

Since the moment Mary learned about palindromic numbers, she has been completely obsessed with them. Indeed, she wants to produce a catalog of these numbers as a personal project.

For those of you who do not know, a *palindromic number* is a natural number whose reading (by avoiding leading zeroes) from left to right is the same one as the one from right to left. For instance, 1991 is a palindromic number, but 1492 is not. Note that the only palindromic number that ends with digit 0 is precisely the number 0. Also, a number being palindromic depends on the numerical basis used to denote such a number. Mary is interested only in decimal palindromic numbers, i.e., numbers written in the usual decimal notation.

Of course, Mary's project of building a complete catalog is impossible to deliver since palindromic numbers are infinite. However, she would still be pleased if groups of consecutive palindromic numbers can be produced. In this way, she will be 'closer' in accomplishing the project's goal of a complete printed catalog of palindromic numbers.

Mary has asked for your help. She would like to have a program that, given two positive integer numbers n and d , outputs the first n palindromic numbers greater than d .

Input

The input consists of several test cases. Each test case consists of a line containing two blank-separated integers n and d ($1 \leq n \leq 10^2$, $1 \leq d \leq 10^{60}$). Numbers are given in decimal notation, without leading zeroes.

Output

For each test case, output n lines with the first n palindromic numbers greater than d . Output such a list in ascending order, with numbers in decimal notation and without leading zeroes.

Sample Input

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3 8
4 175
2 77
1 20003
```

Sample Output

```
9
11
22
181
191
202
212
88
99
20102
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