

# 8 Queens

## Problem 5 - 8 Queens (2%)

### Description

The eight queens puzzle is the problem of placing eight chess queens on an 8×8 chessboard so that no two queens threaten each other; thus, a solution requires that no two queens share the same row, column, or diagonal.

In this problem, given the position  $(x, y)$  of a chess queen, you are asked to place the other seven queens.

**Requirement :** Please use recursion to solve this problem. All other methods will NOT pass TA's demo.

### Input

The position  $(x, y)$  of a queen.  $(0, 0)$  denotes the first row and the first column.

### Output

Output the possible chessboard.

To represent the chessboard, # denotes empty and Q denotes the queen.

Each column should be separated by a whitespace and each chessboard should be separated by a newline.

### Sample Input

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0 0
```

### Sample Output

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Q # # # # # # #
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```

### File name

{Student\_ID}\_5.cpp