Problem E

Enthusiastic Mathematics Challenge

Bob, a mathematics enthusiast, studying everyday number theory and other topics always finds a way to challenge Alice, a computer science enthusiast. You always see with amusement how Bob challenges Alice, and how she always finds a way to build a computer program to solve Bob's challenge, however, this time, Bob found a challenge so hard that Alice was unable to solve, even with a program.

Bob wrote a string S containing only digits, he says there are 3 prime numbers hidden in S, that those prime numbers can be found as three disjoint sets from S, and that all the digits of S should be used, Bob wants Alice to find what the product of those 3 prime numbers is.

You have seen Alice trying to find the answer to Bob's challenge and decided to help her, after a lot of time invested you found that there is no way to find the 3 prime numbers following Bob's rules. This is why you decided to help Alice to write a program that finds the 3 prime numbers if they exist.

Input

The input contains a single line with a string S ($1 \leq |S| \leq 8$) containing only digits.

Output

Output a line containing a single integer, the product of the 3 prime numbers if they exist, if there are more than one possible solution print the smallest one. If S does not contain the 3 prime numbers output a line with the string "Bob lies"without the quotes.

Input example 1	**Output example 1**
333	27

Input example 2	**Output example 2**
707070	Bob lies

Input example 3	**Output example 3**
157	Bob lies

Input example 4	**Output example 4**
01123	606