted into *L* at index *x*.
* If the first line of a query contains the String **Delete**, then the second line contains index *x*, whose element must be deleted from *L*.

**Constraints**

* *1 <= N <= 4000*
* *1 <= Q <= 4000*
* *Each element in is a 32-bit integer.*

**Output Format**

Print the updated list *L* as a single line of space-separated integers.

**Sample Input**

5

12 0 1 78 12

2

Insert

5 23

Delete

0

**Sample Output**

0 1 78 12 23

**Explanation**

*L =* [12,0,1,78,12]

*Q0 =* **Insert** 23 at index *5*.  
*L0 =* [12,0,1,78,12,23]

*Q1 =* **Delete** the element at index 0.  
*L1 =* [0,1,78,12,23]

Having performed all *Q* queries, we print *L1* as a single line of space-separated integers.