Protecting Secrets

The next order of business for the Resistance is to develop our own secret code for communication - after all, those are basically unbreakable, right?

Description

Our super secret code, is defined as a simple series of commands that modify a list of 8 integers. Each of the 8 integers starts with a value of 0. Initially, the "current integer" is the first integer in the list. Each of the commands are as follows:

+	Increase the value of the current integer.
-	Decrease the value of the current integer.
>	Move to the next integer.
<	Move to the previous integer.
[	If the current integer is 0, skip to after the matching].
]	If the current integer is not 0, skip back to the matching [.

Consider the list to wrap fully. That is, if a > occurs while the current integer is the final integer, the new current integer will be the first integer. Integers should be positive and range from 0 to 255, wrapping appropriately.

The input will consist of a sequence of these commands no longer than 20 in length. Output will consist of the values of the 8 integers, space-separated.

You can assume the given code will eventually terminate.

Example

```
<-
0 0 0 0 0 0 0 255
```

```
+++[>+>+>++>+++<<<<-]
0 3 3 6 9 0 0 0
```

```
++[>++<-]>[>+[>+<-]<-]
0 0 0 4 0 0 0 0
```