Given a string of digits, your task is to find the largest prime number which presents in that string. Our prime numbers are values between 2 to 100,000 only.

**Input**

Each line contains a string of digits (255 digits at most). The line contains only ‘0’ indicates the end which will not be processed. The input does not exceed 1,000 lines.

**Output**

Print out in each line the largest prime number found in each input string.

**Sample Input**

11245
91321150448
1226406
0

**Sample Output**

11
1321
2