LCD 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

Input contains integers s and n, where n is the number to be displayed (0 \leq n \leq 99,999, 999) and s is the size in which it shall be displayed (1 \leq 5).

Output

Print the input numbers on screen using "-" signs for the horizontal segments and "|" 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.

Sample Input

2 12345

3 67890

Sample Output -

