**Big String**

**Description**

You are given a string and supposed to do some string manipulations.

**Input**

The first line of the input contains the initial string. You can assume that it is non-empty and its length does not exceed 1,000,000.

The second line contains the number of manipulation commands *N* (0 < *N* ≤ 2,000). The following *N* lines describe a command each. The commands are in one of the two formats below:

1. I ch p: Insert a character *ch* before the *p*-th character of the current string. If *p* is larger than the length of the string, the character is appended to the end of the string.
2. Q p: Query the *p*-th character of the current string. The input ensures that the *p*-th character exists.

All characters in the input are digits or lowercase letters of the English alphabet.

**Output**

For each *Q* command output one line containing only the single character queried.

**Sample Input**

ab

7

Q 1

I c 2

I d 4

I e 2

Q 5

I f 1

Q 3

**Sample Output**

a

d

e

**Source**

[POJ Monthly--2006.07.30](http://poj.org/searchproblem?field=source&key=POJ+Monthly--2006.07.30), zhucheng