

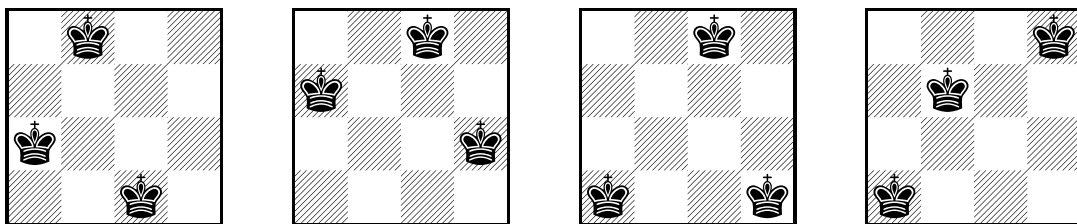
## Peaceful kings

P71701\_en

Examen parcial d'Algorísmia, FME (2010-10-26)

Write a program that prints all the ways to place  $k$  kings on a  $n \times n$  board so that no king threatens another king. Remember that a king threatens all the surrounding cells, either horizontally, vertically, or diagonally.

For instance, these are some ways to place 3 kings on a  $4 \times 4$  board:



### Input

Input consists of two natural numbers  $n > 0$  and  $0 \leq k \leq n^2$ .

### Output

Print all the ways to place  $k$  kings on a  $n \times n$  board so that no king threatens another king. Mark the kings with a 'K', and the empty cells with a dot. Print a line with ten hyphens after every board.

### Information about the checker

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

### Observation

The test cases of this problem do not require a very clever algorithm.

### Sample input 1

```
2 1
```

### Sample output 1

```
K.
..
-----
.K
..
-----
..
K.
-----
..
.K
-----
```

### Sample input 2

3 4

### Sample input 3

3 5

### Sample input 4

3 3

### Sample output 2

K.K  
...  
K.K  
-----

### Sample output 3

### Sample output 4

K.K  
...  
K..  
-----  
K.K  
...  
.K.  
-----  
K.K  
...  
..K  
-----  
K..  
..K  
K..  
-----  
K..  
...  
K.K  
-----  
.K.  
...  
K.K  
-----  
..K  
K..  
..K  
-----  
..K  
...  
K.K  
-----

### Problem information

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