

## Problem 3 - Chat Logger



A company hires you to create a program that implements a chat logger which works with commands. You may receive the following commands:

- **"Chat {message}"**:
  - Add the message at the **last position** in the chat.
- **"Delete {message}"**:
  - Delete the message **if it exists**.
  - Otherwise, ignore the command.
- **"Edit {message} {editedVersion}"**:
  - **Update** the message with the edited version.
  - **If it does not exist**, ignore the command.
- **"Pin {message}"**:
  - Find the given message and **move it to the last index**.
  - **If it does not exist**, ignore the command.
- **"Spam {message1} {message2} {messageN}"**:
  - Add all messages at the **end of the chat**.
- **"end"**:
  - Stop receiving commands.

After the **"end"** command, you should **print** the chat history starting from the first message.

### Input

- Until you receive **"end"**, you will be receiving **commands**.

### Output

- As output, you must **print the chat starting from the first message**. Every message must be in a **new line**.

### Constraints

- The **command will always be valid**.

## Examples

Input	Output
Chat Hello Chat darling Edit darling Darling Spam how are you Delete Darling end	Hello how are you
Chat Hello Delete John Pin Hi end	Hello
Chat John Spam Let's go to the zoo Edit zoo cinema Chat tonight Pin John end	Let's go to the cinema tonight John

## JS Examples

The input will be an array of strings.

Input	Output
(["Chat Hello", "Chat darling", "Edit darling Darling", "Spam how are you", "Delete Darling", "end"])	Hello how are you
(["Chat Hello", "Delete John", "Pin Hi", "end"])	Hello

(["Chat John", "Spam Let's go to the zoo", "Edit zoo cinema", "Chat tonight", "Pin John", "end"])	Let's go to the cinema tonight John
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