Project Euler #52: Permuted multiples



This problem is a programming version of Problem 52 from projecteuler.net

It can be seen that the number, 125874, and its double, 251748, contain exactly the same digits, but in a different order.

Given N, find all the positive integers, $x \leq N$, such that $x, 2x, \cdots Kx$ contain the same digits.

Input Format

Input contains two integers N and K

Output Format

Print all the K multiple corresponding to the test case. If there are more than 1 x print each of them in a new line.

Note1: It is guaranteed a solution exists.

Note2: You should not consider solution with leading 0's.

Constraints

 $125875 \le N \le 2000000$

 $2 \le K \le 6$

Sample Input

125875 2

Sample Output

125874 251748