# Java List

For this problem, we have $2$ types of queries you can perform on a List:

1. Insert $y$ at index $x$:

```
Insert
x y
```

2. 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**

- $1 \le N \le 4000$
- $1 \le Q \le 4000$
- 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**

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

$Q_0$: **Insert** 23 at index $5$.
$L_0 = [12, 0, 1, 78, 12, 23]$

$Q_1$: **Delete** the element at index $0$.
$L_1 = [0, 1, 78, 12, 23]$

Having performed all $Q$ queries, we print $L_1$ as a single line of space-separated integers.