# Lab: Lists

Test your tasks in the Judge system: <https://alpha.judge.softuni.org/contests/lists-lab/4429>

## Change List

Write a program that:

* **Reads a list of integers** from the console and receives **commands** to **manipulate the list**
* Then until you receive **"end"**, you will receive different **commands:**
  + **"**Delete {element}**"** – delete all elements in the list, which are equal to the given element
  + **"**Insert {element} {position}**"** – insert the element at the given position
* When you receive the **"end"** command, print the **final state** of the list (**separated by spaces**)

### Example

|  |  |
| --- | --- |
| **Input** | **Output** |
| 1 2 3 4 5 5 5 6  Delete 5  Insert 10 1  Delete 5  end | 1 10 2 3 4 6 |
| 20 12 4 319 21 31234 2 41 23 4  Insert 50 2  Insert 50 5  Delete 4  end | 20 12 50 319 50 21 31234 2 41 23 |

## List of Products

Write a program that:

* Read an integer number **n** and **n lines of products**
* Print a **numbered list** of all the products **ordered by name**

### Example

|  |  |
| --- | --- |
| **Input** | **Output** |
| 4  Potatoes  Tomatoes  Onions  Apples | 1.Apples  2.Onions  3.Potatoes  4.Tomatoes |
| 5  Carrots  Artichokes  Beans  Eggplants  Peppers | 1.Artichokes  2.Beans  3.Carrots  4.Eggplants  5.Peppers |

## Remove Negatives and Reverse

Write a program that:

* Read a **list of integers**
* **Remove all negative numbers** from it
* Print the remaining elements in **reversed order**
* If there are no elements left in the list, print "**empty**"

### Example

|  |  |
| --- | --- |
| **Input** | **Output** |
| 10 -5 7 9 -33 50 | 50 9 7 10 |
| 7 -2 -10 1 | 1 7 |
| -1 -2 -3 | empty |