SWE2004: Principles in Programming (Spring 2013)

Programming Lab #1
Due-date: March 14th, 11:59 PM

Description

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 line includes two integer numbers \( s \) and \( n \), where \( n \) is the number to be displayed (\( 0 \leq n \leq 99,999 \)) and \( s \) is the size in which it shall be displayed (\( 1 \leq s \leq 10 \)).

Output

Print the numbers specified in the input line 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 & Output

<table>
<thead>
<tr>
<th>input</th>
<th>output</th>
</tr>
</thead>
<tbody>
<tr>
<td>2 12345</td>
<td><img src="image1.png" alt="Sample Output 1" /></td>
</tr>
<tr>
<td>3 67890</td>
<td><img src="image2.png" alt="Sample Output 2" /></td>
</tr>
</tbody>
</table>