# Contact List



Create a program that helps you keep track of the **contacts** that you have. You will **receive** the **list** of **contacts** you already have on a **single line,** **separated** by a **single** **space** in the following format:

**"{contact1} {contact2} {contact3}… {contactn}"**

Then you will receive commands that you need to execute over your list. There are **four** **possible** **commands**:

* **"Add {contact} {index}":**
  + If {**contact**} **isn’t** already **contained** – add it in the **end** of the collection.
  + If {**contact**} **is** already **contained** – add it on the **given** **index, if** the **index exists**.
* **"Remove {index}"**
  + **Remove** the contact on the given index, **if** the **index** **exists**.
* **"Export {startIndex} {count}":**
  + Print the **next {count} contacts starting from the given {startIndex} (including)**, separated by a **single** **space.** If the **count** requested is **more than the contacts**- just **print them to the end**.   
    **"{contact} {contact} {contact}"**
* **"Print Normal/Reversed"**
  + **Print** the contact **list** in **normal** (in the order they have been added) or **reversed order** and then **stop** **the** **program**:

**"Contacts: {contact1} {contact2}… {contactn}"**

## Input

* On the **1st line**, you will receive the **starting list** with the **names of the contacts** **separated** by a **single space**.
* On the **next lines**, you will receive commands in the **format** **described** above**.**

## Output

* Print the needed output upon the **"Export"** command.
* Print the **list after** the **manipulations upon the "Print" command** in the **format** **described** above.

## Examples

|  |  |
| --- | --- |
| **Input** | **Output** |
| Alisson Bellamy Candace Tristan  Remove 3  Add Bellamy 2  Print Normal | Contacts: Alisson Bellamy Bellamy Candace |
| **Comments** | |
| First, we receive the “**Remove 3**” command, so we remove the contact at **index 3** (“**Tristan**”). Then, we receive the command “**Add Bellamy 2**” but we **already have** “**Bellamy**” in our collection, so we **add it on** **index 2**. Lastly, we have to **print** the collection in **normal** order, so our output is: “**Contacts: Alisson Bellamy Bellamy Candace**” | |
|  | |
| Zayn Katy Ariana Avril Nick Mikolas  Remove 3  Add Jacob 0  Export 0 3  Export 3 8  Print Reversed | **Zayn Katy Ariana Nick Mikolas**  **Zayn Katy Ariana Nick Mikolas Jacob**  Zayn Katy Ariana  Nick Mikolas Jacob  Contacts: Jacob Mikolas Nick Ariana Katy Zayn |

[https://judge.softuni.bg/Contests/Practice/Index/1682#2](https://judge.softuni.bg/Contests/Practice/Index/1682" \l "2)