

Problem 3. Inventory

As a young traveler, you gather items and craft new items.

Input / Constraints

You will receive a journal with some Collecting items, separated with ', ' (comma and space). After that, until receiving **"Craft!"** you will be receiving different commands.

Commands (split by " - "):

- **"Collect - {item}"** – Receiving this command, you should add the given item in your inventory. If the item already **exists**, you should **skip** this line.
- **"Drop - {item}"** – You should remove the item from your inventory, **if it exists**.
- **"Combine Items - {oldItem}:{newItem}"** – You should check if the **old item exists**, if so, **add** the new item **after** the **old one**. Otherwise, **ignore** the command.
- **"Renew - {item}"** – If the given item exists, you should change its position and **put it last** in your inventory.

Output

After receiving **"Craft!"** print the items in your inventory, separated by ', ' (comma and space).

Examples

Input	Output
Iron, Wood, Sword Collect - Gold Drop - Wood Craft!	Iron, Sword, Gold
Input	Output
Iron, Sword Drop - Bronze Combine Items - Sword: Bow Renew - Iron Craft!	Sword, Bow, Iron