

Day 72 coding Statement : In this problem you will have to implement a simple editor. The editor maintains the content of a string **S** and have two following functions:

"+ i x": insert a string **x** into the current string **S** after the **i**'th character of the **S** (we use 1-indexing in this problem). When **i** equals to **0** it mean we add **x** at the beginning of **S**.

"? i len": Print the sub-string of length **len** starting at position **i**'th of **S**.

At the beginning, the editor holds an empty string. There will be **Q** queries of the two types described above.

Input

The first line contains the integer **Q**. Each line in the next **Q** lines contains one query.

Output

For each query of the second type, print out the answer sub-string in one line.

Sample Input

5

+ 0 ab

+ 1 c

? 1 3

+ 2 dd

? 1 5

Sample Output

acb

acddb

