

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

input
1689
output
1869

input
18906
output
18690