# Problem 2 – Gladiator Inventory

As a gladiator, Pesho has cool Inventory. He loves to buy new equipment. You are given Pesho`s inventory with all of his equipment -> strings, separated by whitespace. Until you receive **"Fight!"** you will be receiving commands which Pesho does with his inventory.

You may receive the following commands:

* Buy {equipment}
* Trash {equipment}
* Repair {equipment}
* Upgrade {equipment}-{upgrade}

If you receive **Buy command**, you should **add** the equipment at last position in the inventory, but only if it isn`t bought already.

If you receive **Trash command**, **delete** the equipment if it exists.

If you receive **Repair command**, you should **Repair** the equipment if it exists and place it on **last position**.

If you receive **Upgrade command**, you should check if the equipment exists and **insert** after it the upgrade in the following format: "**{equipment}:{upgrade}";**

## Input / Consrtaints

You will receive input in several lines. Each line is a command:

* One the **first line,** you will receive Pesho`s **inventory** – sequence of equipment names, separated by space.
* Each following line, until you receive **"Fight!"** will be a **command**.

## Output

* As output you must print Pesho`s **inventory**.

## Constraints

* The **command will always be valid.**
* The **equipment** and **Upgrade** will be strings and will contain any character, except **'-'**.
* Allowed working **time** / **memory**: **100ms** / **16MB**.

***Scroll down to see examples.***

## Examples

|  |  |  |
| --- | --- | --- |
| **Input** | **Output** | **Comment** |
| SWORD Shield Spear  Buy Bag  Trash Shield  Repair Spear  Upgrade SWORD-Steel  Fight! | SWORD SWORD:Steel Bag Spear | We receive the inventory => SWORD, Shield, Spear  We Buy Bag => SWORD, Shield, Spear, Bag  Trash Shield => SWORD, Spear, Bag  Repair Spear => SWORD, Bag, Spear  We add Upgrade => SWORD, SWORD:Steel, Bag,Spear  We print the inventory. |
| SWORD Shield Spear  Trash Bow  Repair Shield  Upgrade Helmet-V  Fight! | SWORD Spear Shield |  |