

## Problem D. Veci

**Time Limit** 1000 ms

**Mem Limit** 1048576 kB

**OS** Linux

Your program will be given an integer  $X$ . Find the smallest number larger than  $X$  consisting of the same digits as  $X$ .

### Input

The first line of input contains the integer  $X$  ( $1 \leq X \leq 999\,999$ ). The first digit in  $X$  will not be a zero.

### Output

Output the result on a single line. If there is no such number, output 0.

### Sample 1

Input	Output
156	165

### Sample 2

Input	Output
330	0

### Sample 3

Input	Output
27711	71127