# Magic Cards

*The world is threatened by an enemy never seen before. Your hero's weapon seems to be useless against the enemy. But your hero has a super strong arsenal full of powerful magic cards and will challenge the enemy to a card duel to the death and he needs your help to create a deck.*

Create a program that **adds**, **inserts**, **removes** and **swaps** cards in a new **deck**. On the first line, you will receive all cards in the form of strings **separated** by "**:**"**.** Until you receive the **"Ready"** command, you will get commands in the format:

* **Add {card name}**
  + Adds the card to the **end** of the **deck**.
  + If the card **doesn't exist** in print **"Card not found."**
* **Insert {card name} {index}**
  + Insert the card at the **given** index of the **deck.**
  + If the card **doesn't exist** or the index is invalid print **"Error!"**
* **Remove {card name}** 
  + Remove the card from the **deck**.
  + If the card **doesn't exist** in print **"Card not found."**
* **Swap {card name 1} {card name 2}** 
  + **Swap** the **positions** of the cards.
  + Input will **always be valid**
* **Shuffle deck** 
  + Reverse the **deck**

When you receive the "**Ready"** command print the cards in the deck **separated by space**.

### Input

* **On the 1st line,** you will receive the arsenal of all cards available separated by **":"**.
* **On the next lines,** until you receive the **"Ready" command** you will receive commands to arrange your deck.

### Output

* Print the cards in your deck on a single line, separated by a single space.

### Examples

|  |  |
| --- | --- |
| **Input** | **Output** |
| Innervate:Moonfire:Pounce:Claw:Wrath:Bite  Add Moonfire  Add Pounce  Add Bite  Add Wrath  Insert Claw 0  Swap Claw Moonfire  Remove Bite  Shuffle deck  Ready | Wrath Pounce Claw Moonfire |
| **Comments** | |
| First command is Add Moofire and now our deck has one card in it.  1. Moonfire Pounce  2. Moonfire Pounce Bite  3. Moonfire Pounce Bite Wrath  4. Claw Moonfire Pounce Bite Wrath  5. Moonfire Claw Pounce Bite Wrath  6. Moonfire Claw Pounce Wrath  7. Wrath Pounce Claw Moonfire | |
|  | |
| Wrath:Pounce:Lifeweaver:Exodia:Aso:Pop  Add Pop  Add Exodia  Add Aso  Remove Wrath  Add SineokBqlDrakon  Shuffle deck  Insert Pesho 0  Ready | Card not found.  Card not found.  Error!  Aso Exodia Pop |

### JS Input

The input will be provided as an array of strings.

|  |  |
| --- | --- |
| **Input** | **Output** |
| (["Innervate:Moonfire:Pounce:Claw:Wrath:Bite",  "Add Moonfire",  "Add Pounce",  "Add Bite",  "Add Wrath",  "Insert Claw 0",  "Swap Claw Moonfire",  "Remove Bite",  "Shuffle deck",  "Ready"]) | Wrath Pounce Claw Moonfire |
| **Comments** | |
| First command is Add Moofire and now our deck has one card in it.  1. Moonfire Pounce  2. Moonfire Pounce Bite  3. Moonfire Pounce Bite Wrath  4. Claw Moonfire Pounce Bite Wrath  5. Moonfire Claw Pounce Bite Wrath  6. Moonfire Claw Pounce Wrath  7. Wrath Pounce Claw Moonfire | |
|  | |
| (["Wrath:Pounce:Lifeweaver:Exodia:Aso:Pop",  "Add Pop",  "Add Exodia",  "Add Aso",  "Remove Wrath",  "Add SineokBqlDrakon",  "Shuffle deck",  "Insert Pesho 0",  "Ready"]) | Card not found.  Card not found.  Error!  Aso Exodia Pop |