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
1000000000000000000
1001223343
20152015
```

Sample Output

```
2210099887
998877665544332211
998877665
20152015
```