

Given a positive integer  $U$ , find the largest integer  $L$  such that  $L \leq U$  and  $L$  does not contain any digit more than twice.

## Input

The input contains several test cases; each test case is formatted as follows. A test case consists of a single line that contains an integer  $U$  ( $1 \leq U \leq 10^{18}$ ).

## Output

For each test case in the input, output a line with an integer representing the largest number less than or equal to  $U$  that does not contain any digit more than twice.

## Sample Input

```
2210102960
10000000000000000000
1001223343
20152015
```

## Sample Output

```
2210099887
998877665544332211
998877665
20152015
```