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## C. Divisible by Seven

time limit per test: 1 second  
 memory limit per test: 256 megabytes  
 input: standard input  
 output: standard output

You have number  $a$ , whose decimal representation quite luckily contains digits 1, 6, 8, 9. Rearrange the digits in its decimal representation so that the resulting number will be divisible by 7.

Number  $a$  doesn't contain any leading zeroes and contains digits 1, 6, 8, 9 (it also can contain another digits). The resulting number also mustn't contain any leading zeroes.

### Input

The first line contains positive integer  $a$  in the decimal record. It is guaranteed that the record of number  $a$  contains digits: 1, 6, 8, 9. Number  $a$  doesn't contain any leading zeroes. The decimal representation of number  $a$  contains at least 4 and at most  $10^6$  characters.

### Output

Print a number in the decimal notation without leading zeroes — the result of the permutation.

If it is impossible to rearrange the digits of the number  $a$  in the required manner, print 0.

### Examples

<b>input</b>
1689
<b>output</b>
1869

<b>input</b>
18906
<b>output</b>
18690

### Codeforces Round #221 (Div. 2)

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### → Virtual participation

Virtual contest is a way to take part in past contest, as close as possible to participation on time. It is supported only ACM-ICPC mode for virtual contests. If you've seen these problems, a virtual contest is not for you - solve these problems in the archive. If you just want to solve some problem from a contest, a virtual contest is not for you - solve this problem in the archive. Never use someone else's code, read the tutorials or communicate with other person during a virtual contest.

[Start virtual contest](#)

### → Practice

You are registered for practice. You can solve problems unofficially. Results can be found in the contest status and in the bottom of standings.

### → Submit?

Language: GNU G++11 5.1.0 ▼

Choose file: [Choose File](#) No file chosen

Be careful: there is 50 points penalty for submission which fails the pretests or resubmission (except failure on the first test, denial of judgement or similar verdicts). "Passed pretests" submission verdict doesn't guarantee that the solution is absolutely correct and it will pass system tests.



[Submit](#)

### → Problem tags

[math](#) [number theory](#)

No tag edit access

### → Contest materials

- Announcement 
- Tutorial 

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