Jutge.org

The Virtual Learning Environment for Computer Programming

Generating zig-zags

X78797_en

Write a program that, given pairs of positive natural numbers height, width, where width is an even number, generates zig-zags like the ones shown in the examples.

Input

An arbitrary number of cases, where each consists of two positive natural numbers height, width, the width being an even number, in one line.

Output

For each case, the corresponding zig-zag, followed by a blank line.

Sample input

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Sample output

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Observation

You can write the output character by character or by previously building strings, as you wish.

Grading up to 10 points:

• Slow solution: 5 points.

• Fast solution: 10 points.

We understand as a fast solution one which is correct, with linear cost and which passes the public and private tests. We understand as slow solution one which is not fast, but it is correct and passes the public tests.

Problem information

Author: PRO1

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