

To zadanie pochodzi z codeforces:  
<https://codeforces.com/problemset/problem/489/C>

## C. Given Length and Sum of Digits...

time limit per test: 1 second

memory limit per test: 256 megabytes

You have a positive integer  $m$  and a non-negative integer  $s$ . Your task is to find the smallest and the largest of the numbers that have length  $m$  and sum of digits  $s$ . The required numbers should be non-negative integers written in the decimal base without leading zeroes.

### Input

The single line of the input contains a pair of integers  $m, s$  ( $1 \leq m \leq 100, 0 \leq s \leq 900$ ) — the length and the sum of the digits of the required numbers.

### Output

In the output print the pair of the required non-negative integer numbers — first the minimum possible number, then — the maximum possible number. If no numbers satisfying conditions required exist, print the pair of numbers "-1 -1" (without the quotes).

### Examples

**input**

**Copy**

```
2 15
```

**output**

**Copy**

```
69 96
```

**input**

**Copy**

```
3 0
```

**output**

**Copy**

```
-1 -1
```