

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 $9 - t$.

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 ($1 \leq x \leq 10^{18}$) — 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.

Examples

input
27
output
22

input
4545
output
4444