BRAINF__K DESIGN

Problem statement:

Brainf**k is a programming language with only 8 symbols { ,.<>+-[] }. Ms.Sashwath

thought of creating a compiler with only 5 symbols { .<>+- }. In her language

0 refers to A, 1 refers to B and so on upto Z. The functionalities of the symbols are as follows

Initially i=0

. : print the value at current i

\> : move one position right (i++)

< : move one position left (i--)

\+ : increment the value at current i

\- : decrement the value at current i

If any other character is found it is considered as a comment and is ignored.

For example ++++.>+++.<++. will print "EDG"

Because initially i=0 and value at i=0. Incrementing four times value at 0 becomes 4 which refers to E.

Then position of i is incremented. i=1 and now value at 1 is incremented 3 times and D is printed

Again the position of i is decremented. i=0. Already the value at 0 is 4 and we further increment it twice.

So it becomes 6 and it is printed as G.

INPUT:

The first line consists of an integer t, denotes the number of test cases. Then next t lines

consists of a string of length <=100

OUTPUT:

For each test case print the required result in an individual line.

EXAMPLE:

SAMPLE INPUT:

8

+++++.++++.>>>>.+++.<<<+++.++.<++KKKHJKHKHJJLKJH12132.

```
++++.++++.++.+...

>>>.<+.HJ<+.>+.>+.

+++.---.+-+->.<.++--+++.

+++++++++UIIU++-----.>...-+><><+.

.

+++

>++++.
```

SAMPLE OUTPUT:

```
FJADDFL
EIKLLL
ABBCB
DAAAD
FAAAB
A


E
```

WARNING: Note that you've to handle the comments (symbols other than the specified five symbols may present in the input).