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The Virtual Learning Environment for Computer Programming

# Rooks inside a rectangle

P31389\_en

Consider a rectangular board  $r \times c$  with  $r \leq c$ . Write a program that prints all the ways to place r rooks on the board so that no rook threatens another rook.

#### Input

Input consists of two natural numbers r and c, with  $1 \le r \le c$ .

## Output

Print all the ways to place r rooks on the board so that no rook threatens another rook. Represent the rooks with a 'R', and the empty positions with a dot. Print an empty line after each board.

#### Information about the checker

You can print the solutions to this exercise in any order.

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2 3

# Sample output 1

R... .R. R...

R..

.R.

..R

..R R..

..R

# Sample input 2

1 1

## Sample output 2

R

#### **Problem information**

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