HackerRank

Project Euler #38: Pandigital multiples

This problem is a programming version of Problem 38 from projecteuler.net

Take the number 192 and multiply it by each of 1, 2, and 3:

$$192\times 1=192$$

$$192 \times 2 = 384$$

$$192 \times 3 = 576$$

By concatenating each product we get the 1 to 9 pandigital, 192384576. We will call 192384576 the concatenated product of 192 and (1,2,3)

The same can be achieved by starting with 9 and multiplying by 1, 2, 3, 4, and 5, giving the pandigital, 918273645, which is the concatenated product of 9 and (1, 2, 3, 4, 5). Let's call 9 as the Multiplier M

The similar process can be shown for 1 to 8 pandigital also. 18 when multiplied by 1, 2, 3, 4 gives 18365472 which is 1-8 pandigital.

You are given N and K where K=8 or 9, find the multipliers for that given K below N and print them in ascending order.

Input Format

Input contains two integer N and K.

Constraints

$$100 \le N \le 10^5$$

 $8 \le K \le 9$
 $1 < M$

Output Format

Print the answer corresponding to the test case.

Sample Input

100 8

Sample Output

18 78