A. Chewbacca and Number

time limit per test
1 second
memory limit per test
256 megabytes
input
standard input
output
standard output

Luke Skywalker gave Chewbacca an integer number x. Chewbacca isn't good at numbers but he loves inverting digits in them. Inverting digit t means replacing it with digit t - t.

Help Chewbacca to transform the initial number x to the minimum possible **positive** number by inverting some (possibly, zero) digits. The decimal representation of the final number shouldn't start with a zero.

Input

The first line contains a single integer x ($1 \le x \le 1018$) — the number that Luke Skywalker gave to Chewbacca.

Output

Print the minimum possible positive number that Chewbacca can obtain after inverting some digits. The number shouldn't contain leading zeroes.

input Copy 27 output Copy 22 input Copy 4545 output Copy 4544