

## B. Lucky Substring

time limit per test: 2 seconds

memory limit per test: 256 megabytes

input: standard input

output: standard output

Petya loves lucky numbers. Everybody knows that lucky numbers are positive integers whose decimal representation contains only the lucky digits **4** and **7**. For example, numbers **47**, **744**, **4** are lucky and **5**, **17**, **467** are not.

One day Petya was delivered a string  $S$ , containing only digits. He needs to find a string that

- represents a lucky number without leading zeroes,
- is not empty,
- is contained in  $S$  as a substring the maximum number of times.

Among all the strings for which the three conditions given above are fulfilled, Petya only needs the lexicographically minimum one. Find this string for Petya.

### Input

The single line contains a non-empty string  $S$  whose length can range from **1** to **50**, inclusive. The string only contains digits. The string can contain leading zeroes.

### Output

In the only line print the answer to Petya's problem. If the sought string does not exist, print **"-1"** (without quotes).

### Examples

<b>input</b>
047
<b>output</b>
4

<b>input</b>
16
<b>output</b>
-1

<b>input</b>
472747
<b>output</b>
7

### Note

The lexicographical comparison of strings is performed by the  $<$  operator in the modern programming languages. String  $X$  is lexicographically less than string  $Y$  either if  $X$  is a prefix of  $Y$ , or exists such  $i$  ( $1 \leq i \leq \min(|X|, |Y|)$ ), that  $X_i < Y_i$  and for any  $j$  ( $1 \leq j < i$ )  $X_j = Y_j$ . Here  $|a|$  denotes the length of string  $a$ .

In the first sample three conditions are fulfilled for strings **"4"**, **"7"** and **"47"**. The lexicographically minimum one is **"4"**.

In the second sample  $S$  has no substrings which are lucky numbers.

In the third sample the three conditions are only fulfilled for string **"7"**.

### → Attention

Package for this problem was not updated by the problem writer or Codeforces administration after we've upgraded the judging servers. To adjust the time limit constraint, solution execution time will be multiplied by 2. For example, if your solution works for 400 ms on judging servers, then value 800 ms will be displayed and used to determine the verdict.

### Codeforces Beta Round #91 (Div. 2 Only)

Finished

### → 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

### → Problem tags

brute force implementation

No tag edit access

### → Contest materials

- Announcement 
- Tutorial #1 
- Tutorial #2 