



Problem C
MULTIPLE

Input File: C.DAT

Program Source File: C.PAS or C.C or C.CPP

Write a program that, given a natural number N between 0 and 4999 (inclusively), and m distinct decimal digits x_1, x_2, \dots, x_m (at least one), finds the **smallest strictly positive multiple** of N that has no other digits besides x_1, x_2, \dots, x_m (if such a multiple exists).

The input file has several data sets separated by an empty line, each data set having the following format:

- On the first line - the number N
- On the second line - the number m
- On the following M lines - the digits x_1, x_2, \dots, x_m .

For each data set, the program should write to standard output on a single line the multiple, if such a multiple exists, and 0 otherwise.

An example of input and output:

input	output
22	110
3	0
7	
0	
1	
2	
1	
1	