Product of numbers

Time limit: 1 second Memory limit: 2048 megabytes

In this program, you will receive a positive integer number \mathbf{m} , and your task is to find the minimal positive integer number \mathbf{q} so that the product of all digits in \mathbf{q} is equal to \mathbf{m} .

• Input Format

The first line has one number m.

• Output Format

The minimal positive number q. If we can't find q, print "-1" (negative one).

• Technical Specifications

 $1 \le m \le 10^9$

Input	Output
10	25
22	-1
1	1