In this program a barcode system is defined as follows:

- Accepted values must have an even number of digits
- Values are composed only of digits (0,1,...,9)
- Each digit is represented by 5 bars (3 with thickness l, 2 with thickness L - see table below)
- Each bar is either white or black, but there should not be adjacent bars of the same color
- To implement the verification, the value "0" is added at the beginning and a digit (key) is added at the end, which is calculated as follows:
  - the sum of the digits at odd positions is calculated
  - the sum of the digits at even positions is calculated and multiplied by 3
  - the sum of the two values is calculated
  - the sought key is the smallest number that must be added to the obtained value to obtain a number divisible by 10.

Character	B1	B2	B3	B4	B5
0	0	0	1	1	0
1	1	0	0	0	1
2	0	1	0	0	1
3	1	1	0	0	0
4	0	0	1	0	1
5	1	0	1	0	0
6	0	1	1	0	0
7	0	0	0	1	1
8	1	0	0	1	0
9	0	1	0	1	0

Example:

If the initial value is "1234543210", then we add the value "0" at the beginning and add the key c at the end, which we calculate as follows:

1+3+5+3+1=13

2+4+4+2+0=12

12*3=36

13+36=49

c=50-49=1

The value to be represented will be "012345432101".