## 5.Tseam Account

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

You may receive the following commands:

* **Install {game} - add** the game at the **last** position in the account, but only if it **isn't** installed already.
* **Uninstall {game} - delete** the game if it **exists**.
* **Update {game} - update** the game **if it exists** and place it in the **last position**.
* **Expansion {game}-{expansion} -** 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 Peter`s **account** - a **sequence** of game names, **separated** by space.
* Until you receive **"Play!"** you will be receiving **commands**.

### Output

* As output, you must print Peter`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** | **Comments** |
| ['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 |  |