

Yonas and Tony Playing Game Again

Time Limit	0.2s
Memory Limit	64MB

Description

After the last time Yonas and Tony played the stone game. Yonas felt addicted to play more game. Thus, Tony thinks a game and then he come up with a game. This game is described as follow. Tony gives a number N to Yonas, then Yonas is required to give the smallest positive integer A so that the product of its digits is equal to N . Yonas is confused but at the same time feeling excited. Yonas required your help as you are his best friend.

Input Format

First line contains 1 number T denoting the number of test cases, then the next T lines contains a number N .

Output Format

T lines of numbers that is the answer to the problem or -1 if the answer cannot be found.

Constraint

- $1 \leq T \leq 10000$
- $0 \leq N \leq 10^7$
- $A \geq 1$

Sample Input 1

```
4
7
10
8
11
```

Sample Output 1

```
7
25
8
-1
```