# 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 |