

Problem G
LC-Display

A friend of you has just bought a new computer. Until now, the most powerful computer he had ever used was a pocket calculator. Now, looking at his new computer, he is a bit disappointed, because he liked the LC-display of his calculator so much. So you decide to write a program that displays numbers in an LC-display-like style.

Input

The input file contains several lines, one for each number to display. Each line consists of two integers s, n ($1 \leq s \leq 10, 0 \leq n \leq 99\,999\,999$), where n is the number to be displayed and s is the size in which it shall be displayed.

The input file will be terminated by a line containing two zeros.

Output

Output the numbers given in the input file in an LC-display-style using s "-" signs for the horizontal segments and s "|" signs for the vertical ones. Each digit occupies exactly $s + 2$ columns and $2s + 3$ rows. (Be sure to fill all the white space occupied by the digits with blanks, also for the last digit.) There shall be exactly one column of blanks between two digits. Output one blank line after each number.

You will find a sample of each digit in the sample input.

Sample Input

```
2 123
2 456
2 7890
0 0
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Sample Output

