Task Description: Keyboard

You are implementing a text editor. Since text editor is a complicated software, you are going to simplify things. The first simplification is you are assuming the user's text will be only consist of one line. Second, the user will not do any operation other than :

1. Press left buttons K times. The cursor will move to the left K times. If the cursor is initially at the beginning of a line, then the cursor will not move.
2. Press right buttons K times. The cursor will move to the right K times. If the cursor is initially at the end of a line, then the cursor will not move.
3. Insert a character X. A character X (note that X is a variable) will be inserted in the current cursor position. After this operation, the cursor will be located in the right of the new character.
4. Delete a character. A character that is located in the left of the cursor will be deleted. If the cursor is located in the beginning of the line, then the operation will have no effect. **After this operation, the cursor will be located at the beginning of the line.**

After all operation are executed, you must output the text to the user.

Input

The first line of the input will consist of a single integer Q, the number of user's operation. Q lines follow. Each of the line indicates the operation, in one of the following format :
left K - representing operation 1
right K - representing operation 2
insert X - representing operation 3
delete - representing operation 4

Output

One line, representing the final text after all of the user's operation

Sample Input

```
7
insert o
insert n
left 10
insert j
right 1
delete
insert a
```

Sample Output

```
ajn
```

Explanation

Below is the result of the text after each operation. “|” indicates the position of the cursor

o|

on|

|on

j|on

jo|n

|jn

a|jn

Constraint

N, K will be between 1 and 100 inclusive.

X will be a single lowercase letter