From Skiena and Revilla, *Programming Challenges: The Programming Contest Training Manual* Springer-Verlag, New York, 2003. ISBN: 0-387-00163-8.

# 110104 LC-Display

A friend of yours has just bought a new computer. Before this, the most powerful machine he ever used was a pocket calculator. He is a little disappointed because he liked the LCD display of his calculator more than the screen on his new computer! To make him happy, write a program that prints numbers in LCD display style.

# Input

The input file contains several lines, one for each number to be displayed. Each line contains integers s and n, where n is the number to be displayed ( $0 \le n \le 99,999,999$ ) and s is the size in which it shall be displayed ( $1 \le s \le 10$ ). The input will be terminated by a line containing two zeros, which should not be processed.

# Output

Print the numbers specified in the input file in an LCD 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, including the last digit. There must be exactly one column of blanks between two digits.

Output a blank line after each number. You will find an example of each digit in the sample output below.

#### Sample Input

#### 2 12345

3 67890

0 0

### Sample Output



