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

input	
047	
output	
4	

1	n	p	u	t

16

output

-1

input

472747

output

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 ($1 \le i \le min(|x|, |y|)$), that $x_i \le y_i$ and for any j ($1 \le j \le i$) $x_j = y_j$. 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".