Problem E. Two Lucky Numbers

Time limit 2000 ms
Mem limit 1048576 kB

Problem Statement

Mr. AtCoder reads in the newspaper that today's lucky number is a positive integer A and tomorrow's is a positive integer B.

Here, he defines a positive integer x that satisfies both of the following conditions as a super-lucky number.

- The decimal notation of x contains A as a contiguous substring.
- The decimal notation of $2x$ contains B as a contiguous substring.

Actually, under the Constraints of this problem, there is always a super-lucky number less than 10^{18}. Find one such number.

Constraints

- $1 \leq A < 10^8$
- $1 \leq B < 10^8$
- A and B have no leading `0` s.
- All values in input are integers.

Input

Input is given from Standard Input in the following format:

```
A
B
```

Output

Print one super-lucky number less than 10^{18}. If multiple solutions exist, you may print any of them.

Sample 1

Input	Output
13 62	131

One super-lucky number is $x = 131$, because:

- $x = 131$ contains 13 as a substring. (1-st through 2-nd characters)
- $2x = 262$ contains 62 as a substring. (2-nd through 3-rd characters)

Some other super-lucky numbers are 313, 8135, and 135797531, which would also be accepted.

Sample 2

Input	Output
69120 824	869120

One super-lucky number is $x = 869120$, because:

- $x = 869120$ contains 69120 as a substring. (2-nd through 6-th characters)
- $2x = 1738240$ contains 824 as a substring. (4-th through 6-th characters)

The smallest super-lucky number is 69120, but note that any lucky number with at most 18 digits would be accepted.

Sample 3

Input	Output
6283185 12566370	6283185

When $x = 6283185$, x is A itself, and $2x$ is B itself. In such a case too, x is a super-lucky number.