# Problem 3 – Tseam Account

As a gamer, Pesho has Tseam Account. He loves to buy new games. You are given Pesho`s account with all of his games-> strings, separated by space. Until you receive **"Play!"** you will be receiving commands which Pesho does with his account.

You may receive the following commands:

* Install {game}
* Uninstall {game}
* Update {game}
* Expansion {game}-{expansion}

If you receive **Install command**, you should **add** the game at last position in the account, but only if it isn`t installed already.

If you receive **Uninstall command**, **delete** the game if it exists.

If you receive **Update command**, you should **update** the game if it exists and place it on **last position**.

If you receive **Expansion command**, you should check if the game exists and **insert** after it the expansion in the following format: "**{game}:{expansion}";**

## Input

* On the **first input line** you will receive Pesho`s **account** – sequence of game names, separated by space.
* Until you receive **"Play!"** you will be receiving **commands**.

## Output

* As output you must print Pesho`s Tseam **account**.

## Constraints

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

## Examples

|  |  |  |
| --- | --- | --- |
| **Input** | **Output** | **Comment** |
| CS WoW Diablo  Install LoL  Uninstall WoW  Update Diablo  Expansion CS-Go  Play! | CS CS:Go LoL Diablo | We receive the account => CS, WoW, Diablo  We Install LoL => CS, WoW, Diablo, LoL  Uninstall WoW => CS, Diablo, LoL  Update Diablo => CS, LoL, Diablo  We add expansion => CS, CS:Go, LoL, Diablo  We print the account. |
| CS WoW Diablo  Uninstall XCOM  Update PeshoGame  Update WoW  Expansion Civ-V  Play! | CS Diablo WoW |  |