

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
```