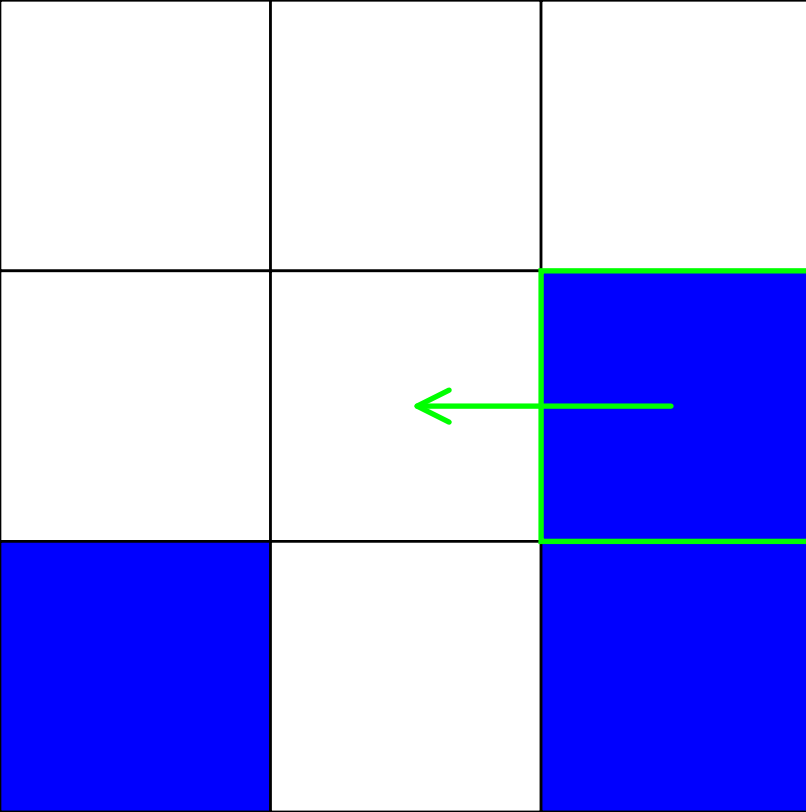


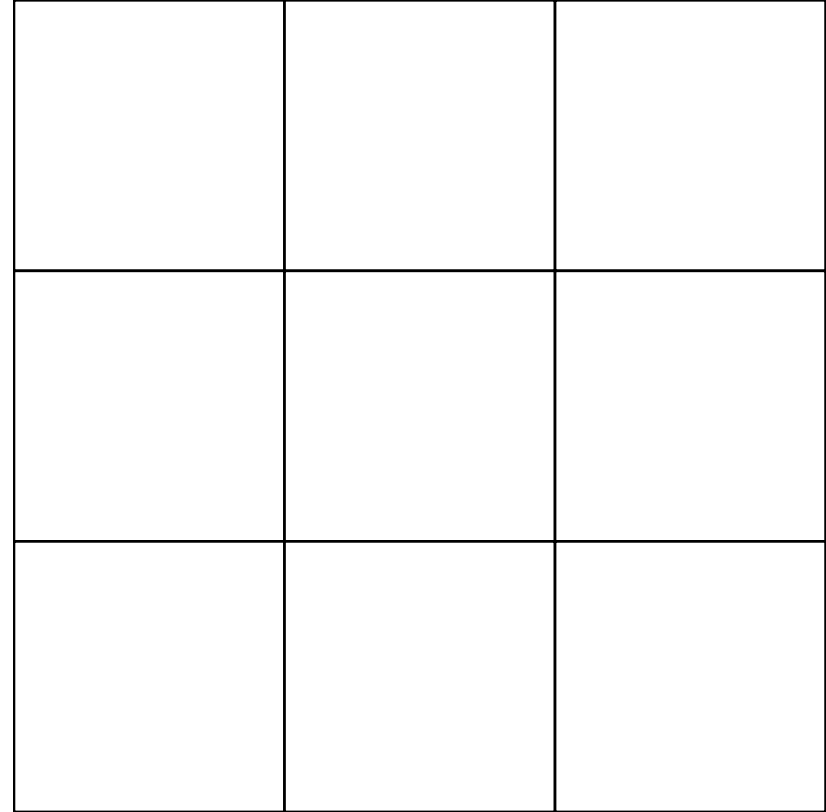
...:SOLUTION:...: Solvable in 1 moves (blocks positions: {(1, 2): <Color: blue>, (2, 0): <Color: blue>, (2, 2): <Color: blue>})

INITIAL STATE: (MOVE 1)

Perform: move_left at position: (1, 2):



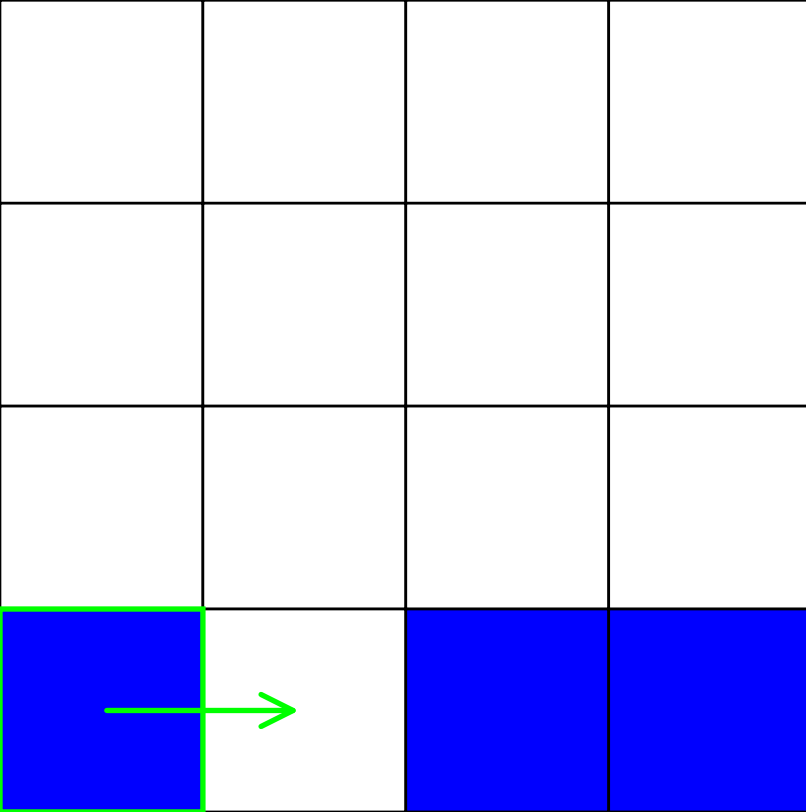
FINAL STATE



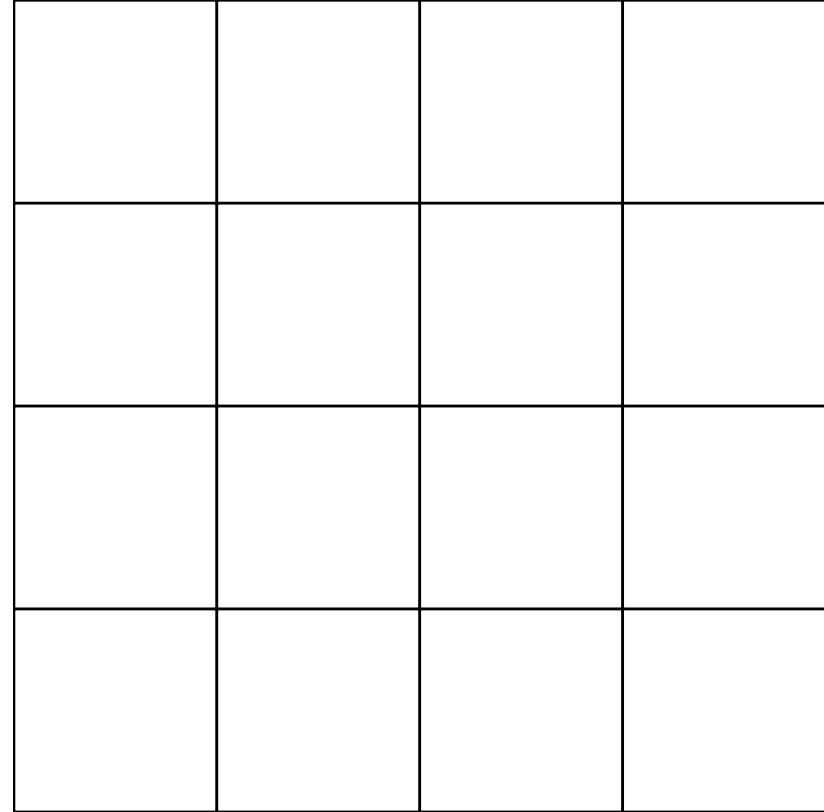
...:SOLUTION:...: Solvable in 1 moves (blocks positions: {(3, 0): <Color: blue>, (3, 2): <Color: blue>, (3, 3): <Color: blue>})

INITIAL STATE: (MOVE 1)

Perform: move_right at position: (3, 0):



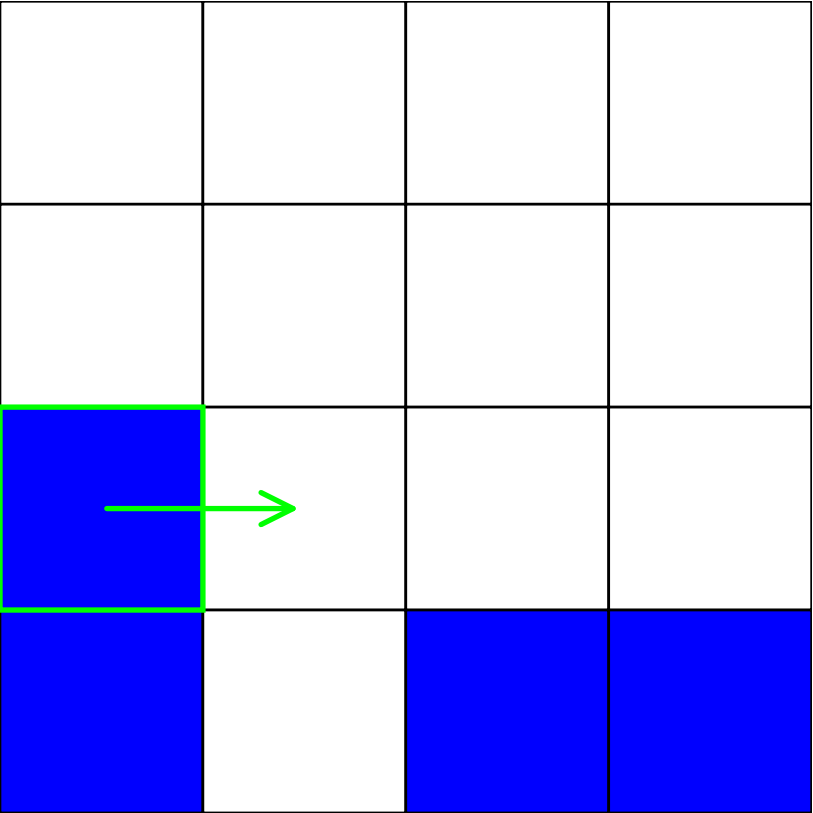
FINAL STATE



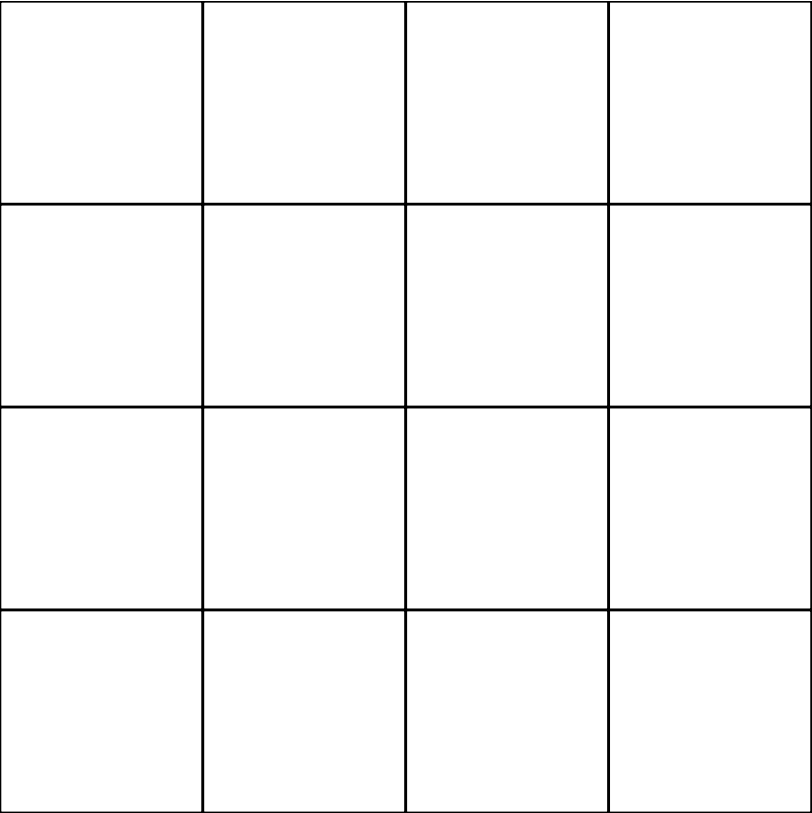
...:SOLUTION::...: Solvable in 1 moves (blocks positions: {(2, 0): <Color: blue>, (3, 0): <Color: blue>, (3, 2): <Color: blue>, (3,

INITIAL STATE: (MOVE 1)

Perform: move_right at position: (2, 0):



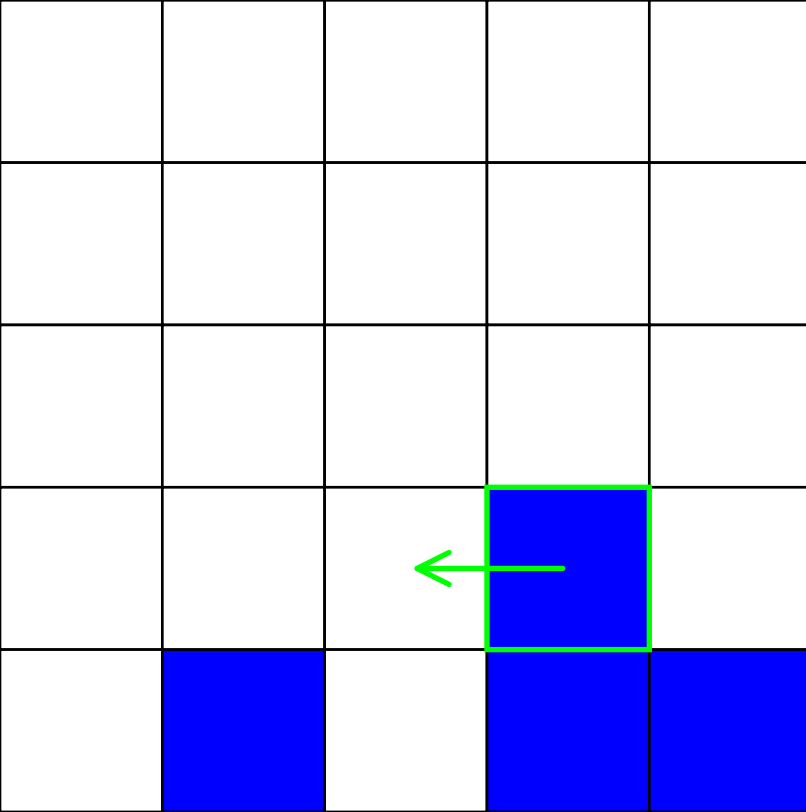
FINAL STATE



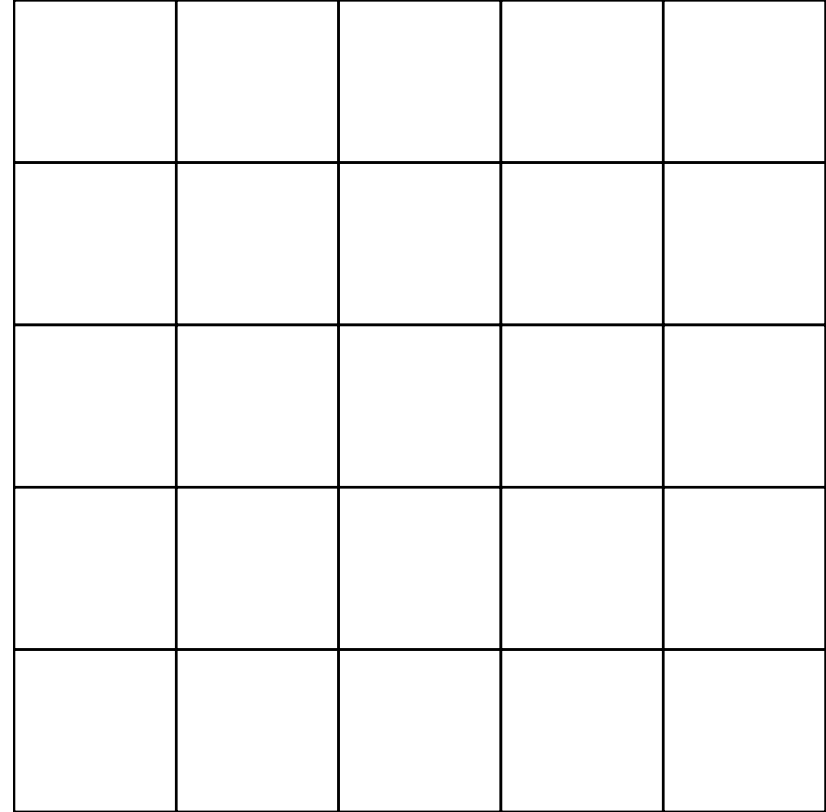
...:SOLUTION:...: Solvable in 1 moves (blocks positions: {(3, 3): <Color: blue>, (4, 1): <Color: blue>, (4, 3): <Color: blue>, (4,

INITIAL STATE: (MOVE 1)

Perform: move_left at position: (3, 3):



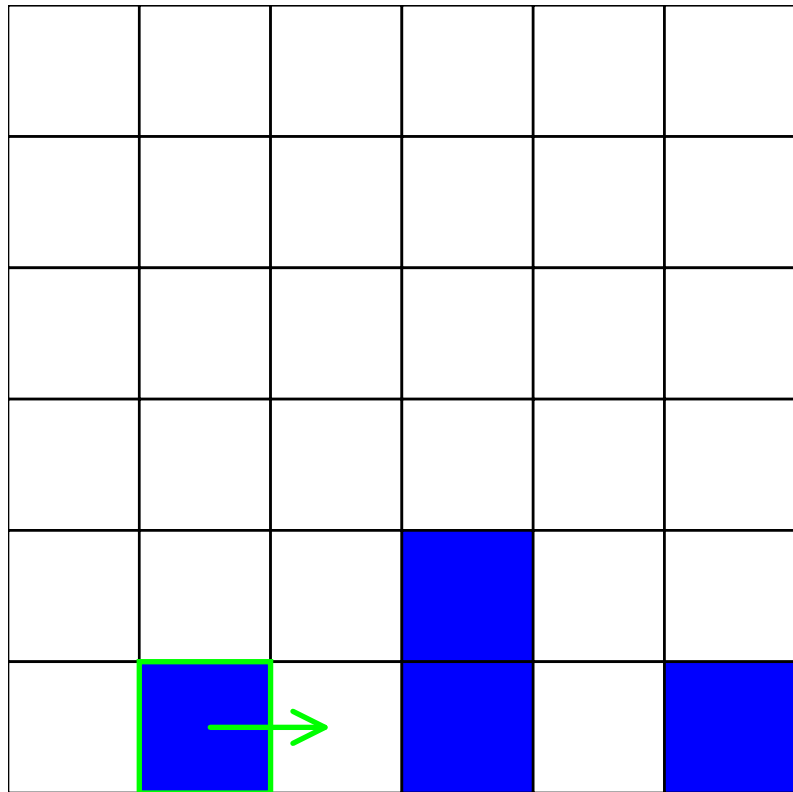
FINAL STATE



...:SOLUTION:...: Solvable in 2 moves (blocks positions: {(4, 3): <Color: blue>, (5, 1): <Color: blue>, (5, 3): <Color: blue>, (5, 5): <Color: blue>})

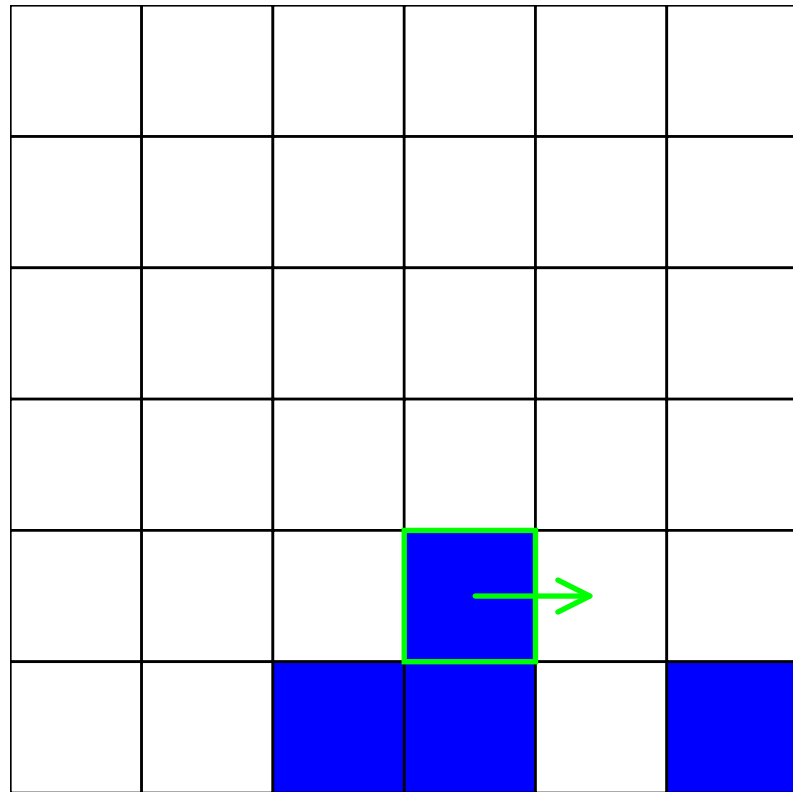
INITIAL STATE: (MOVE 1)

Perform: move_right at position: (5, 1):

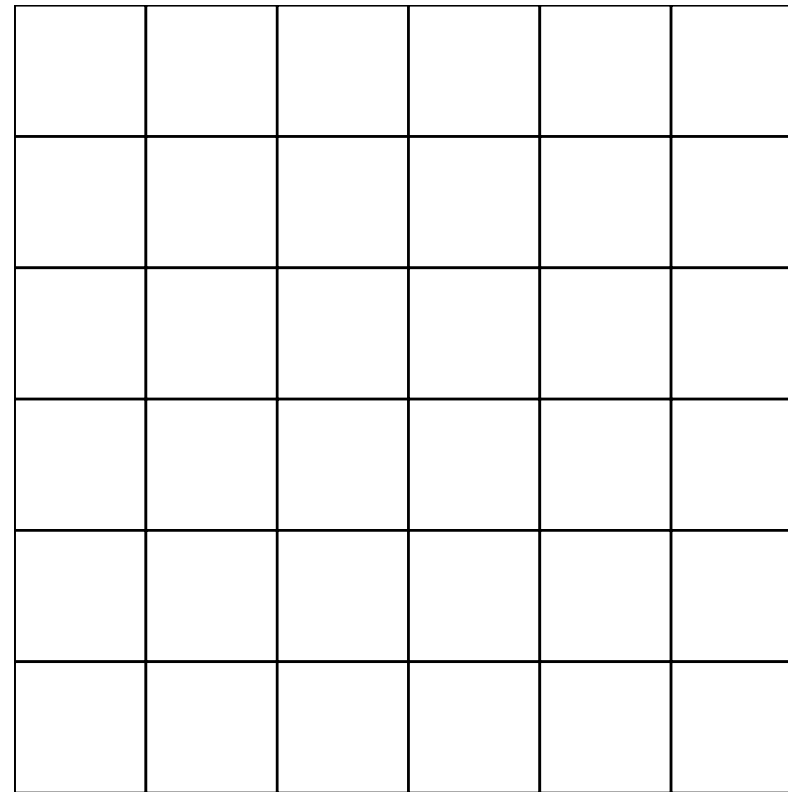


(MOVE 2)

Perform: move_right at position: (4, 3):



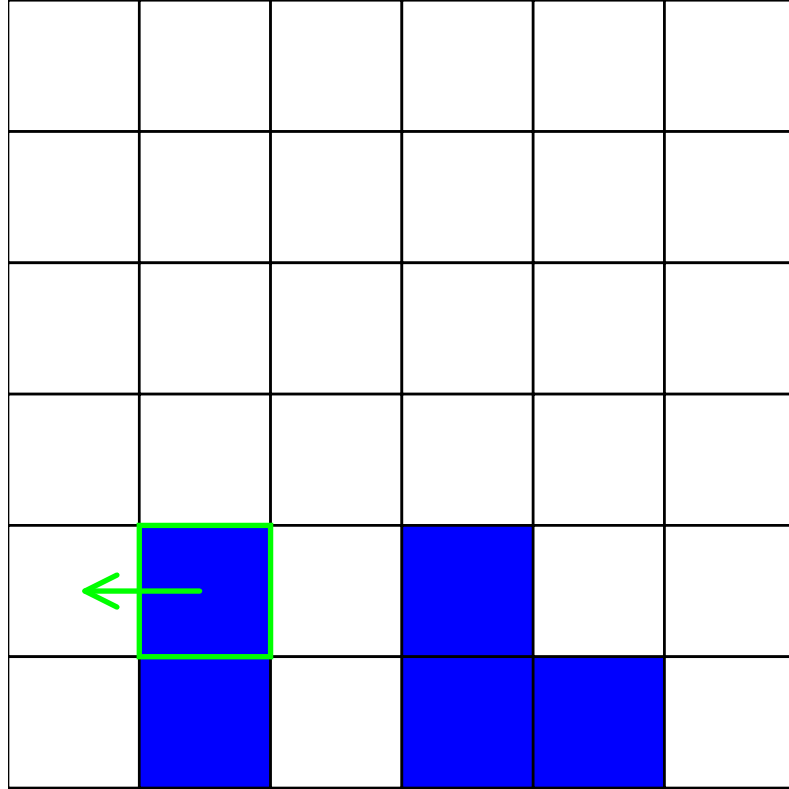
FINAL STATE



...::SOLUTION:...: Solvable in 2 moves (blocks positions: {(4, 1): <Color: blue>, (4, 3): <Color: blue>, (5, 1): <Color: blue>, (5, 3): <Color: blue>, (5, 4): <Color: blue>})

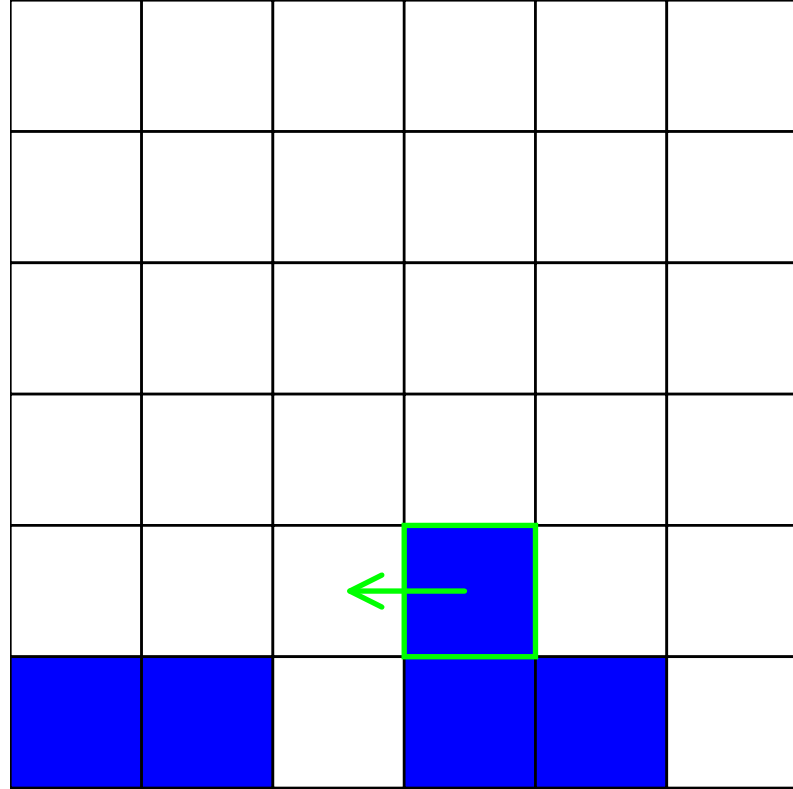
INITIAL STATE: (MOVE 1)

Perform: move_left at position: (4, 1):

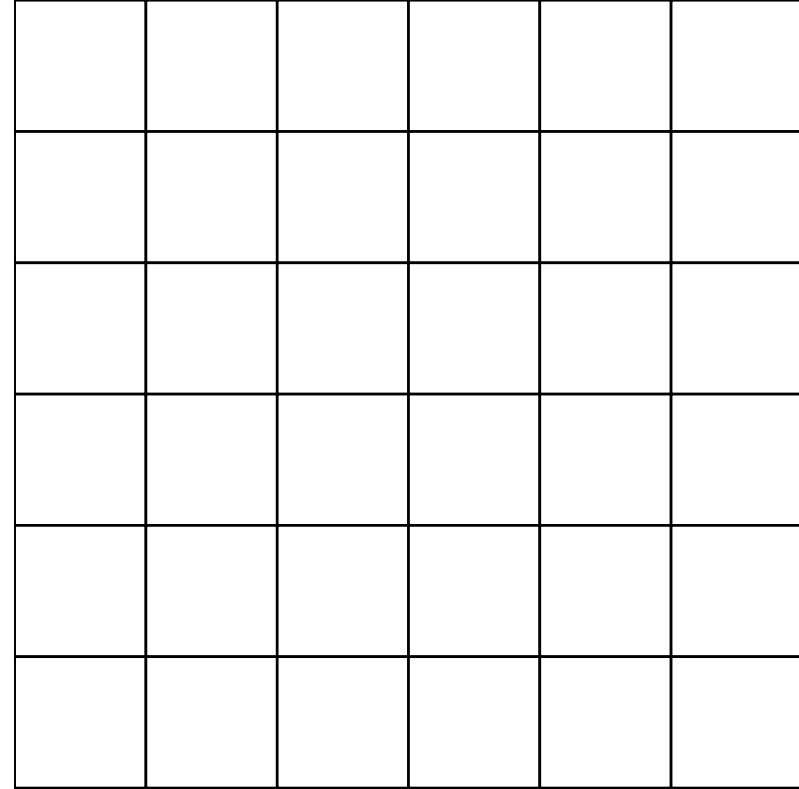


(MOVE 2)

Perform: move_left at position: (4, 3):



FINAL STATE



FINAL STATE

INITIAL STATE: (MOVE 1)

A 7x7 grid representing a game board. The bottom row contains blue squares at columns 1, 3, 4, 6, and 7. A green arrow points from the square at (row 7, column 1) to the square at (row 6, column 4).

A 7x7 grid with a blue square at (4,1) and a green arrow pointing right to (5,1).

[illegible]

INITIAL STATE: (MOVE 1)

A 10x10 grid with a blue highlighted path and a green arrow pointing left.

The grid is composed of 10 columns and 10 rows. The bottom row (row 10) is entirely blue. The second row from the bottom (row 9) has blue cells at columns 1, 3, 5, 7, and 9. All other cells are white.

A green arrow is located in the second row from the bottom (row 9), pointing left towards the third column. The arrow is positioned between the second and third columns, with its tip pointing towards the third column.

A 10x10 grid with a blue square at (4, 4) and a green arrow pointing right from it.

[illegible]

INITIAL STATE: (MOVE 1)

A 10x10 grid with blue cells at (1,1), (1,2), (1,5), (1,8), (1,9), (2,1), (2,2), (2,5), and (2,8). A green arrow points from (2,2) to (2,5).

A 10x10 grid with a green arrow pointing right from the bottom row, column 6 to column 7.

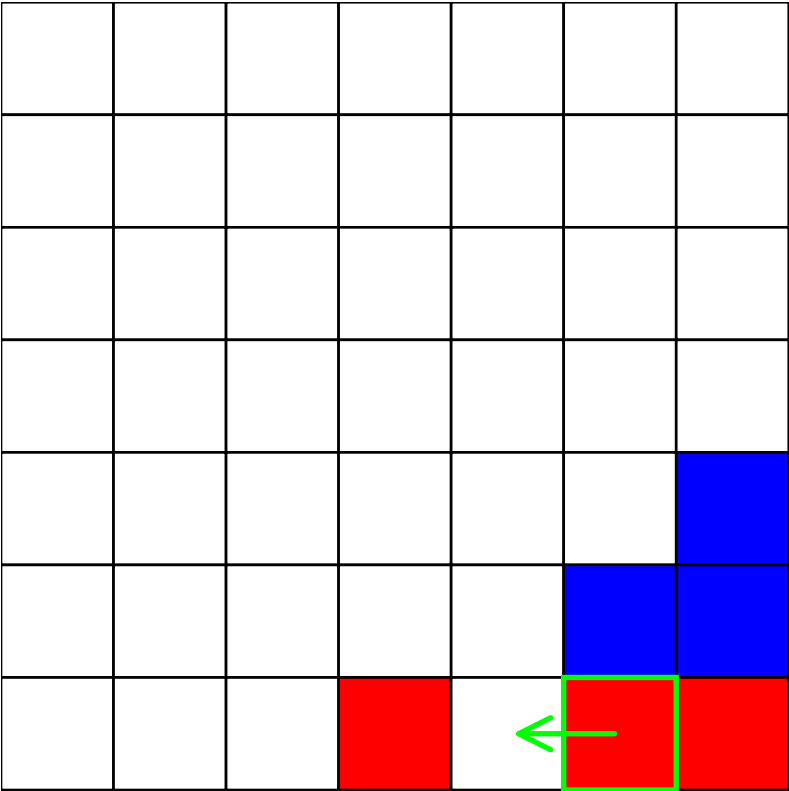
[illegible]

FINAL STATE

...:SOLUTION:...: Solvable in 2 moves (blocks positions: {(4, 6): <Color: blue>, (5, 5): <Color: blue>, (5, 6): <Color: blue>, (6, 3): <Color: red>, (6, 5): <Color: red>, (6, 6): <Color: red>})

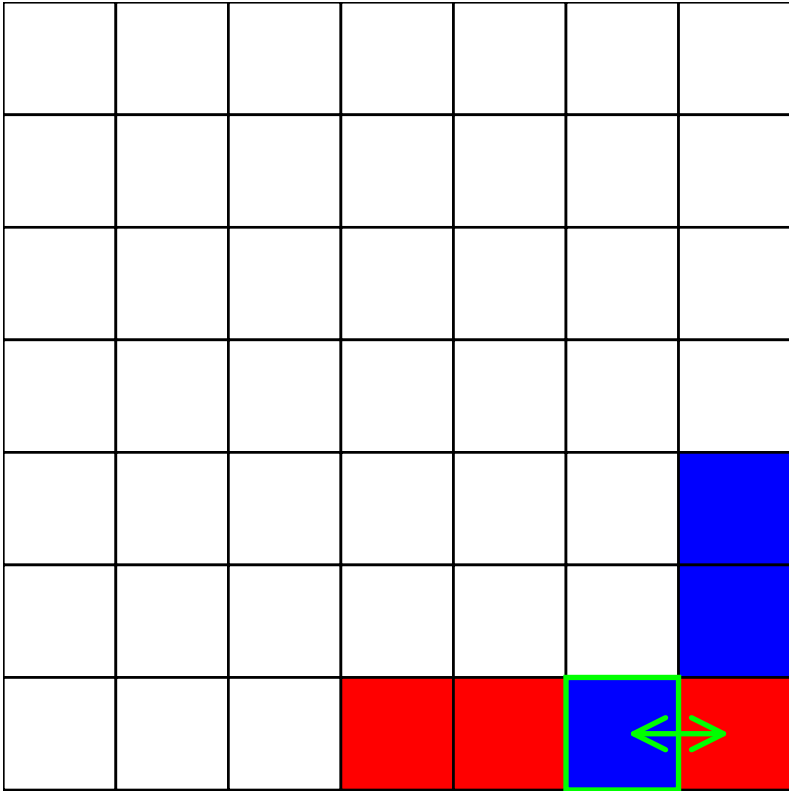
INITIAL STATE: (MOVE 1)

Perform: move_left at position: (6, 5):

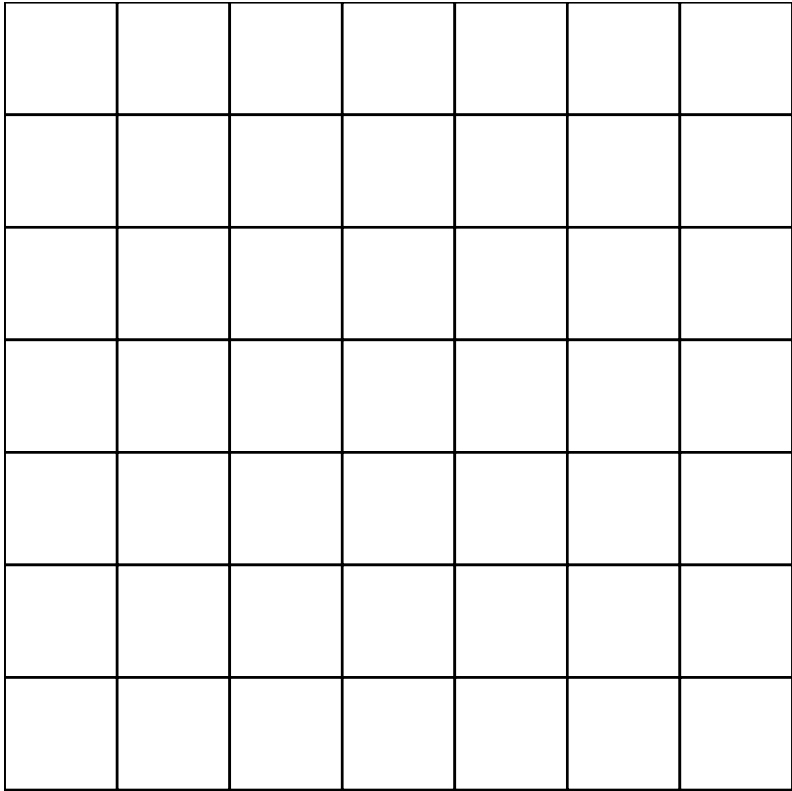


(MOVE 2)

Perform: exchange_right at position: (6, 5):

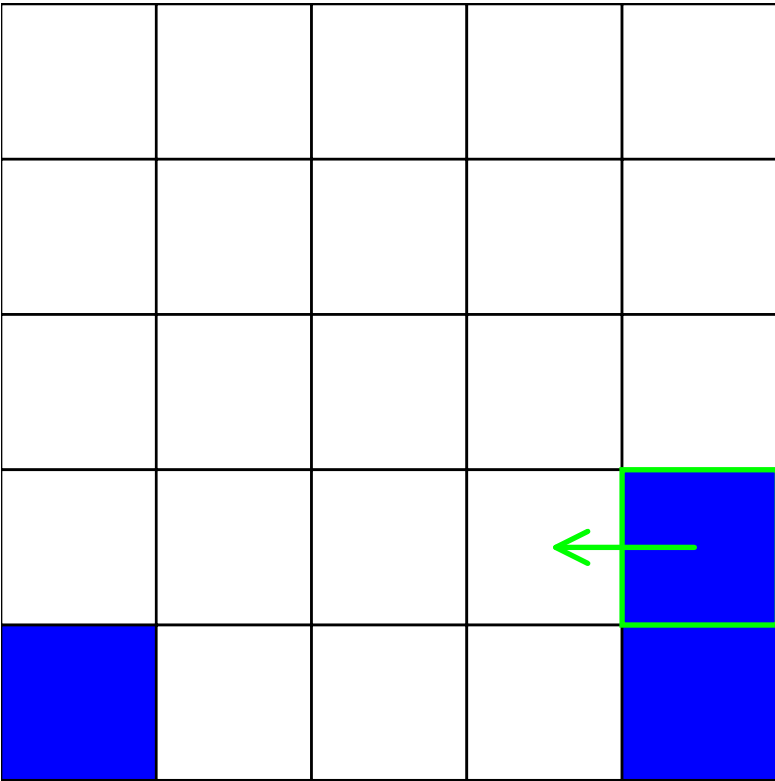


FINAL STATE

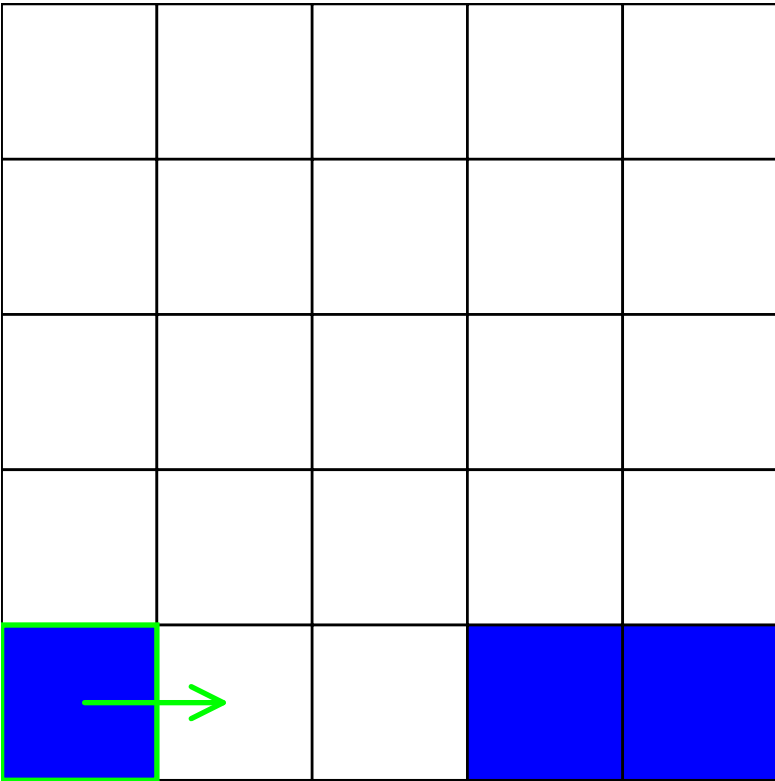


...:SOLUTION::...: Solvable in 3 moves (blocks positions: {(3, 4): <Color: blue>, (4, 0): <Color: blue>, (4, 4): <Color: blue>})

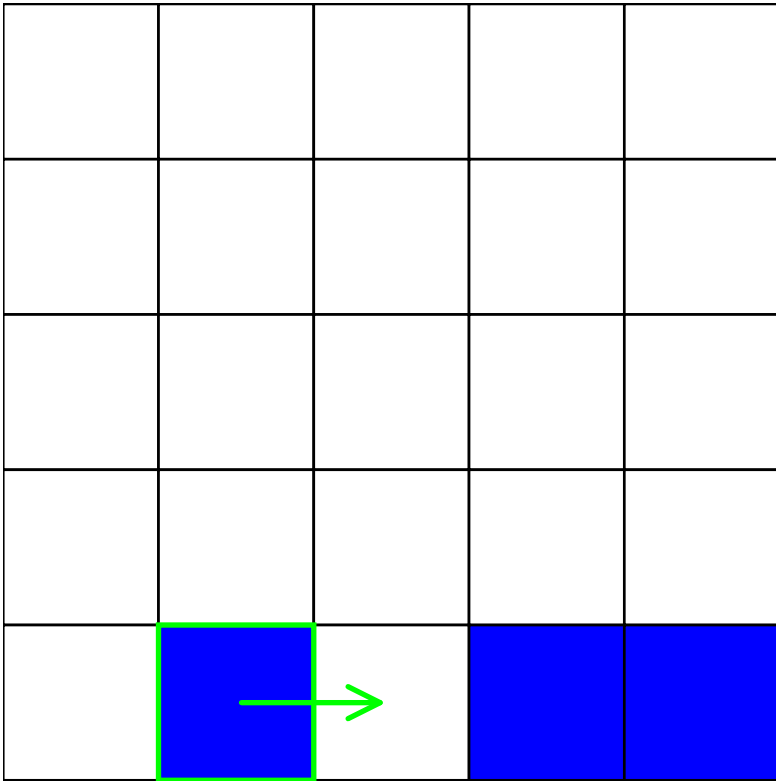
INITIAL STATE: (MOVE 1)
Perform: move_left at position: (3, 4):



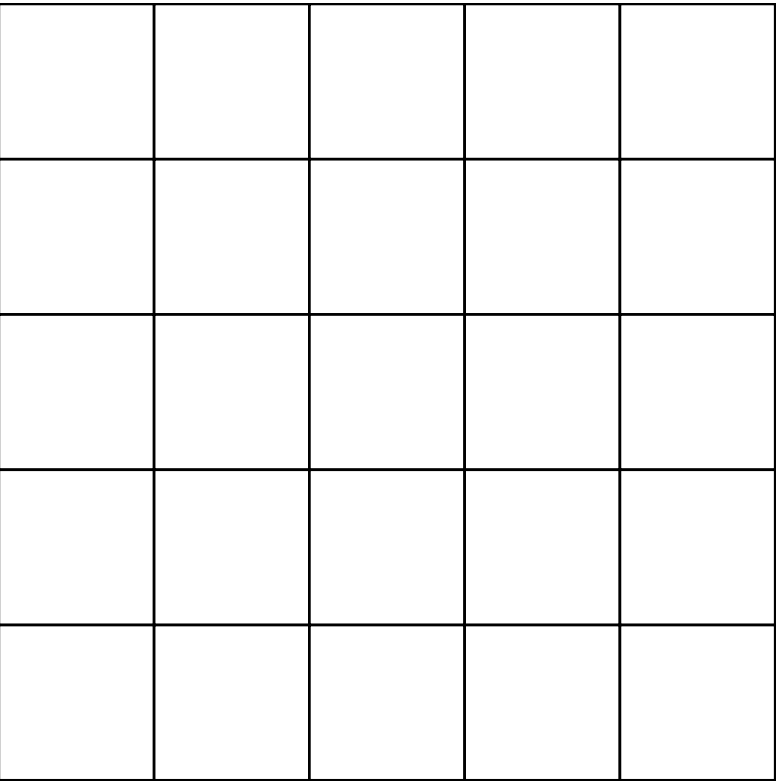
(MOVE 2)
Perform: move_right at position: (4, 0):



(MOVE 3)
Perform: move_right at position: (4, 1):



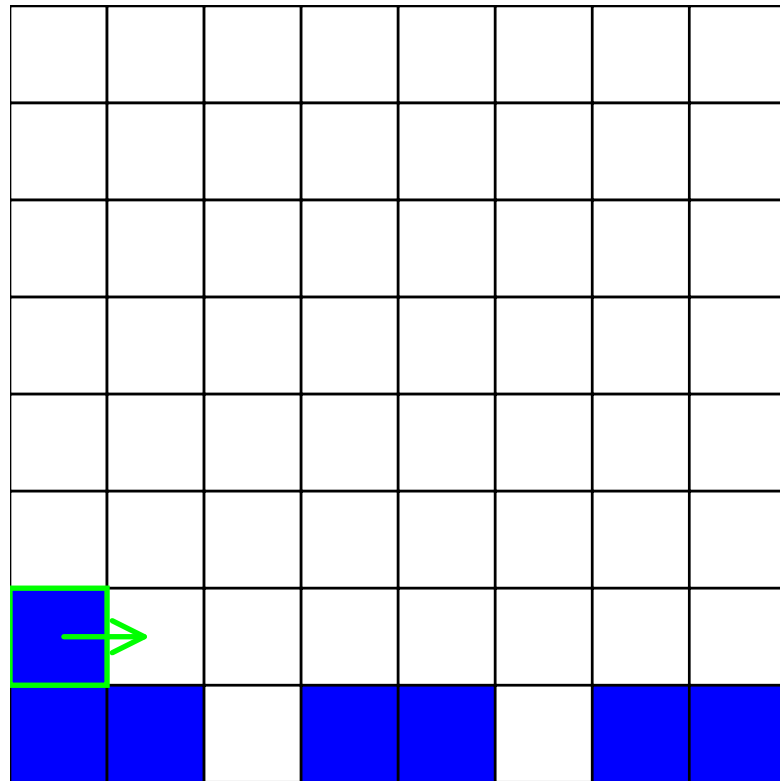
FINAL STATE



...:SOLUTION:...: Solvable in 3 moves (blocks positions: {(6, 0): <Color: blue>, (7, 0): <Color: blue>, (7, 1): <Color: blue>, (7, 3): <Color: blue>, (7, 4): <Color: blue>, (7, 6): <Color: blue>, (7, 7): <Color: blue>})

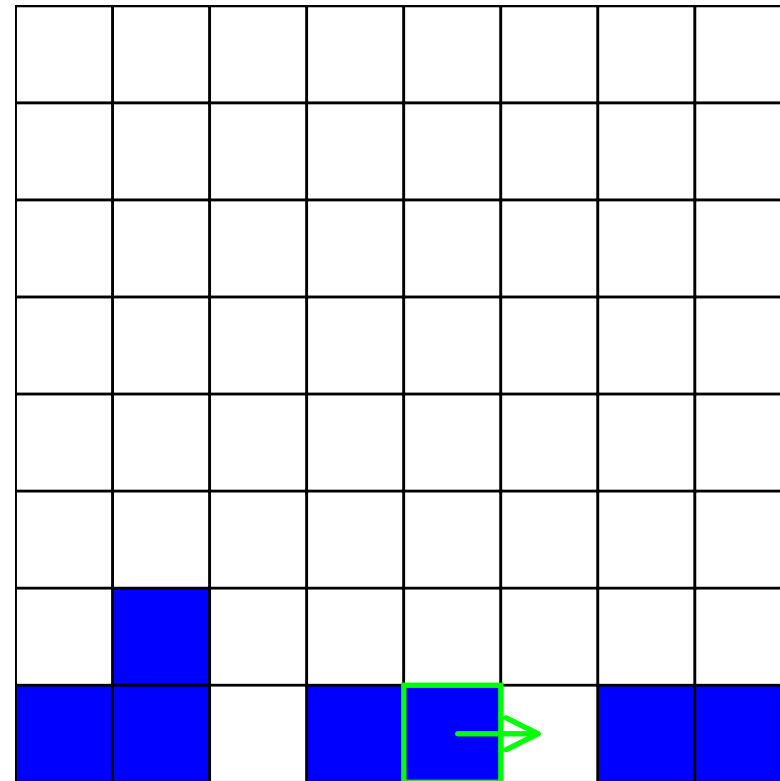
INITIAL STATE: (MOVE 1)

Perform: move_right at position: (6, 0):



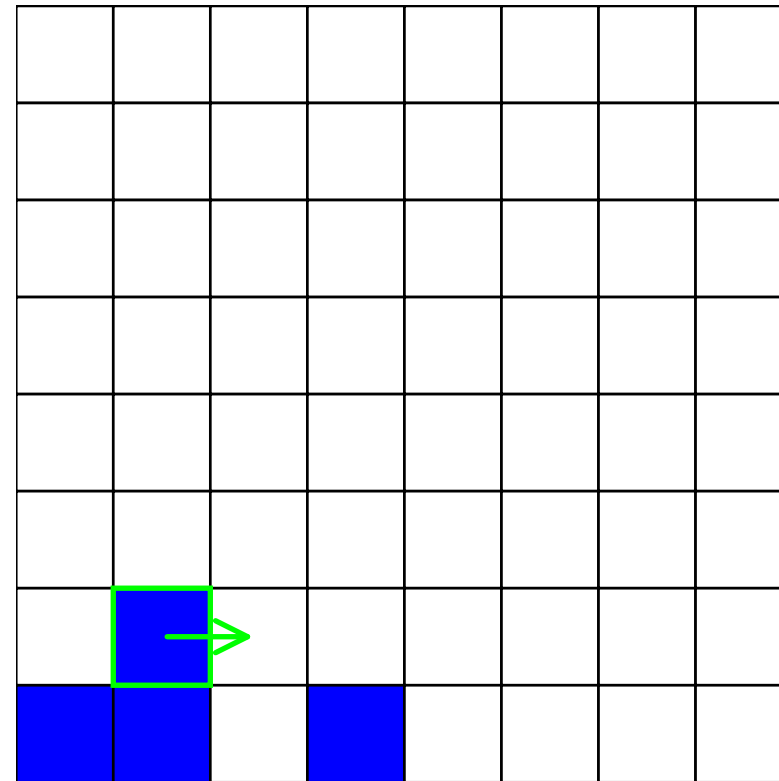
(MOVE 2)

Perform: move_right at position: (7, 4):

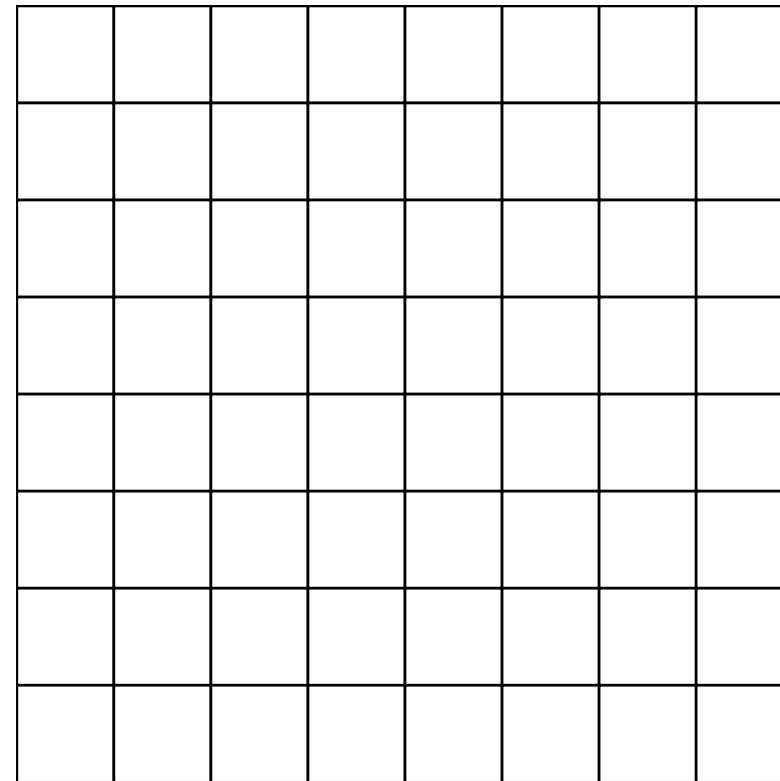


(MOVE 3)

Perform: move_right at position: (6, 1):



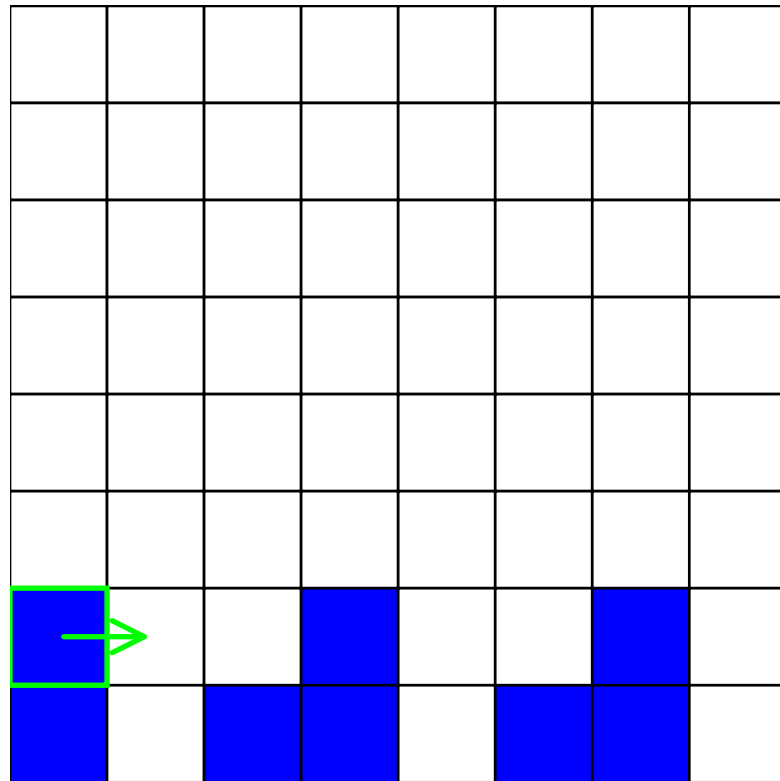
FINAL STATE



...:SOLUTION:...: Solvable in 3 moves (blocks positions: {(6, 0): <Color: blue>, (6, 3): <Color: blue>, (6, 6): <Color: blue>, (7, 0): <Color: blue>, (7, 2): <Color: blue>, (7, 3): <Color: blue>, (7, 5): <Color: blue>, (7, 6): <Color: blue>})

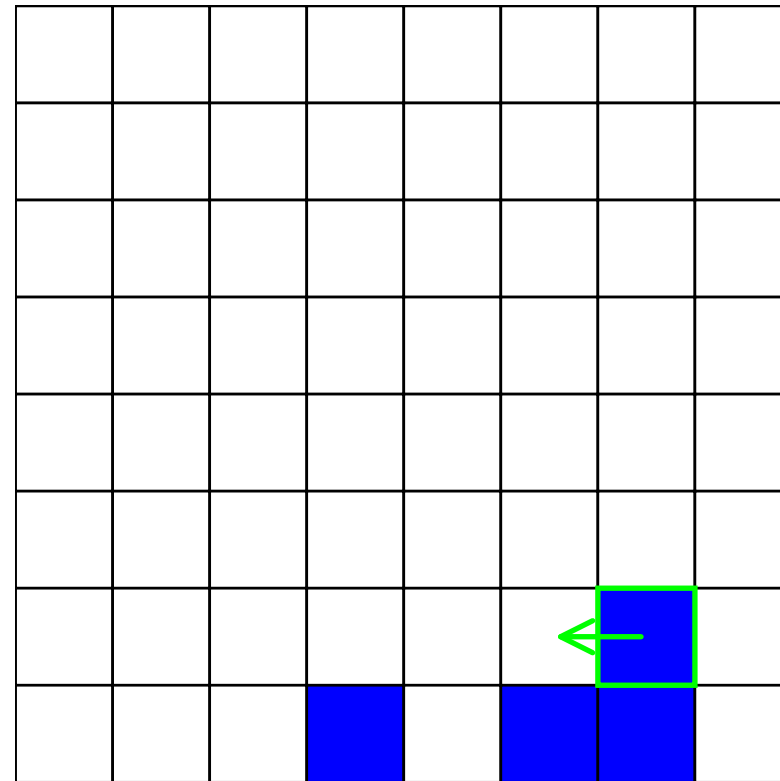
INITIAL STATE: (MOVE 1)

Perform: move_right at position: (6, 0):



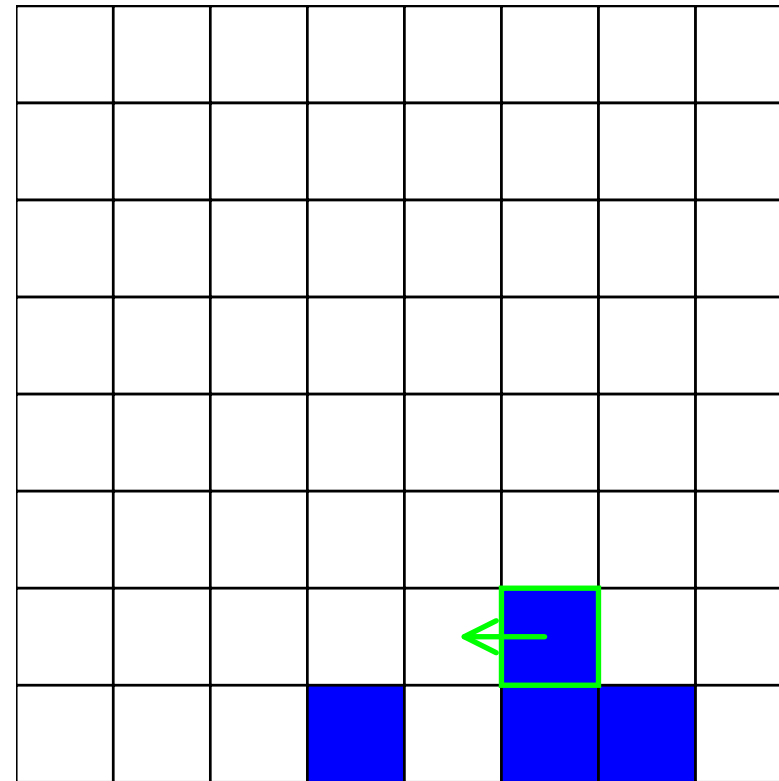
(MOVE 2)

Perform: move_left at position: (6, 6):

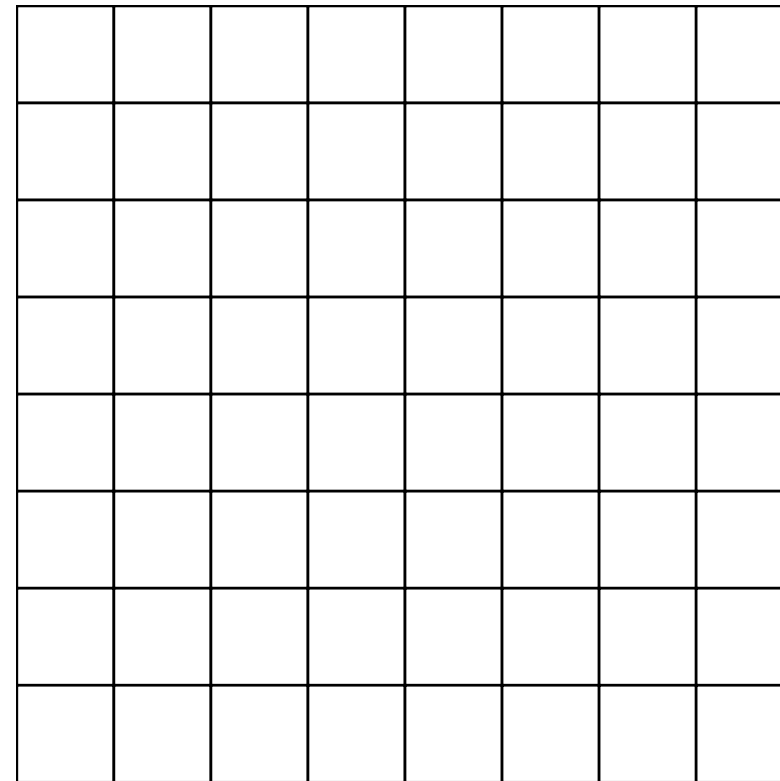


(MOVE 3)

Perform: move_left at position: (6, 5):



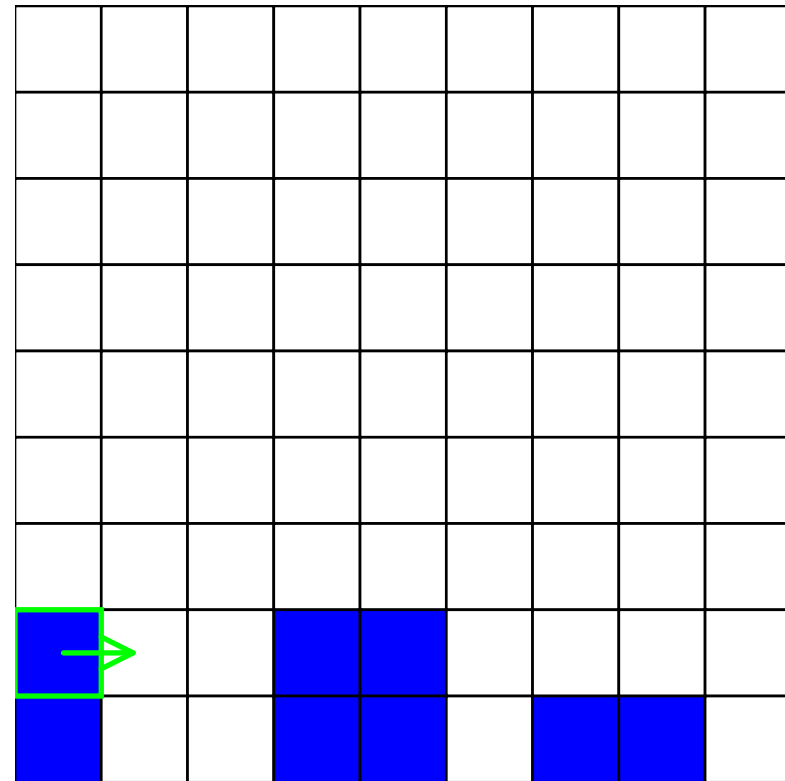
FINAL STATE



...:SOLUTION:...: Solvable in 3 moves (blocks positions: {(7, 0): <Color: blue>, (7, 3): <Color: blue>, (7, 4): <Color: blue>, (8, 0): <Color: blue>, (8, 3): <Color: blue>, (8, 4): <Color: blue>, (8, 6): <Color: blue>, (8, 7): <Color: blue>})

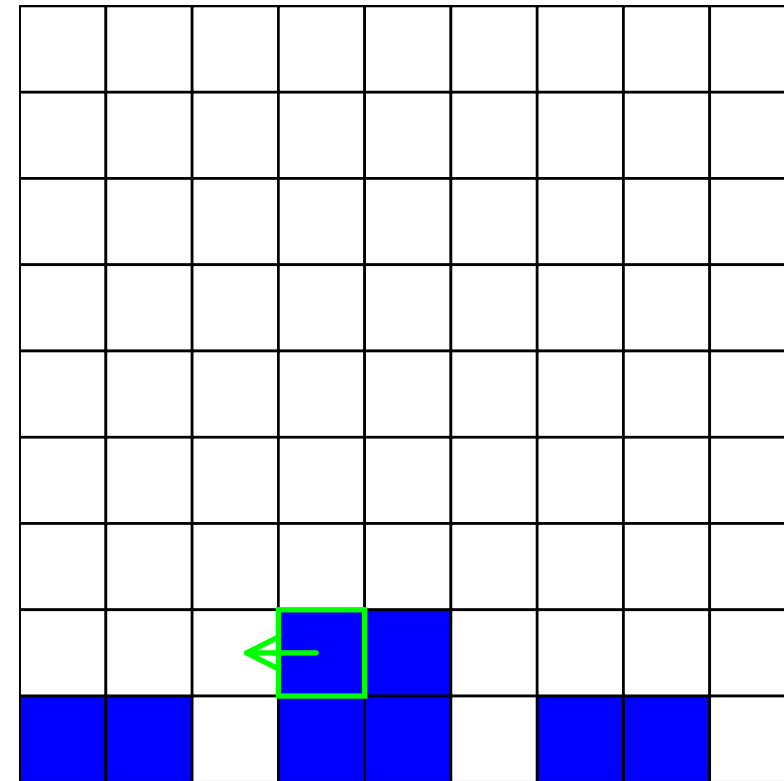
INITIAL STATE: (MOVE 1)

Perform: move_right at position: (7, 0):



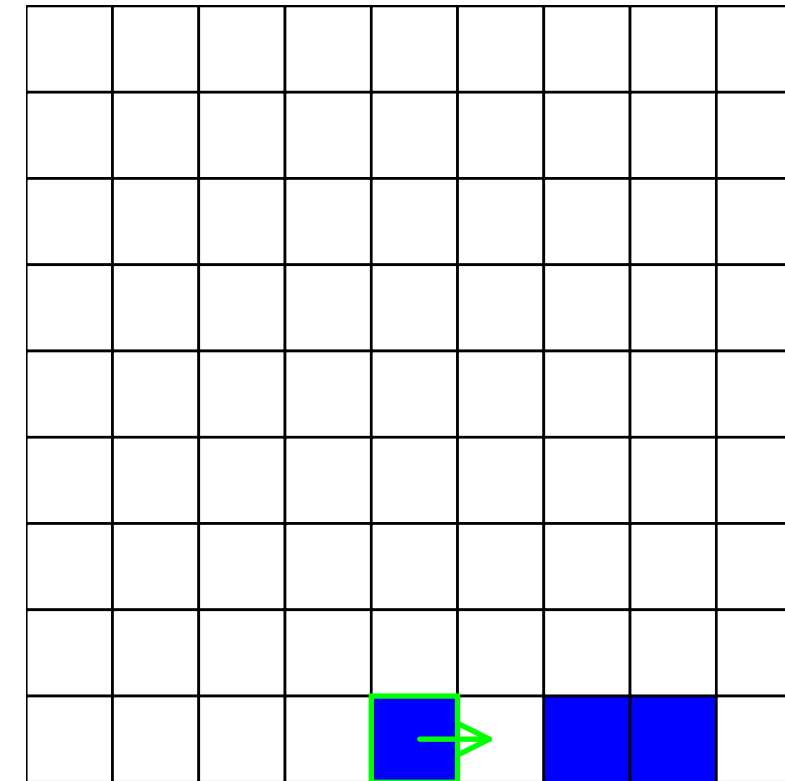
(MOVE 2)

Perform: move_left at position: (7, 3):

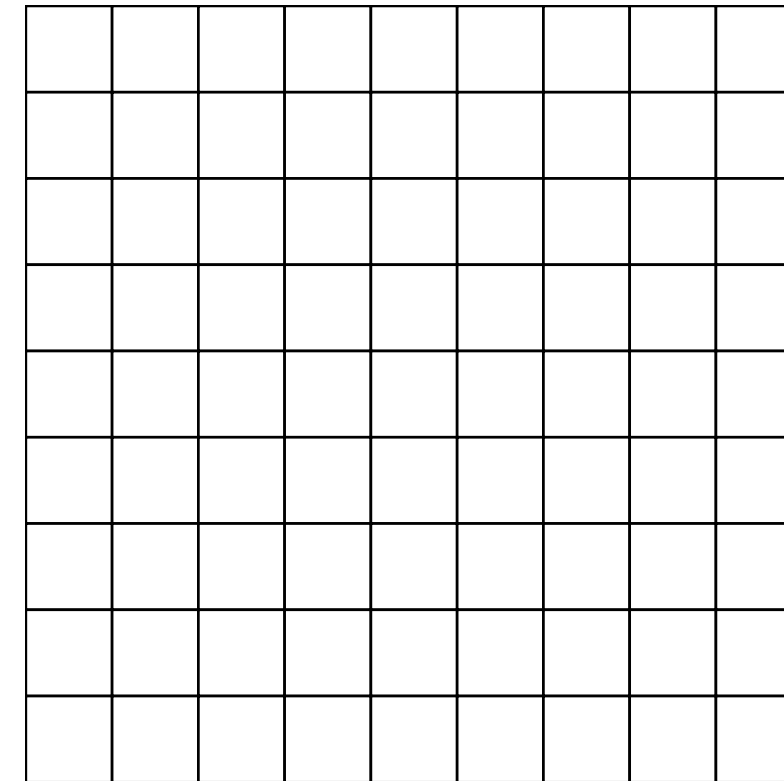


(MOVE 3)

Perform: move_right at position: (8, 4):



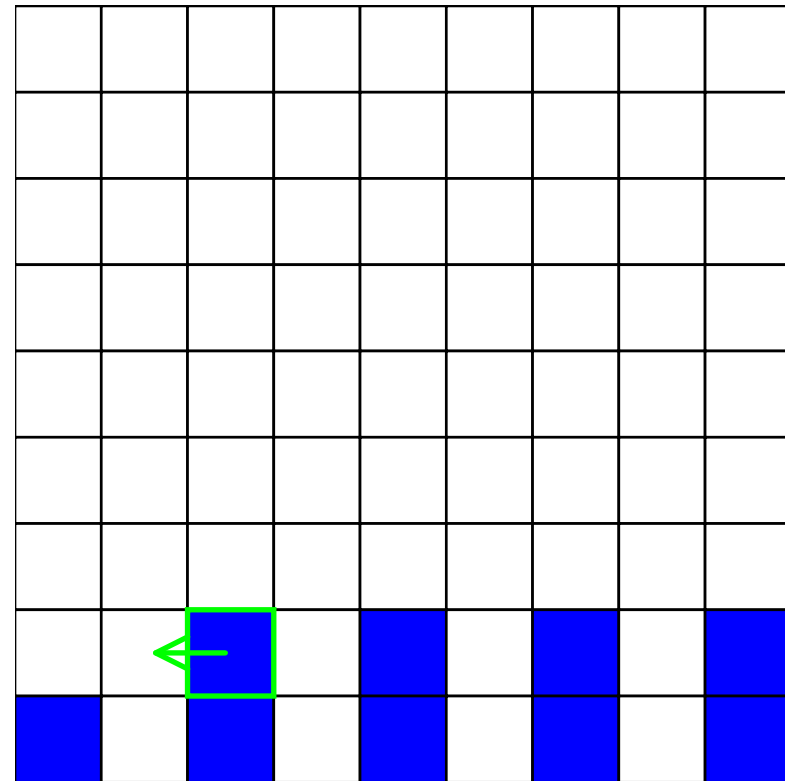
FINAL STATE



...:SOLUTION:...: Solvable in 3 moves (blocks positions: {(7, 2): <Color: blue>, (7, 4): <Color: blue>, (7, 6): <Color: blue>, (7, 8): <Color: blue>, (8, 0): <Color: blue>, (8, 2): <Color: blue>, (8, 4): <Color: blue>, (8, 6): <Color: blue>, (8, 8): <Color: blue>}

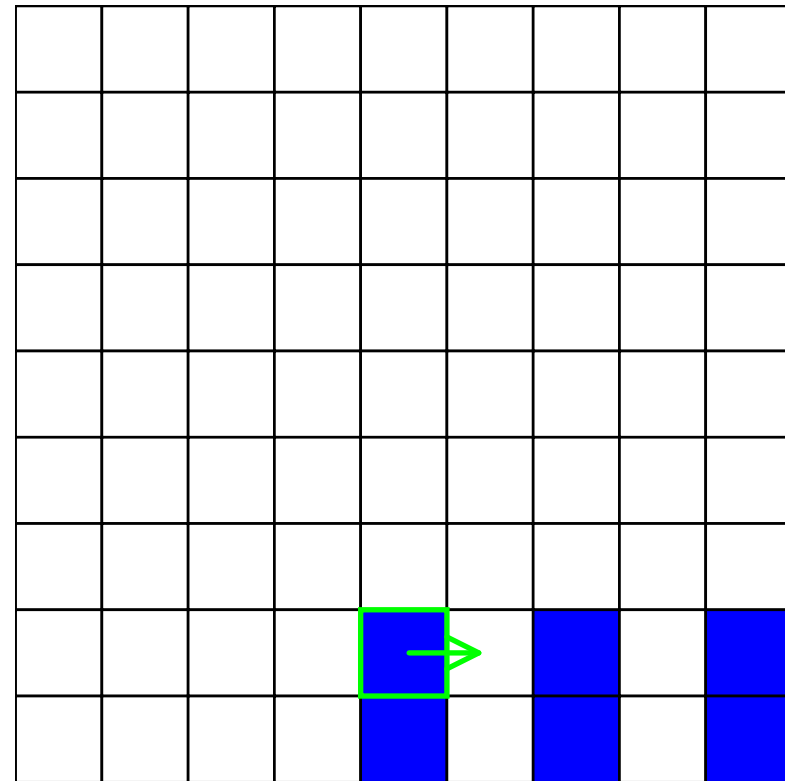
INITIAL STATE: (MOVE 1)

Perform: move_left at position: (7, 2):



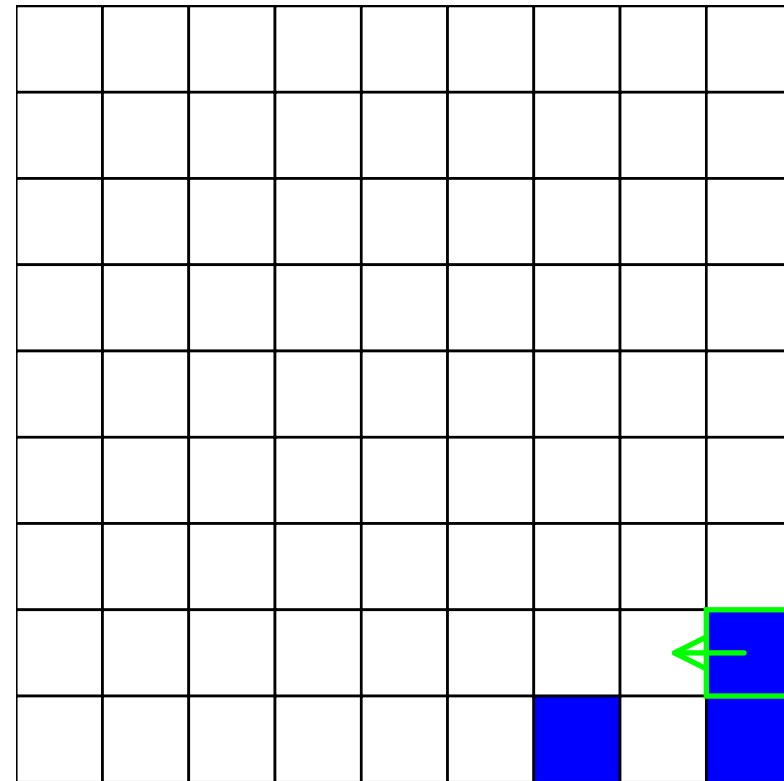
(MOVE 2)

Perform: move_right at position: (7, 4):

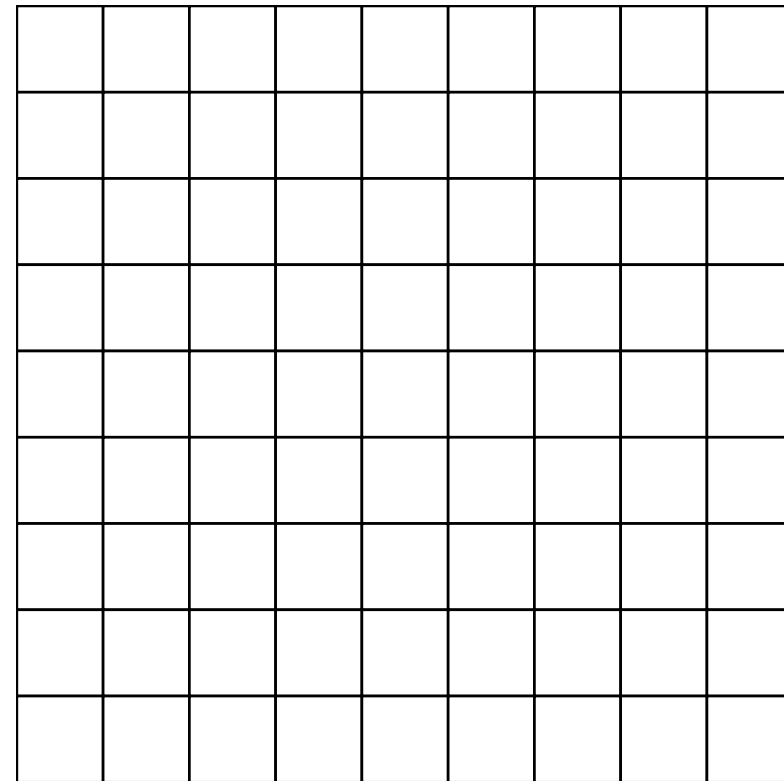


(MOVE 3)

Perform: move_left at position: (7, 8):



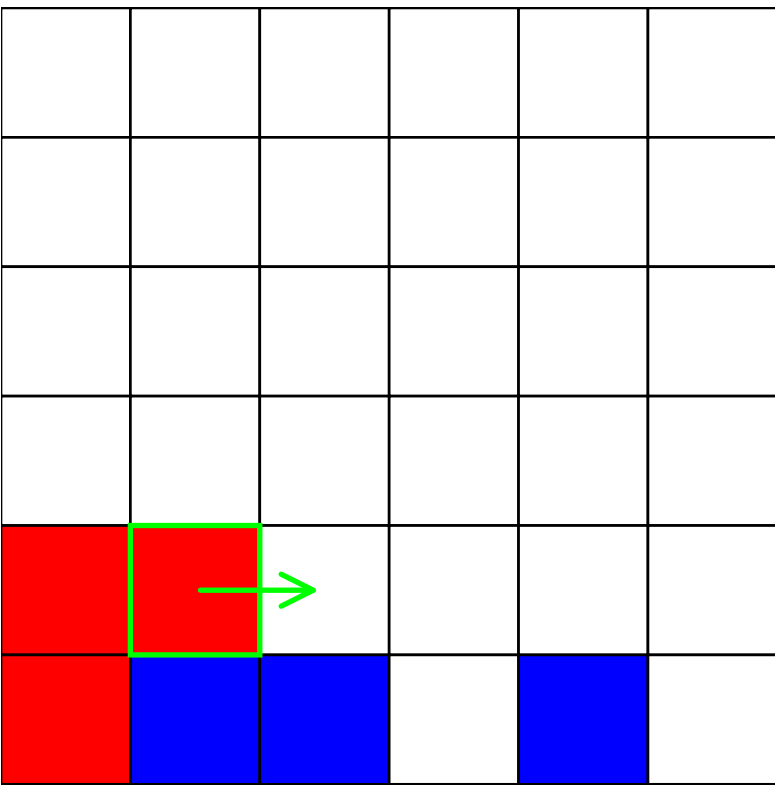
FINAL STATE



...:SOLUTION::...: Solvable in 3 moves (blocks positions: {(4, 0): <Color: red>, (4, 1): <Color: red>, (5, 0): <Color: red>, (5, 1): <Color: blue>, (5, 2): <Color: blue>, (5, 4): <Color: blue>})

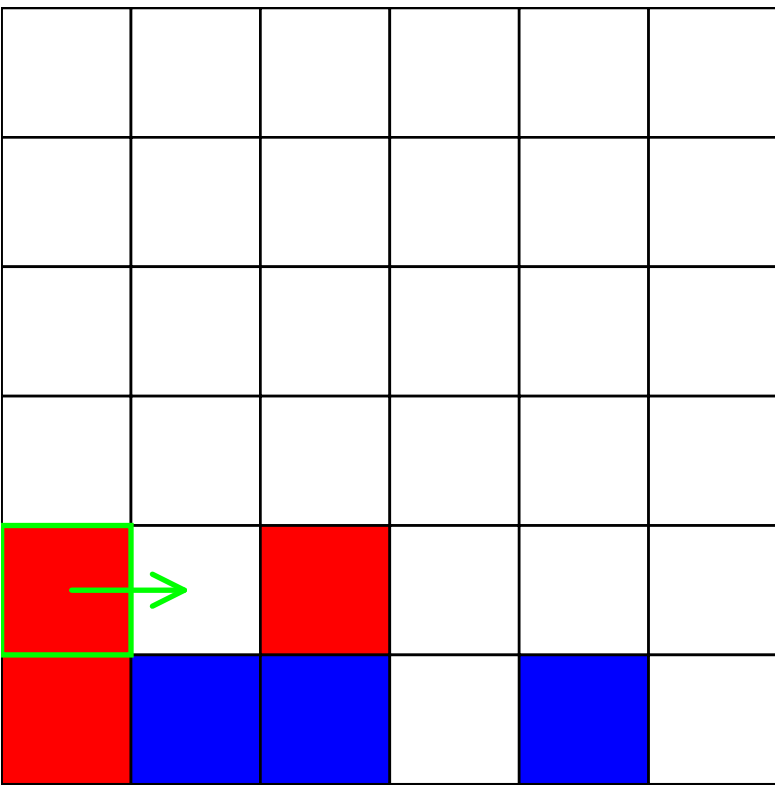
INITIAL STATE: (MOVE 1)

Perform: move_right at position: (4, 1):



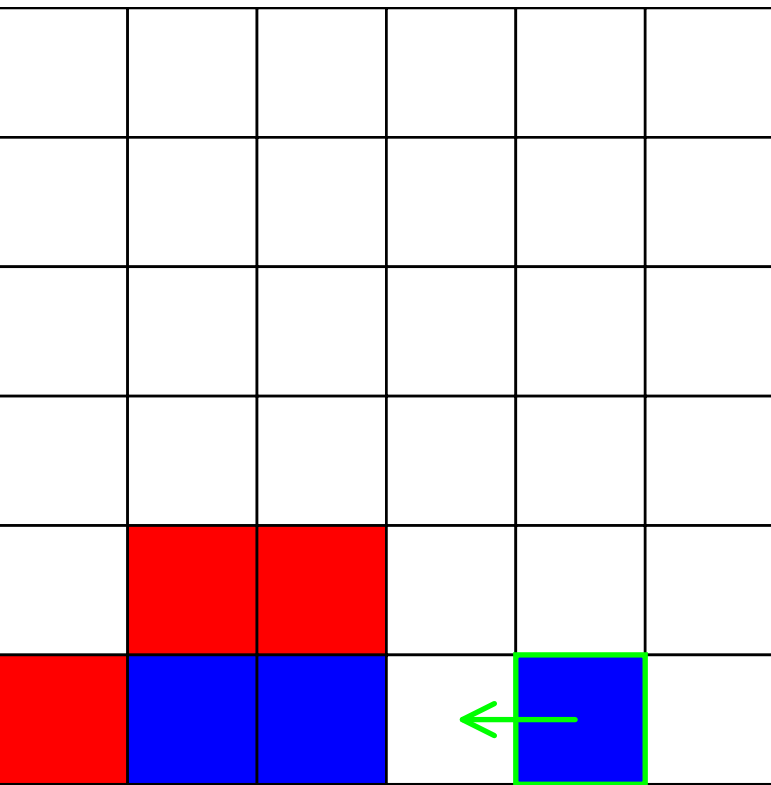
(MOVE 2)

Perform: move_right at position: (4, 0):

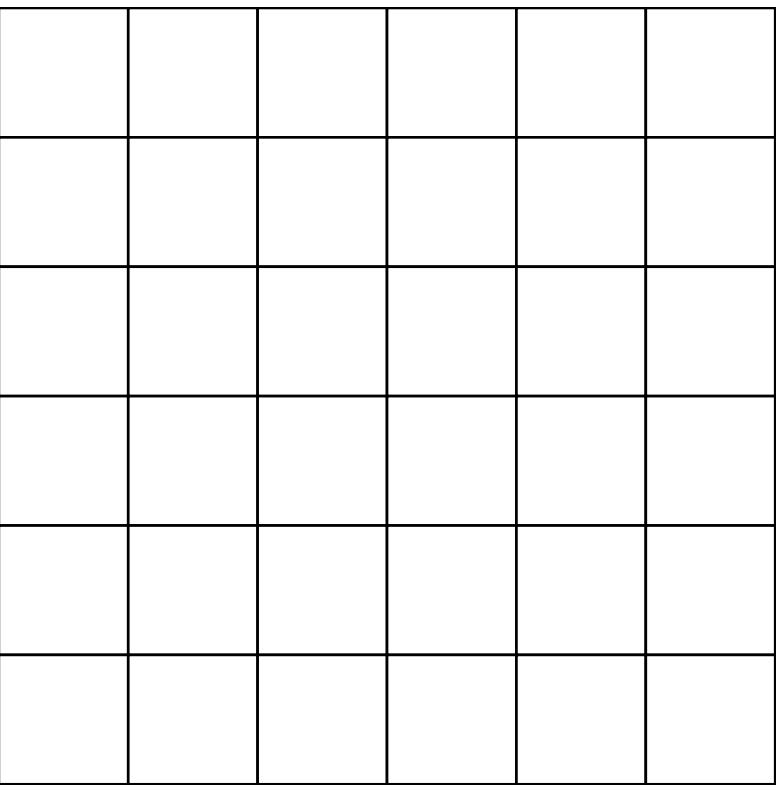


(MOVE 3)

Perform: move_left at position: (5, 4):



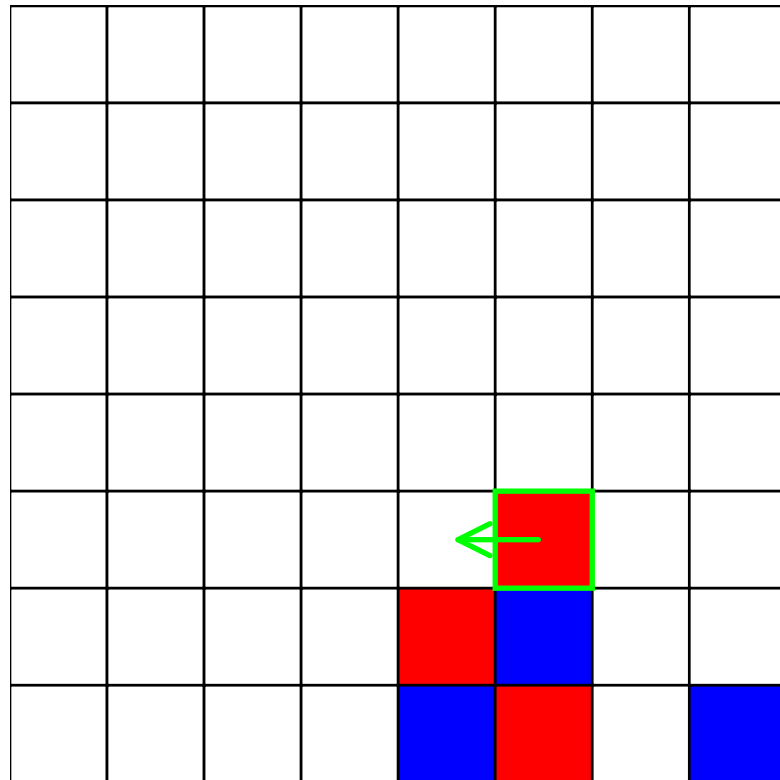
FINAL STATE



...:SOLUTION:...: Solvable in 3 moves (blocks positions: {(5, 5): <Color: red>, (6, 4): <Color: red>, (6, 5): <Color: blue>, (7, 4): <Color: blue>, (7, 5): <Color: red>, (7, 7): <Color: blue>})

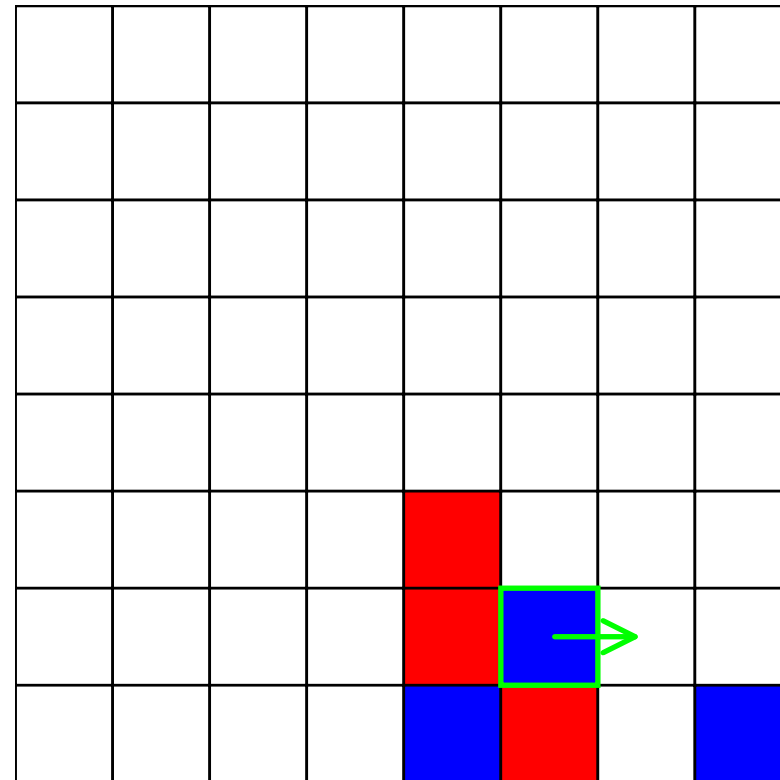
INITIAL STATE: (MOVE 1)

Perform: move_left at position: (5, 5):



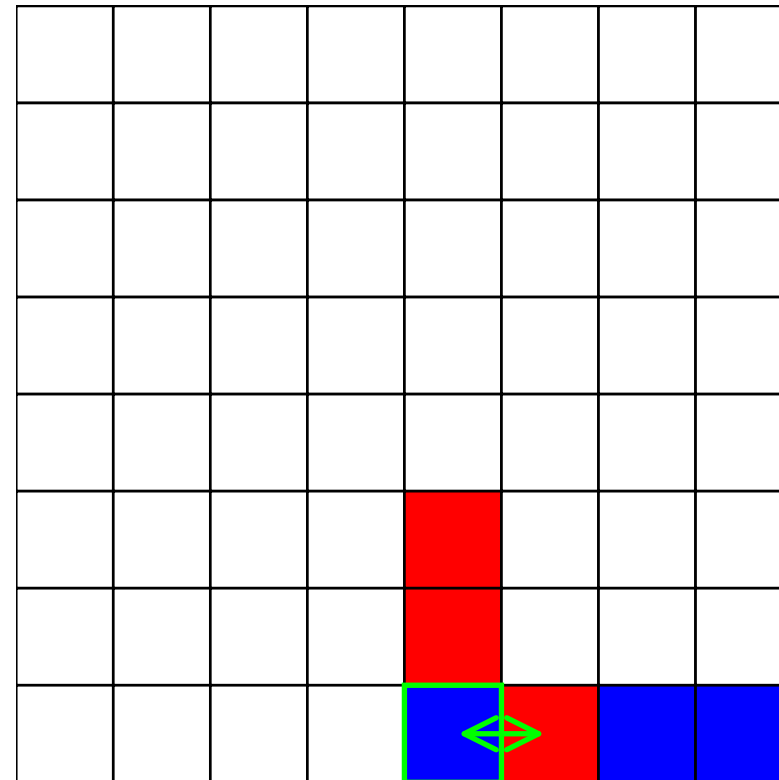
(MOVE 2)

Perform: move_right at position: (6, 5):

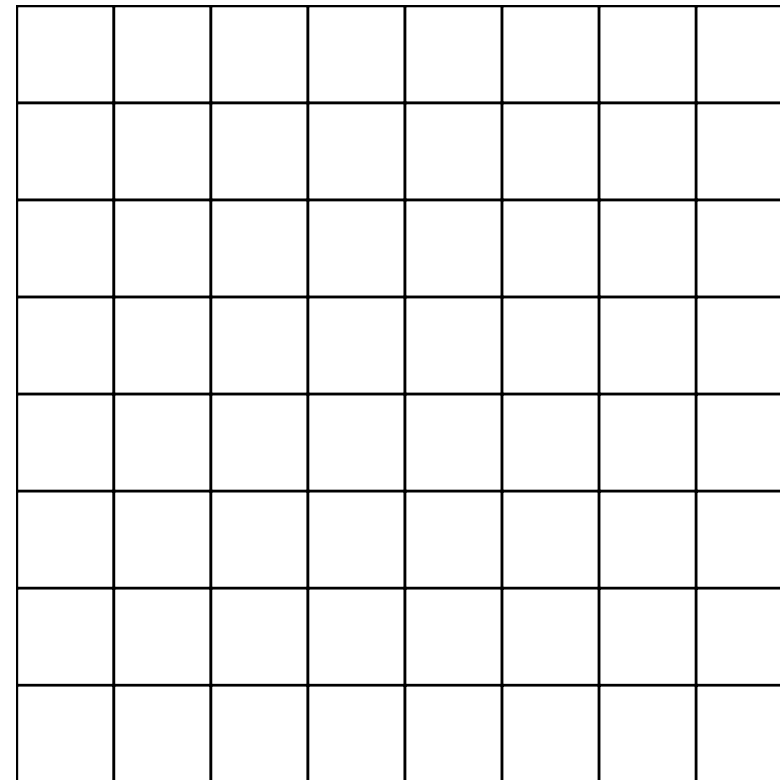


(MOVE 3)

Perform: exchange_right at position: (7, 4):

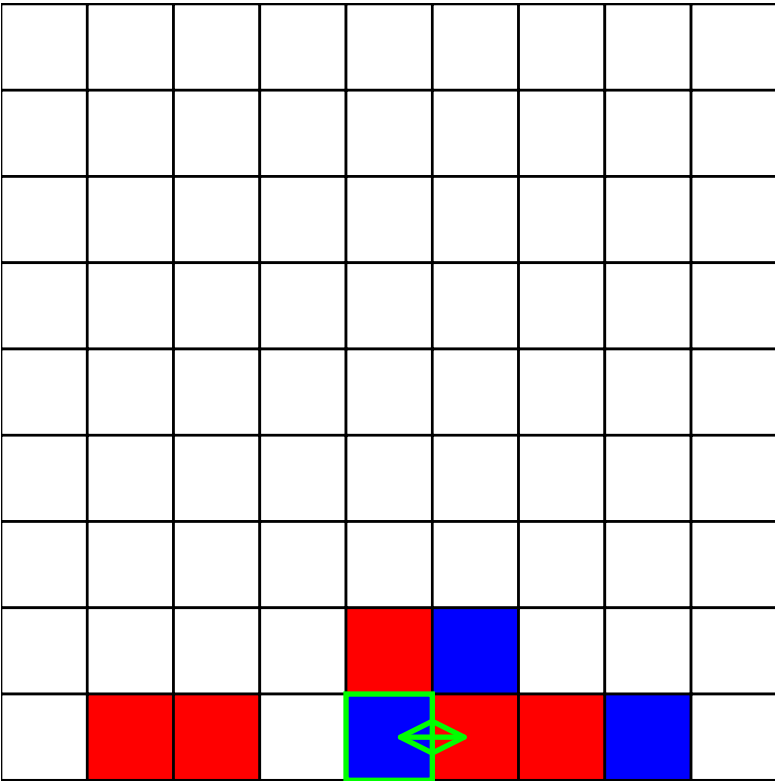


FINAL STATE

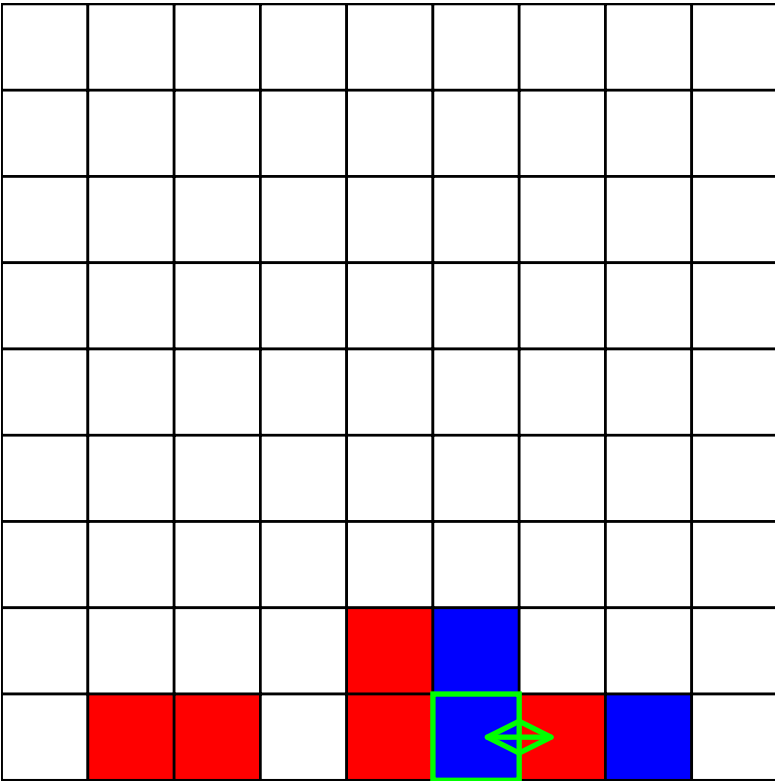


...:SOLUTION::...: Solvable in 3 moves (blocks positions: {(7, 4): <Color: red>, (7, 5): <Color: blue>, (8, 1): <Color: red>, (8, 2): <Color: red>, (8, 4): <Color: blue>, (8, 5): <Color: red>, (8, 6): <Color: red>, (8, 7): <Color: blue>})

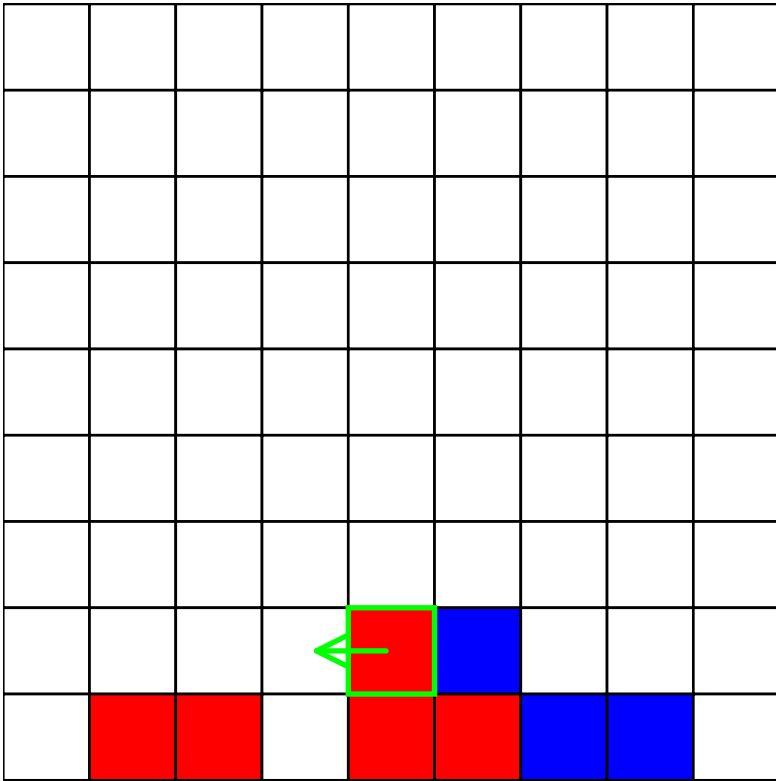
INITIAL STATE: (MOVE 1)
Perform: exchange_right at position: (8, 4):



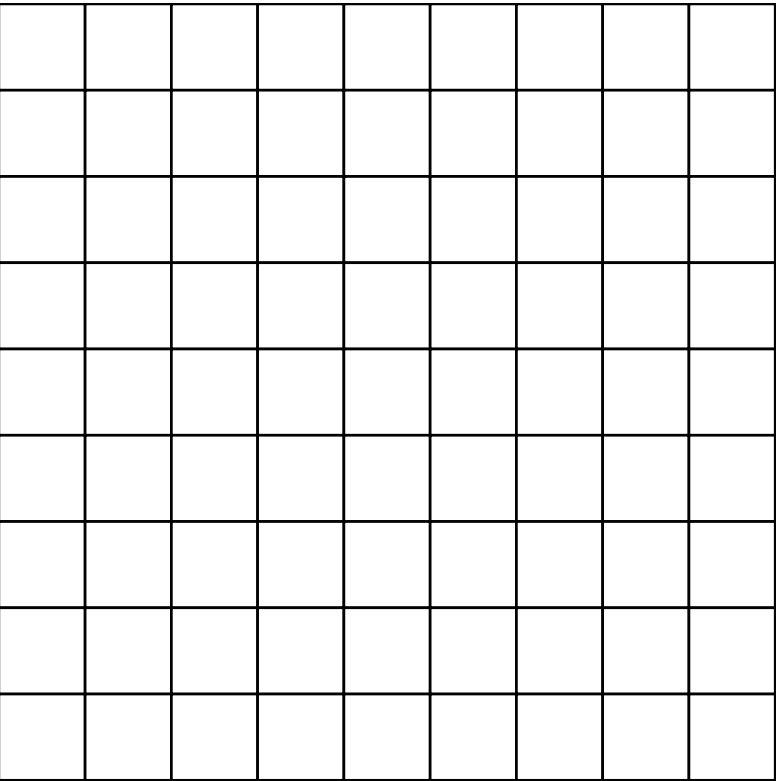
(MOVE 2)
Perform: exchange_right at position: (8, 5):



(MOVE 3)
Perform: move_left at position: (7, 4):



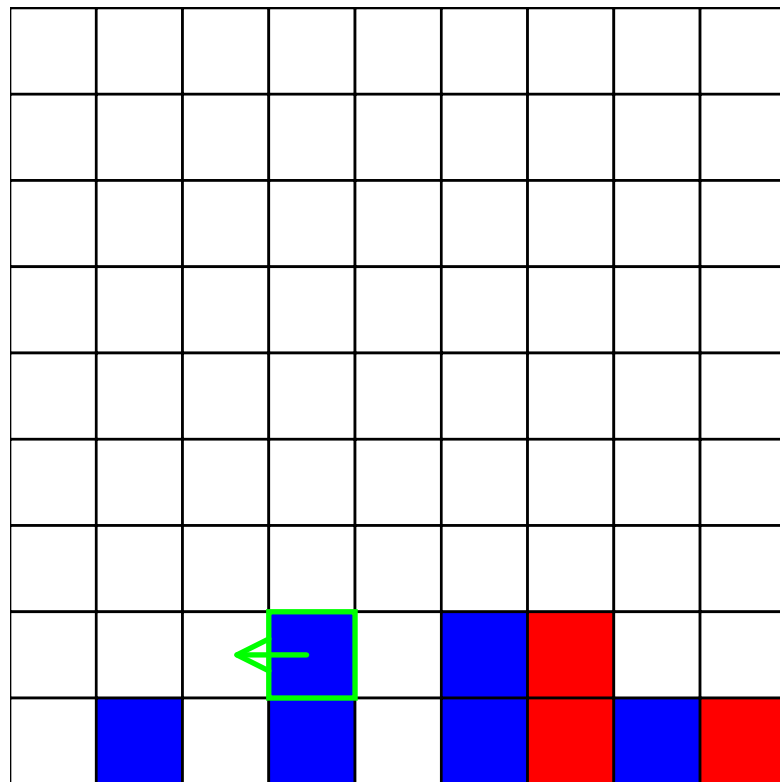
FINAL STATE



...:SOLUTION:...: Solvable in 3 moves (blocks positions: {(7, 3): <Color: blue>, (7, 5): <Color: blue>, (7, 6): <Color: red>, (8, 1): <Color: blue>, (8, 3): <Color: blue>, (8, 5): <Color: blue>, (8, 6): <Color: red>, (8, 7): <Color: blue>, (8, 8): <Color: red>}

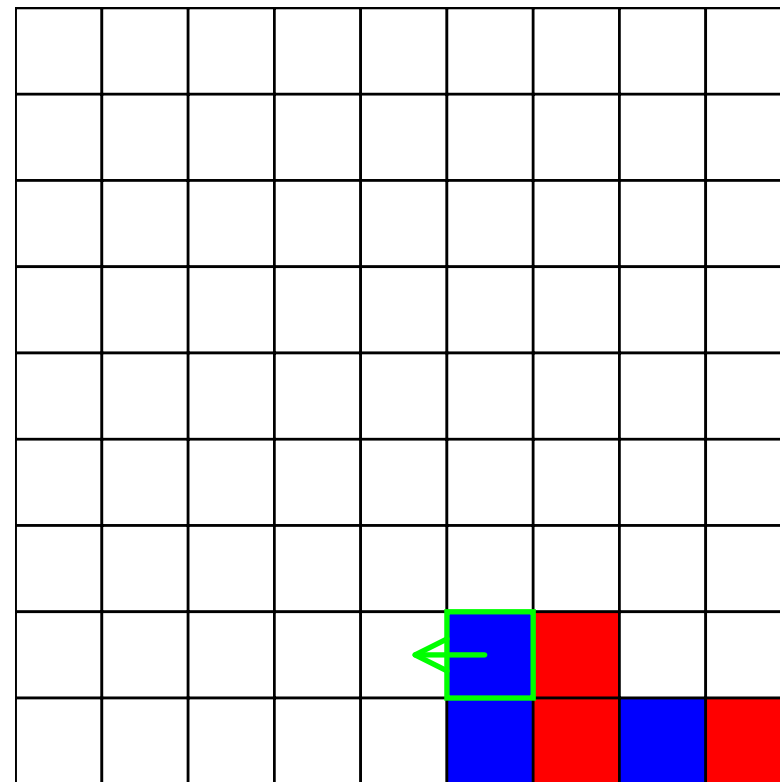
INITIAL STATE: (MOVE 1)

Perform: move_left at position: (7, 3):



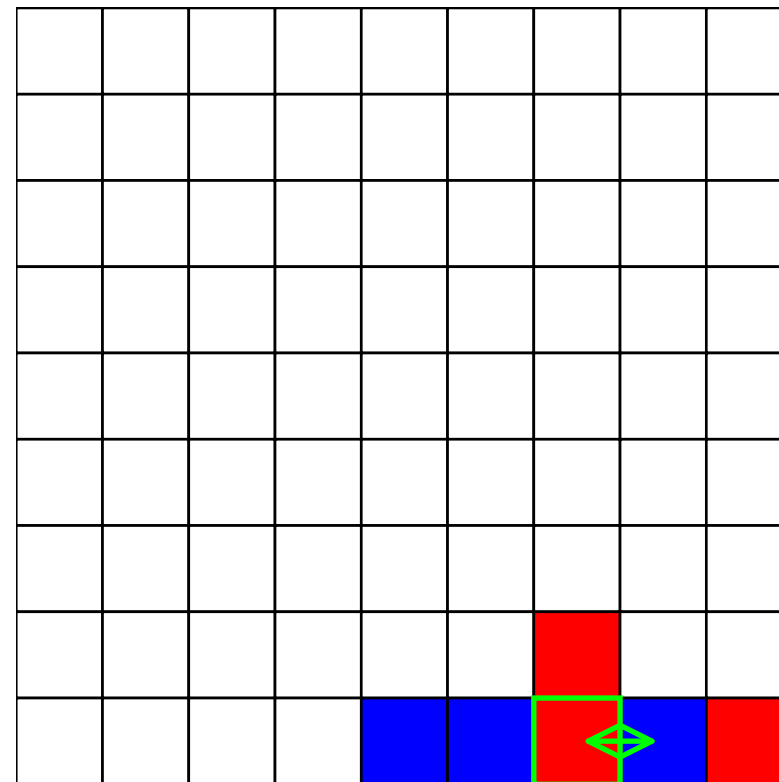
(MOVE 2)

Perform: move_left at position: (7, 5):

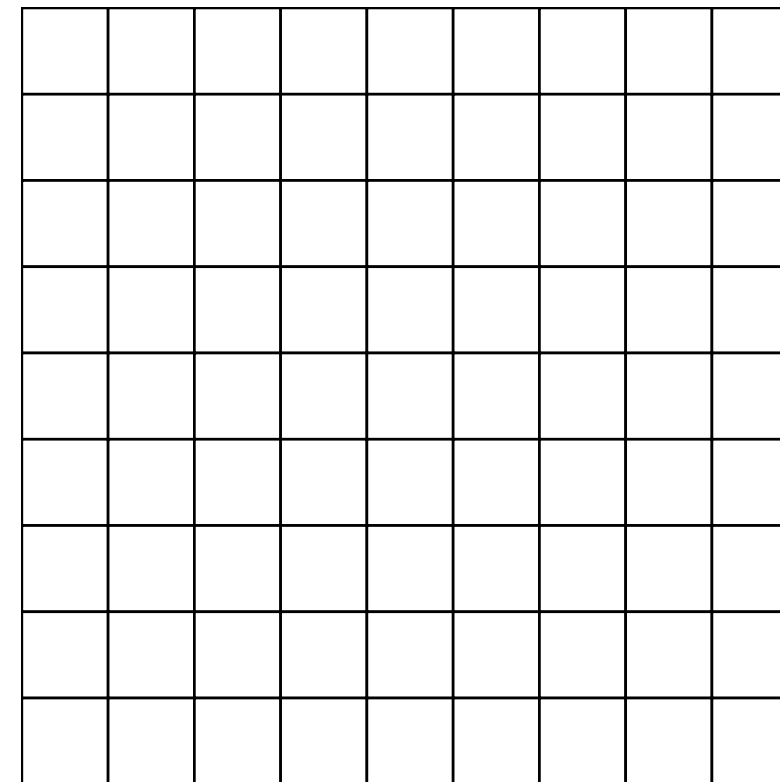


(MOVE 3)

Perform: exchange_right at position: (8, 6):



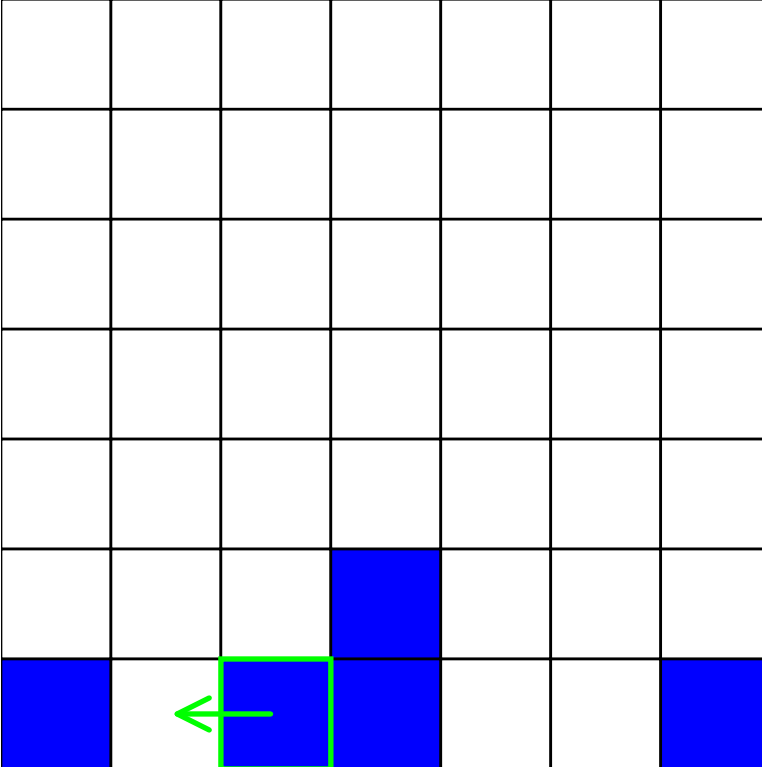
FINAL STATE



...:SOLUTION:...: Solvable in 4 moves (blocks positions: {(5, 3): <Color: blue>, (6, 0): <Color: blue>, (6, 2): <Color: blue>, (6, 3): <Color: blue>, (6, 6): <Color: blue>})

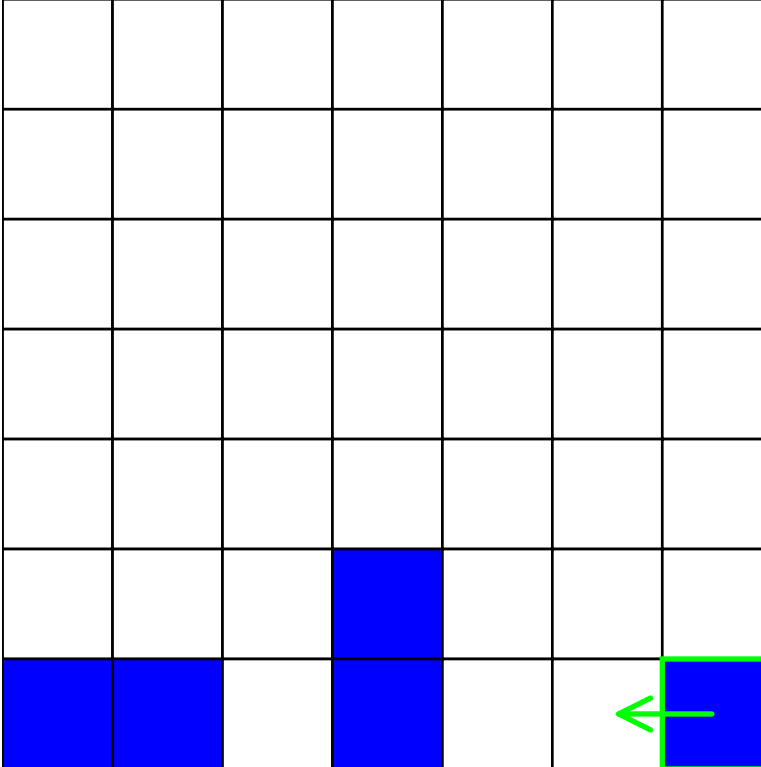
INITIAL STATE: (MOVE 1)

Perform: move_left at position: (6, 2):



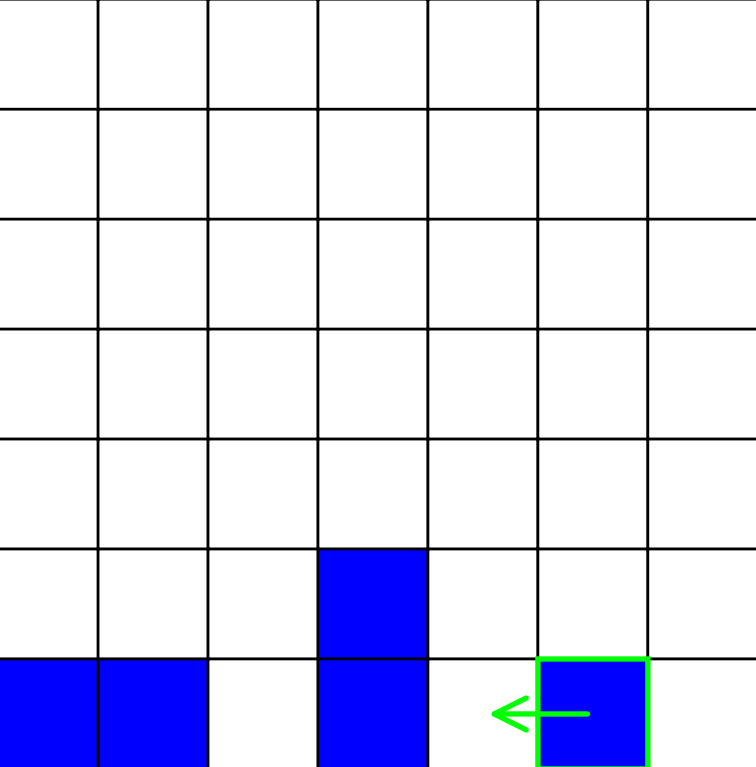
(MOVE 2)

Perform: move_left at position: (6, 6):



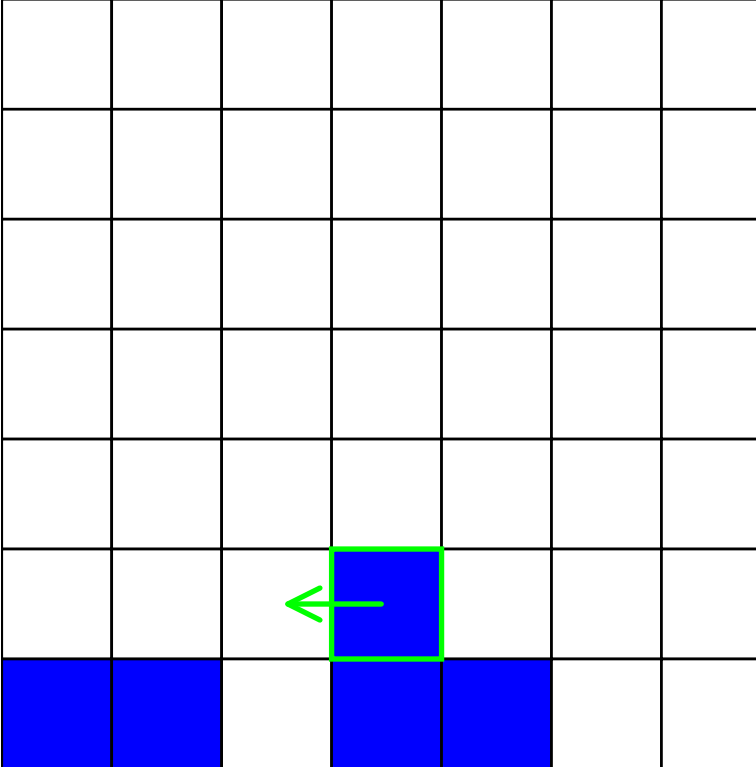
(MOVE 3)

Perform: move_left at position: (6, 5):

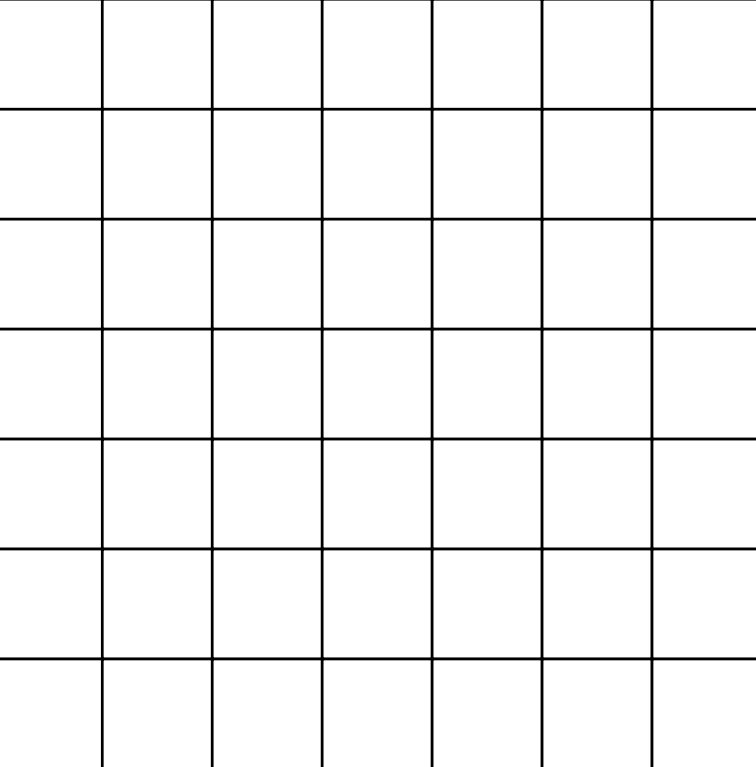


(MOVE 4)

Perform: move_left at position: (5, 3):



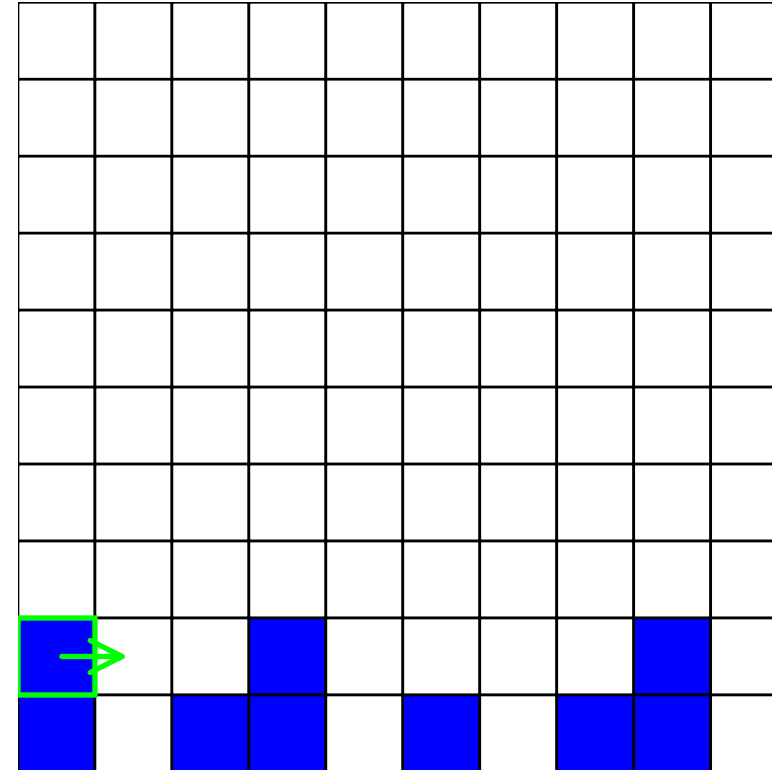
FINAL STATE



...:SOLUTION:...: Solvable in 4 moves (blocks positions: {(8, 0): <Color: blue>, (8, 3): <Color: blue>, (8, 8): <Color: blue>, (9, 0): <Color: blue>, (9, 2): <Color: blue>, (9, 3): <Color: blue>, (9, 5): <Color: blue>, (9, 7): <Color: blue>, (9, 8): <Color: blue>})

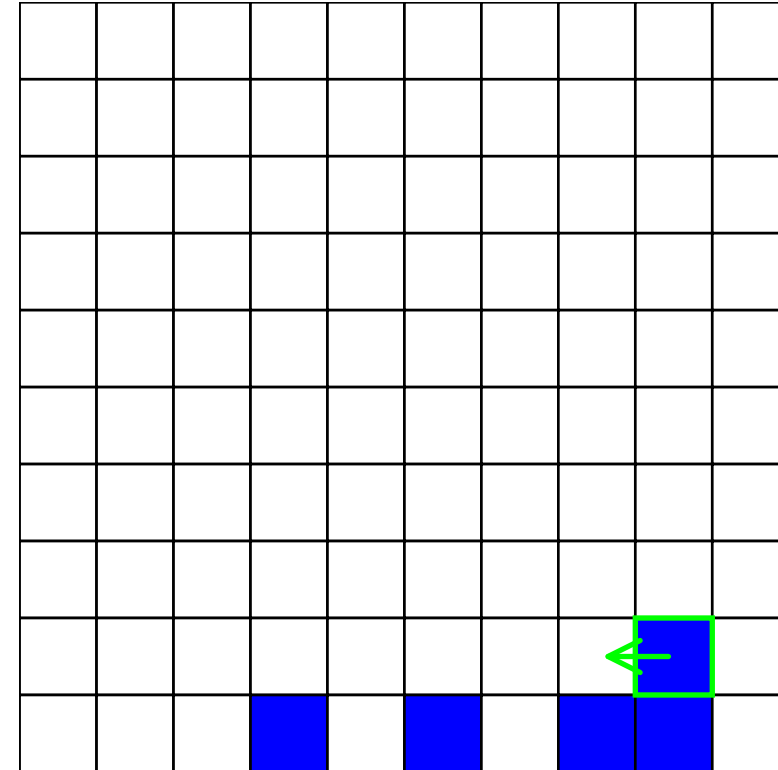
INITIAL STATE: (MOVE 1)

Perform: move_right at position: (8, 0):



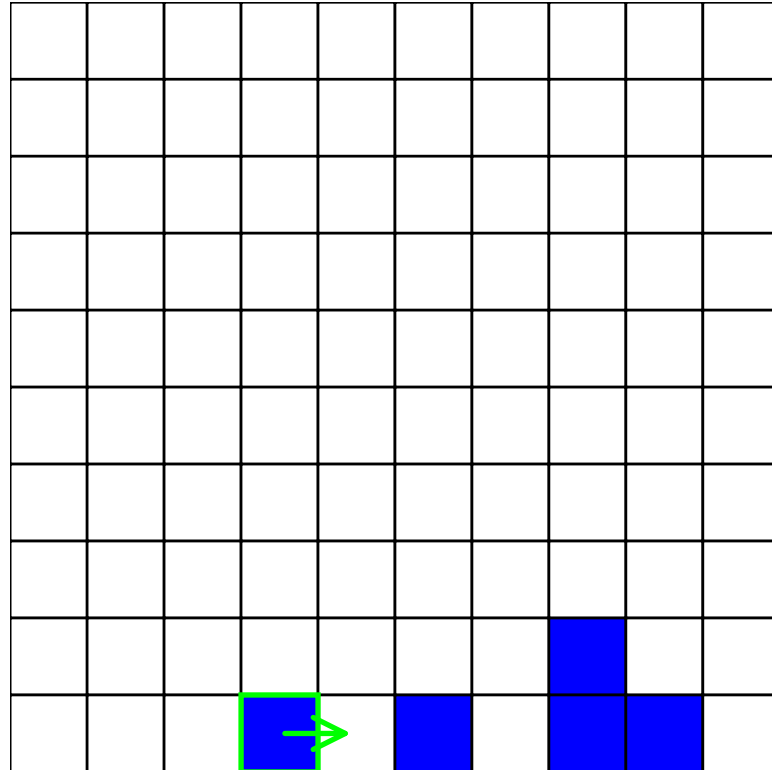
(MOVE 2)

Perform: move_left at position: (8, 8):



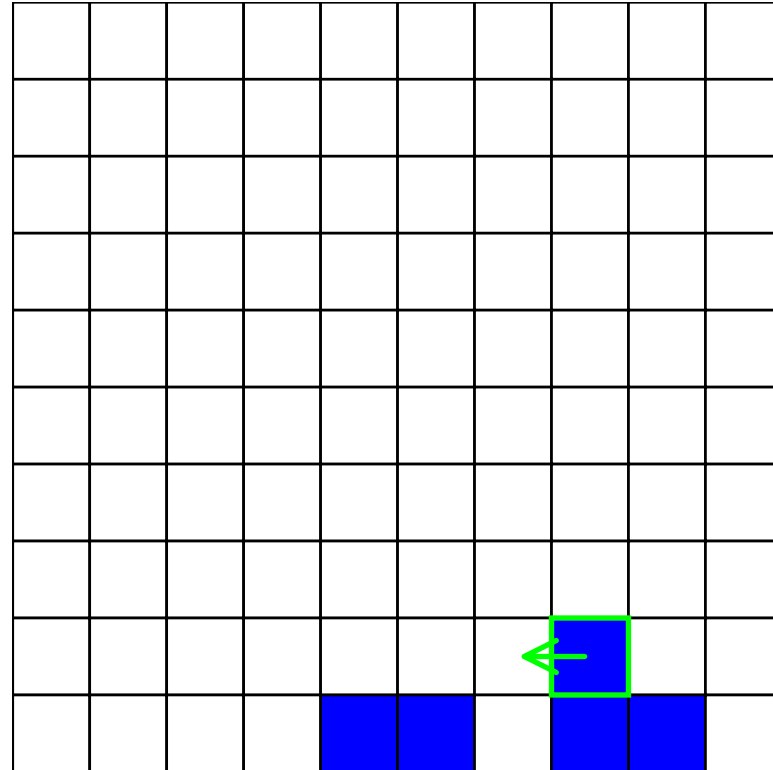
(MOVE 3)

Perform: move_right at position: (9, 3):

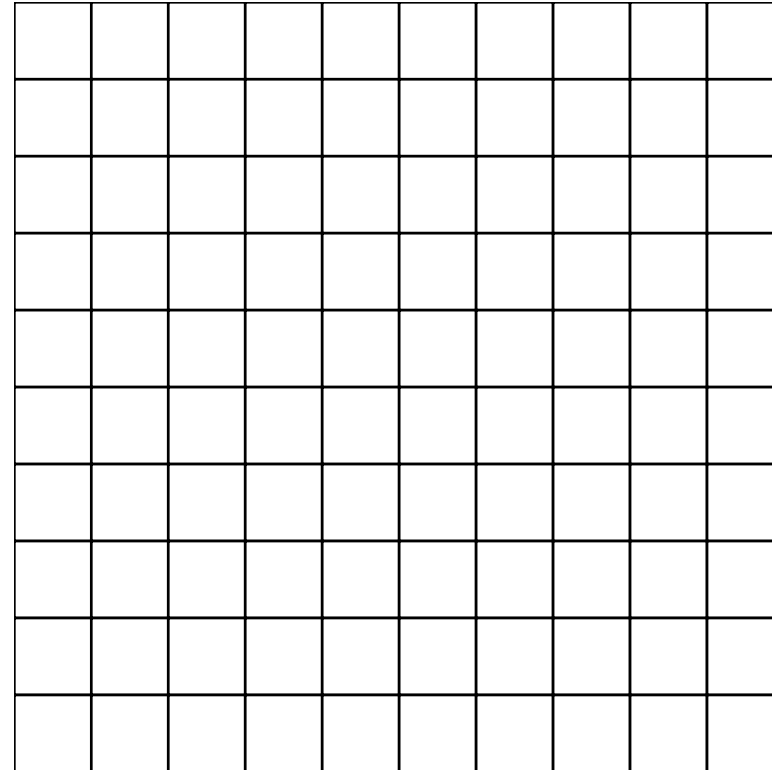


(MOVE 4)

Perform: move_left at position: (8, 7):



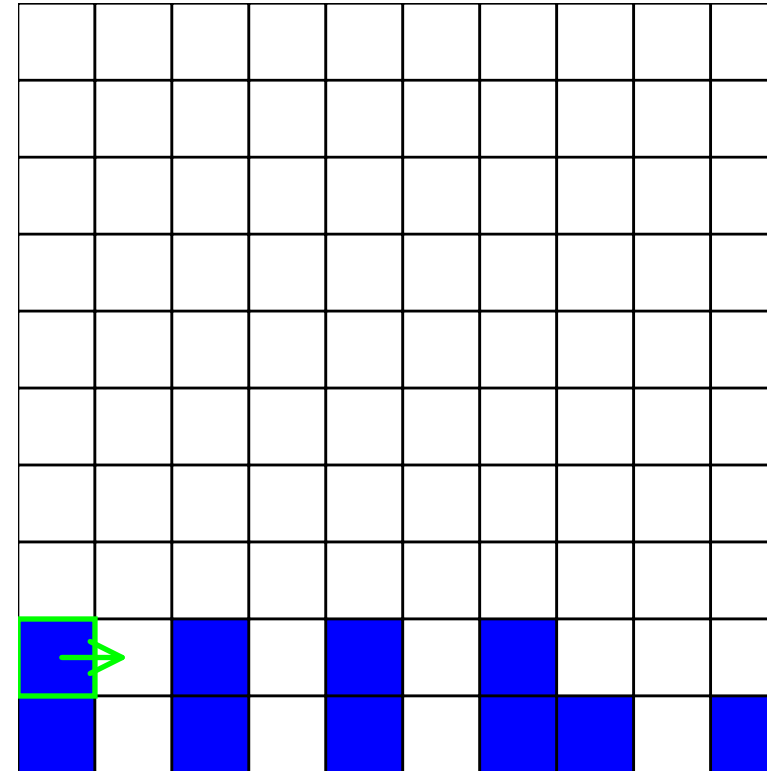
FINAL STATE



...:SOLUTION:...: Solvable in 4 moves (blocks positions: {(8, 0): <Color: blue>, (8, 2): <Color: blue>, (8, 4): <Color: blue>, (8, 6): <Color: blue>, (9, 0): <Color: blue>, (9, 2): <Color: blue>, (9, 4): <Color: blue>, (9, 6): <Color: blue>, (9, 7): <Color: blue>, (9, 9): <Color: blue>})

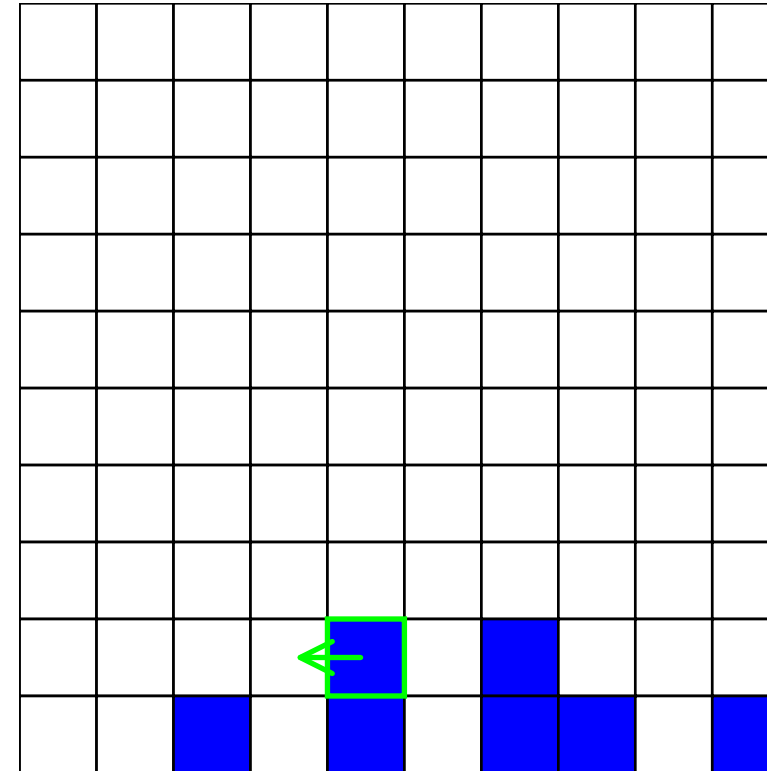
INITIAL STATE: (MOVE 1)

Perform: move_right at position: (8, 0):



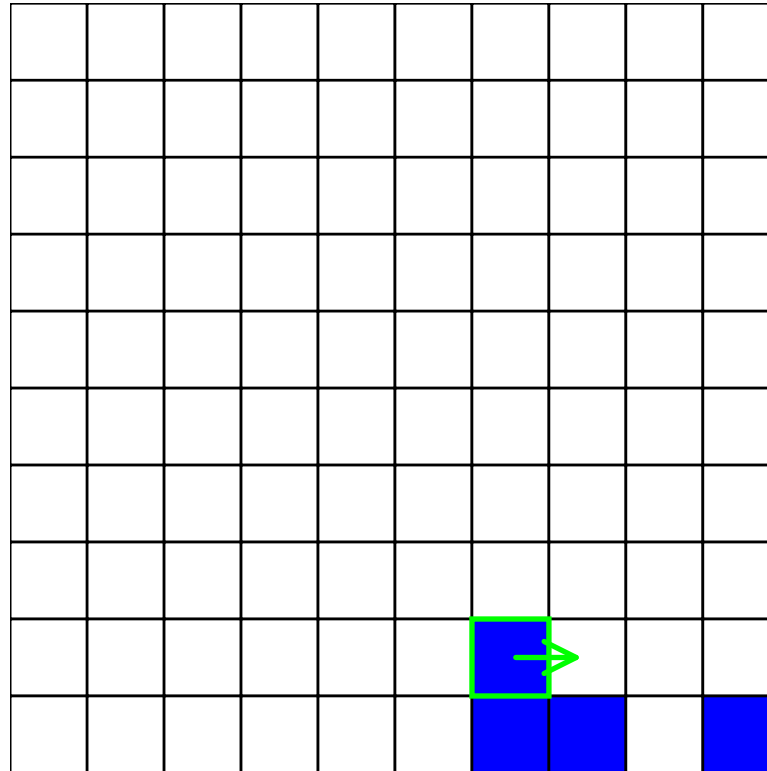
(MOVE 2)

Perform: move_left at position: (8, 4):



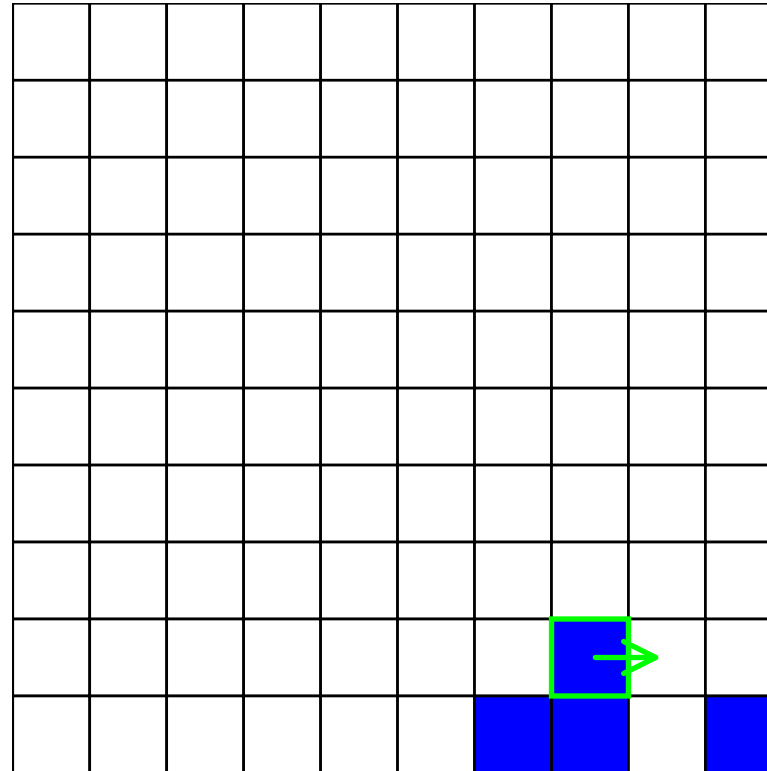
(MOVE 3)

Perform: move_right at position: (8, 6):

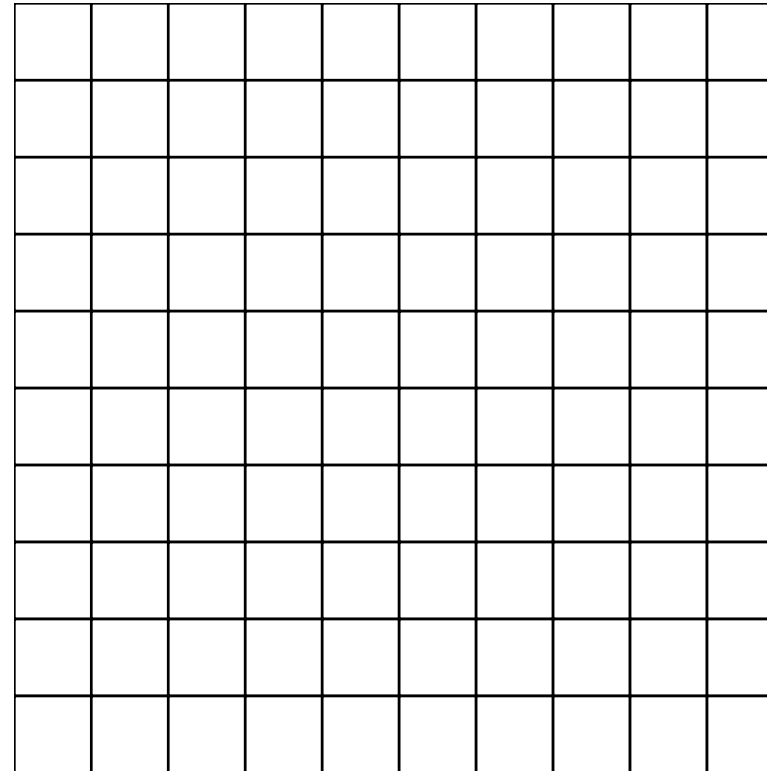


(MOVE 4)

Perform: move_right at position: (8, 7):



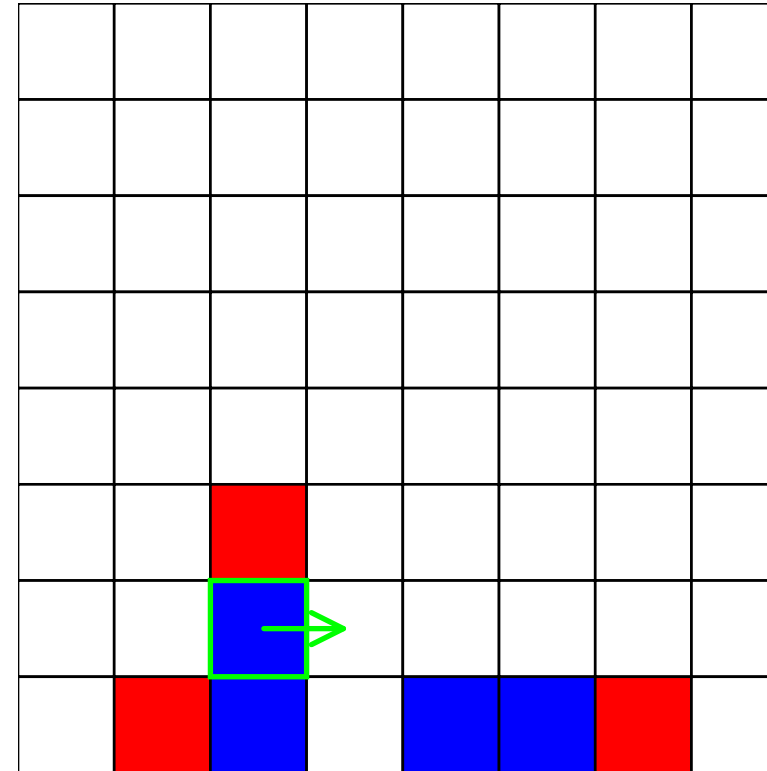
FINAL STATE



...:SOLUTION:...: Solvable in 4 moves (blocks positions: {(5, 2): <Color: red>, (6, 2): <Color: blue>, (7, 1): <Color: red>, (7, 2): <Color: blue>, (7, 4): <Color: blue>, (7, 5): <Color: blue>, (7, 6): <Color: red>})

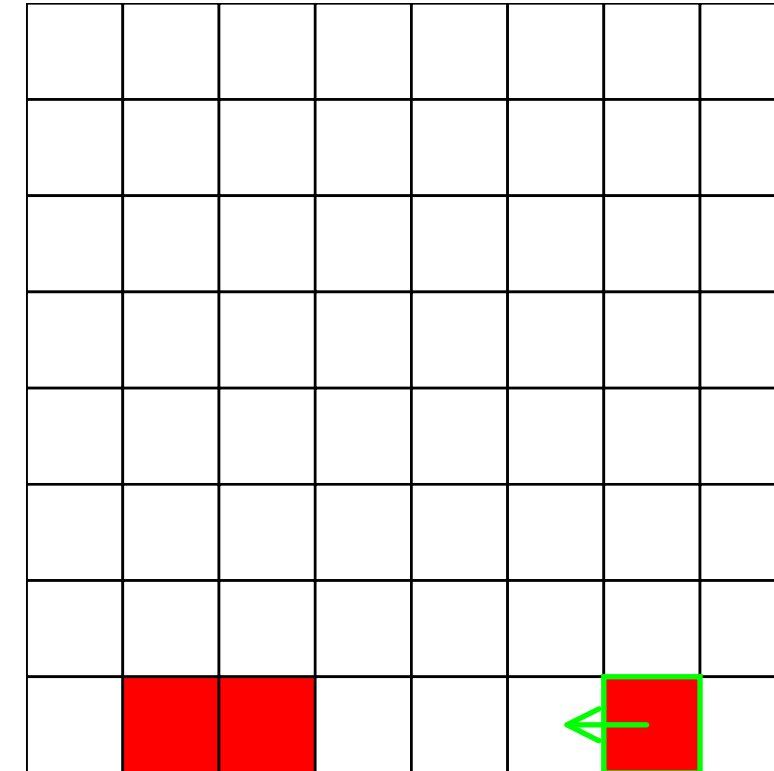
INITIAL STATE: (MOVE 1)

Perform: move_right at position: (6, 2):



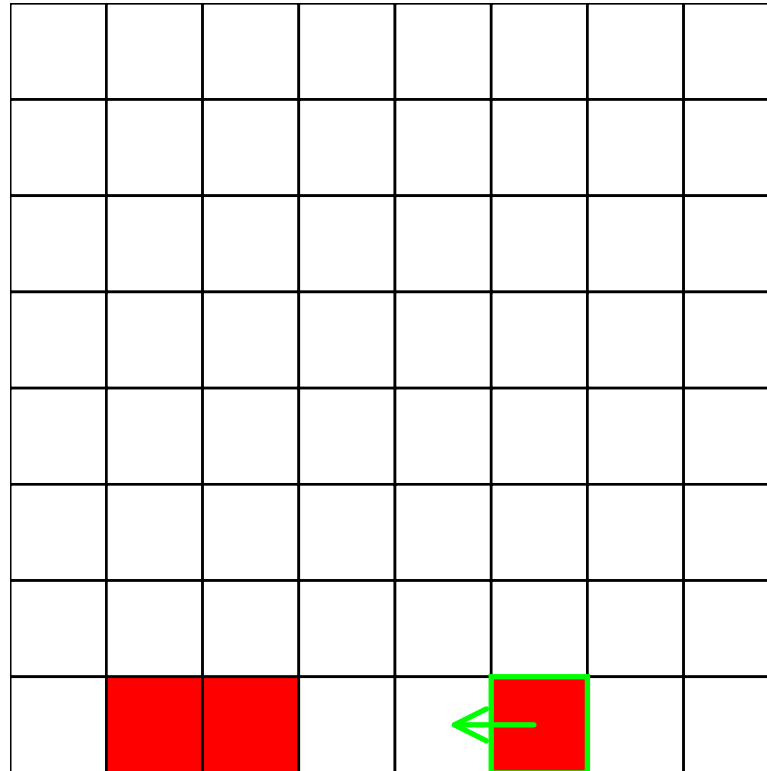
(MOVE 2)

Perform: move_left at position: (7, 6):



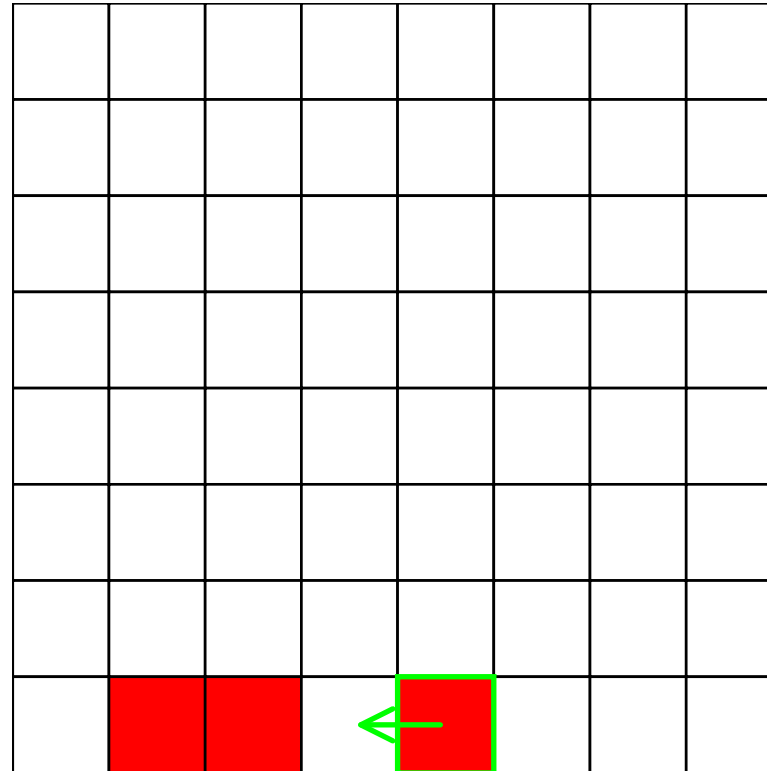
(MOVE 3)

Perform: move_left at position: (7, 5):

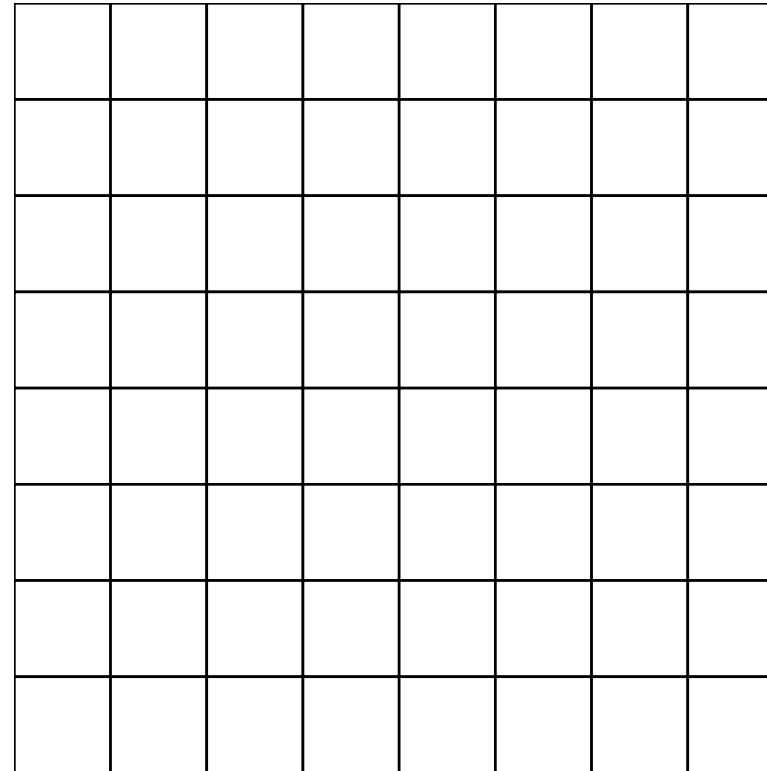


(MOVE 4)

Perform: move_left at position: (7, 4):



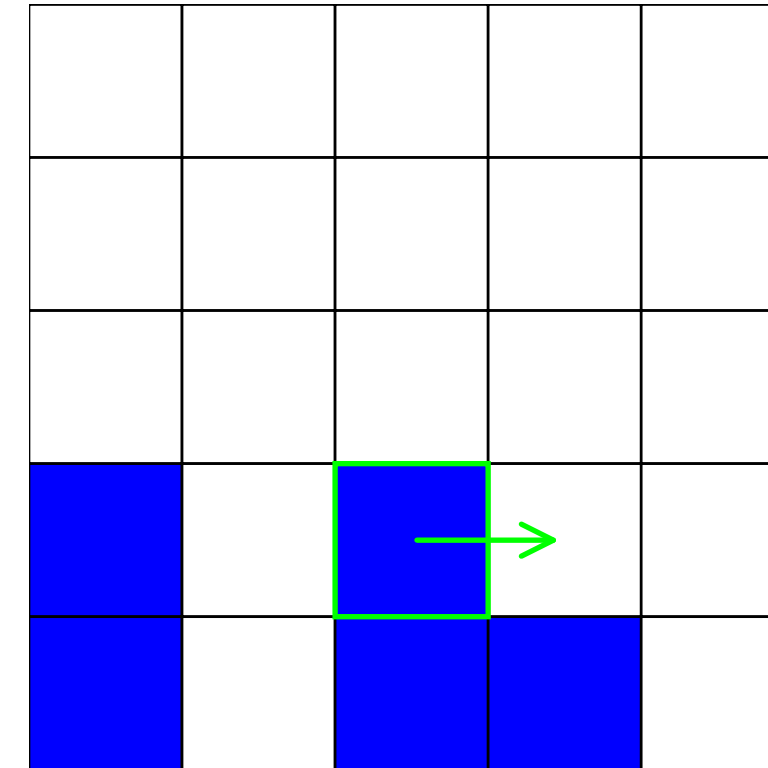
FINAL STATE



...:SOLUTION::...: Solvable in 5 moves (blocks positions: {(3, 0): <Color: blue>, (3, 2): <Color: blue>, (4, 0): <Color: blue>, (4, 2): <Color: blue>, (4, 3): <Color: blue>})

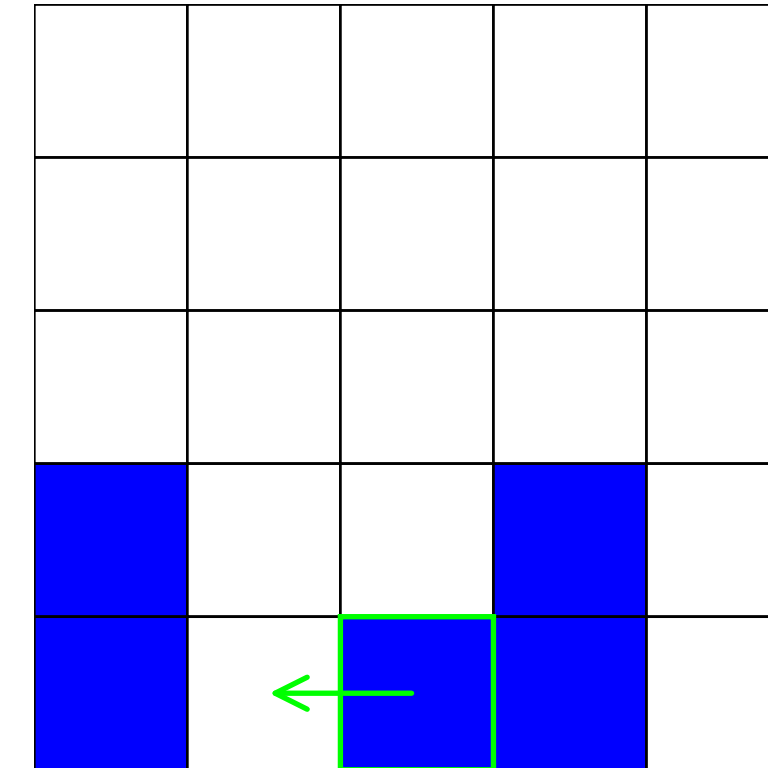
INITIAL STATE: (MOVE 1)

Perform: move_right at position: (3, 2):



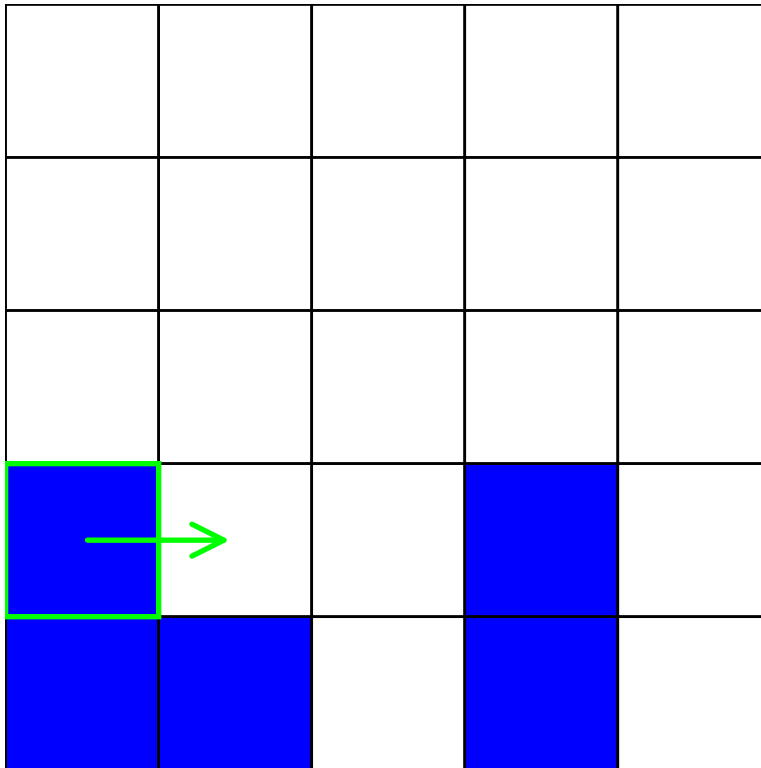
(MOVE 2)

Perform: move_left at position: (4, 2):



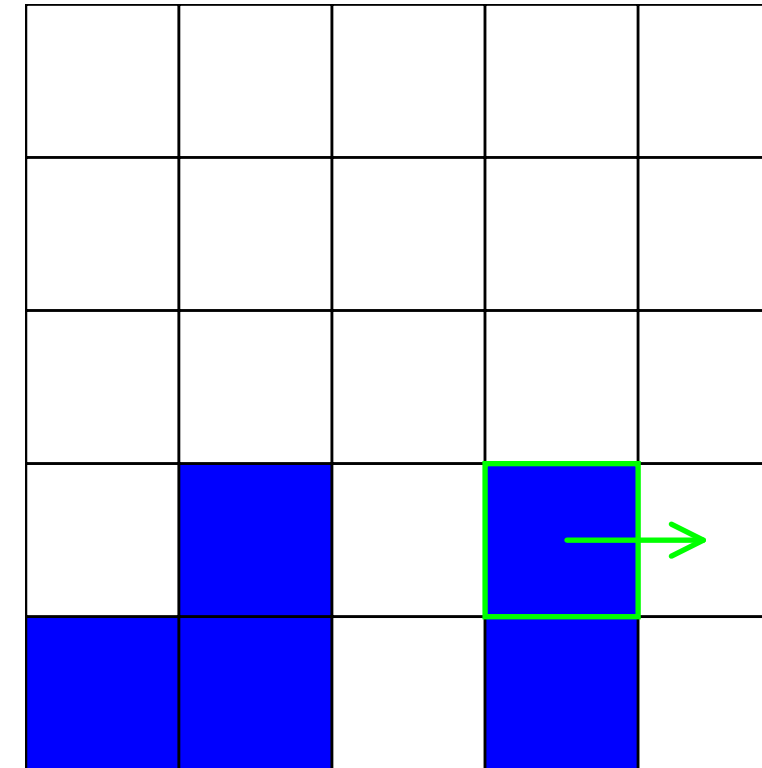
(MOVE 3)

Perform: move_right at position: (3, 0):



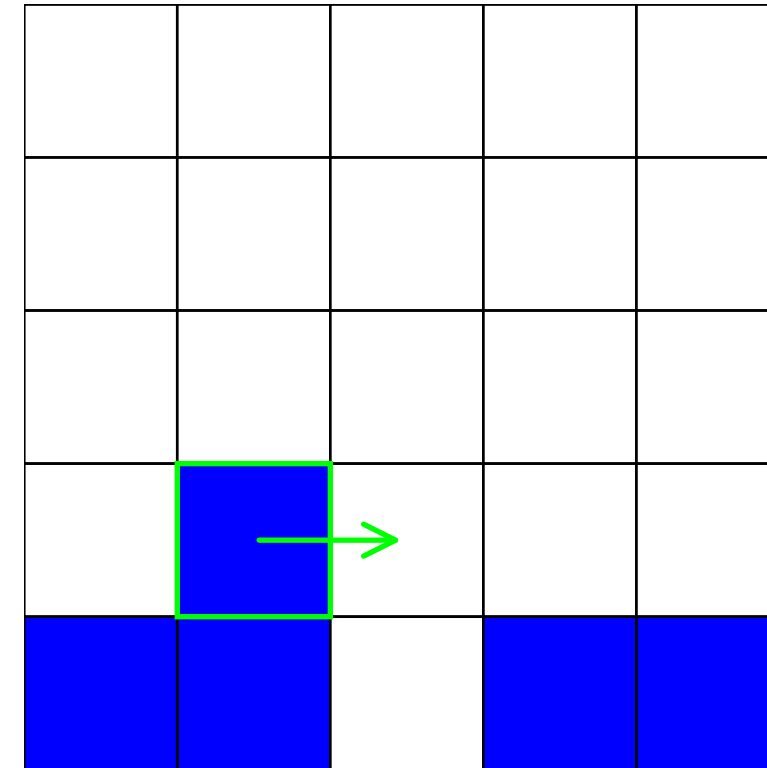
(MOVE 4)

Perform: move_right at position: (3, 3):

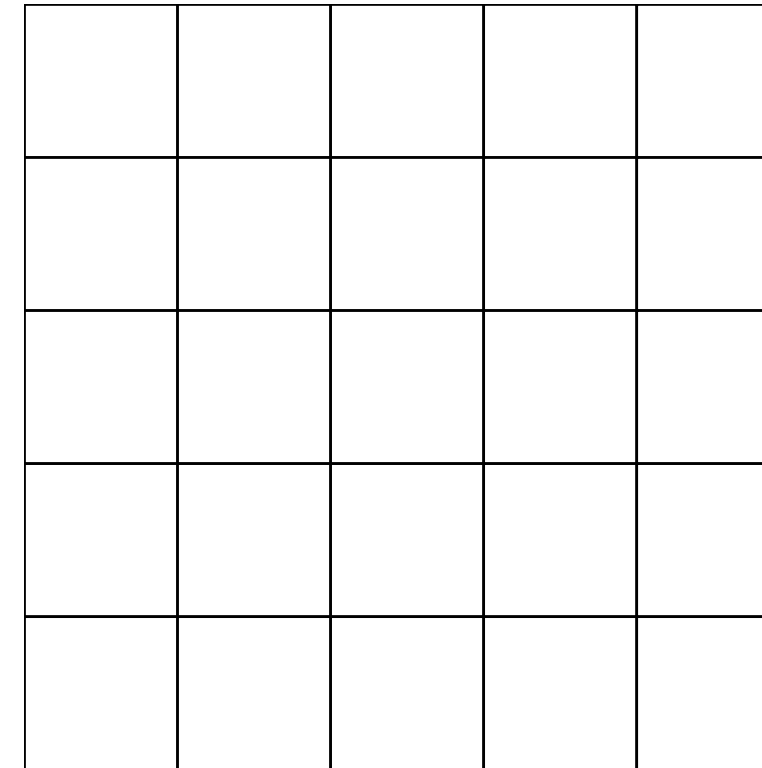


(MOVE 5)

Perform: move_right at position: (3, 1):



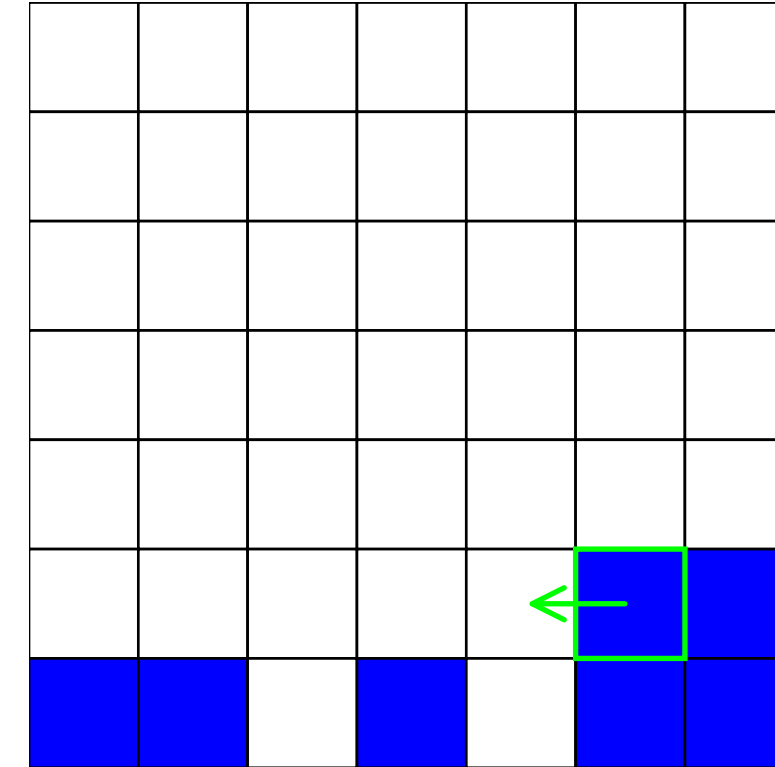
FINAL STATE



...::SOLUTION:...: Solvable in 5 moves (blocks positions: {(5, 5): <Color: blue>, (5, 6): <Color: blue>, (6, 0): <Color: blue>, (6, 1): <Color: blue>, (6, 3): <Color: blue>, (6, 5): <Color: blue>, (6, 6): <Color: blue>})

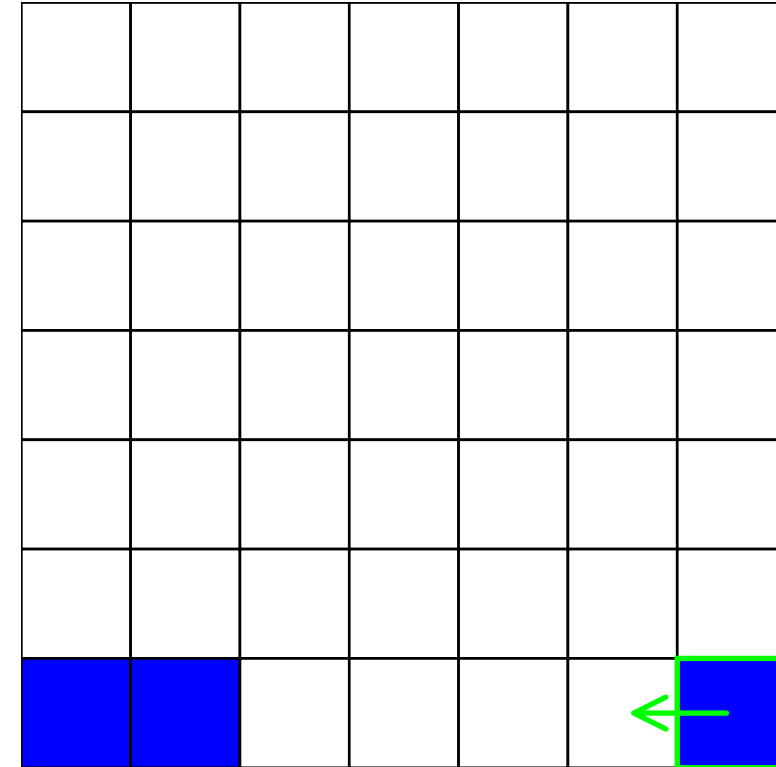
INITIAL STATE: (MOVE 1)

Perform: move_left at position: (5, 5):



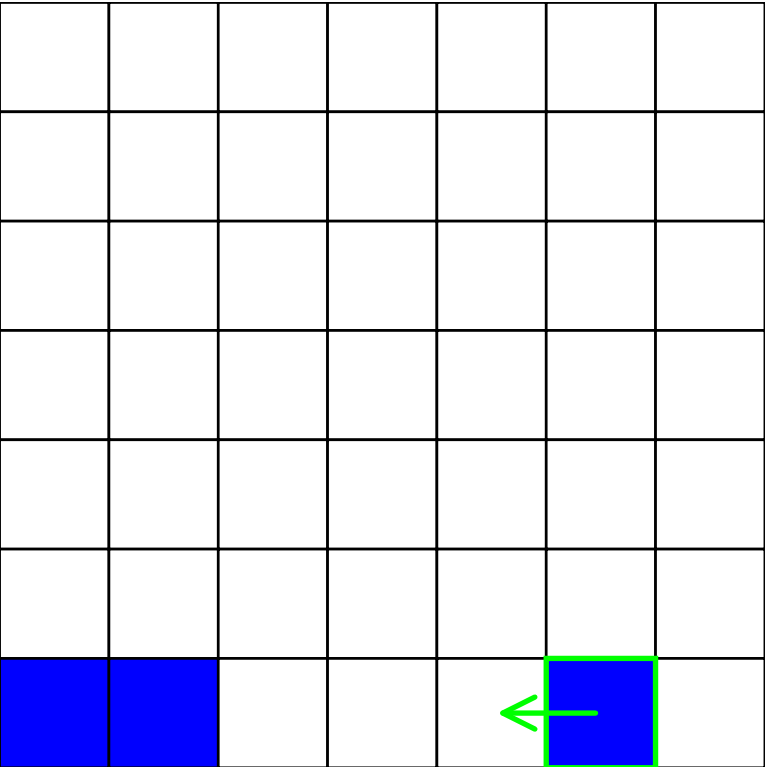
(MOVE 2)

Perform: move_left at position: (6, 6):



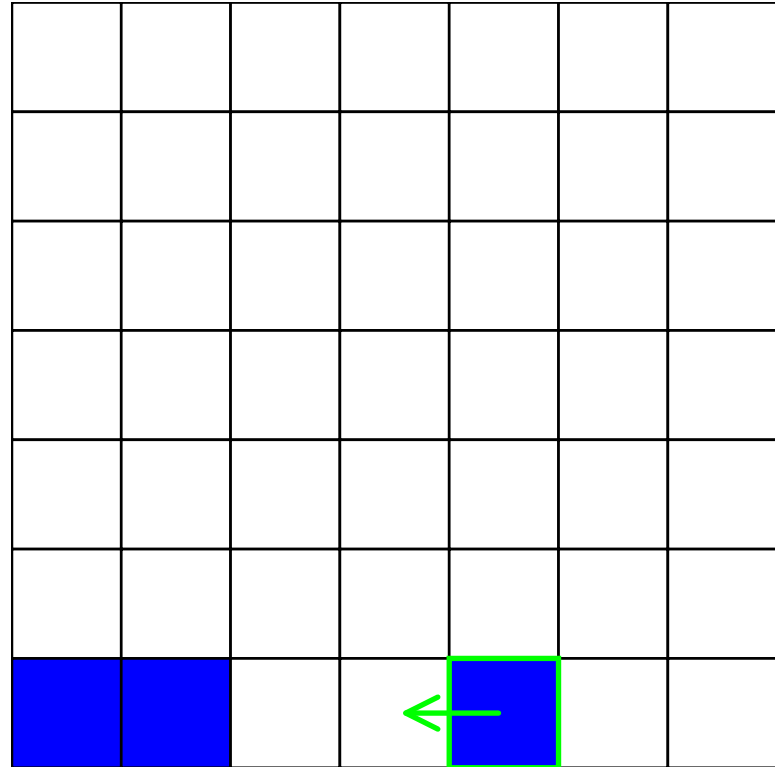
(MOVE 3)

Perform: move_left at position: (6, 5):



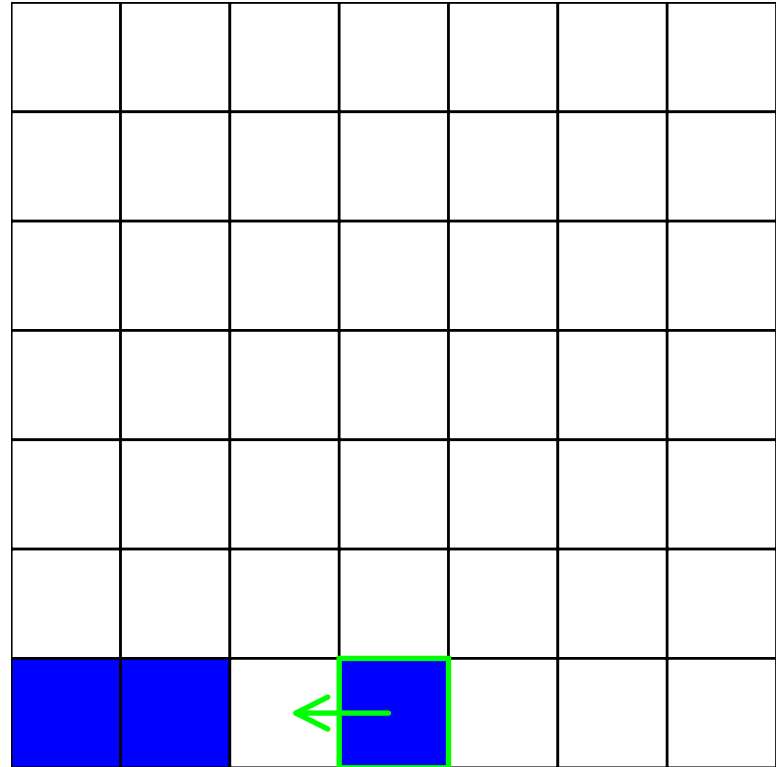
(MOVE 4)

Perform: move_left at position: (6, 4):

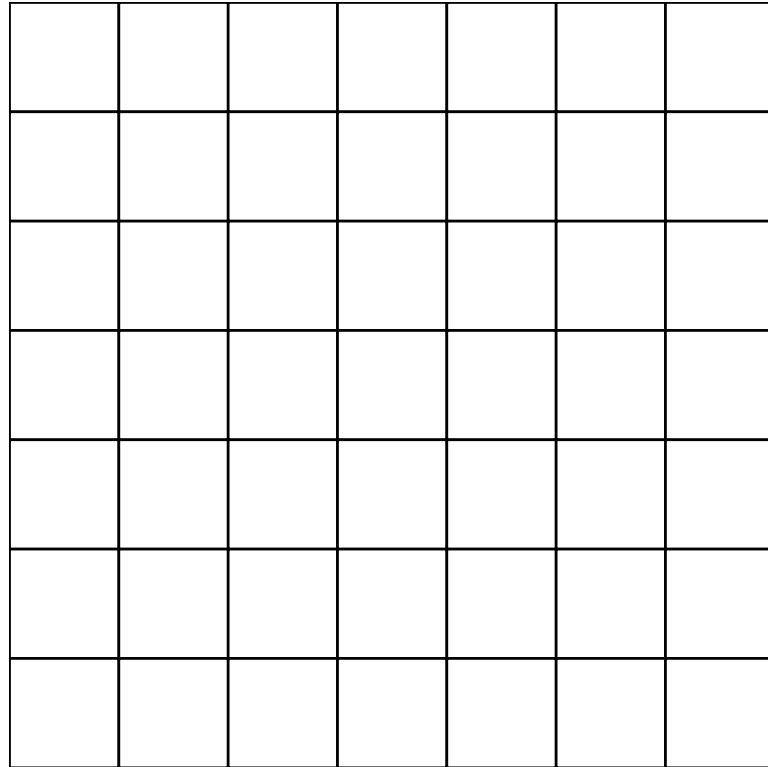


(MOVE 5)

Perform: move_left at position: (6, 3):



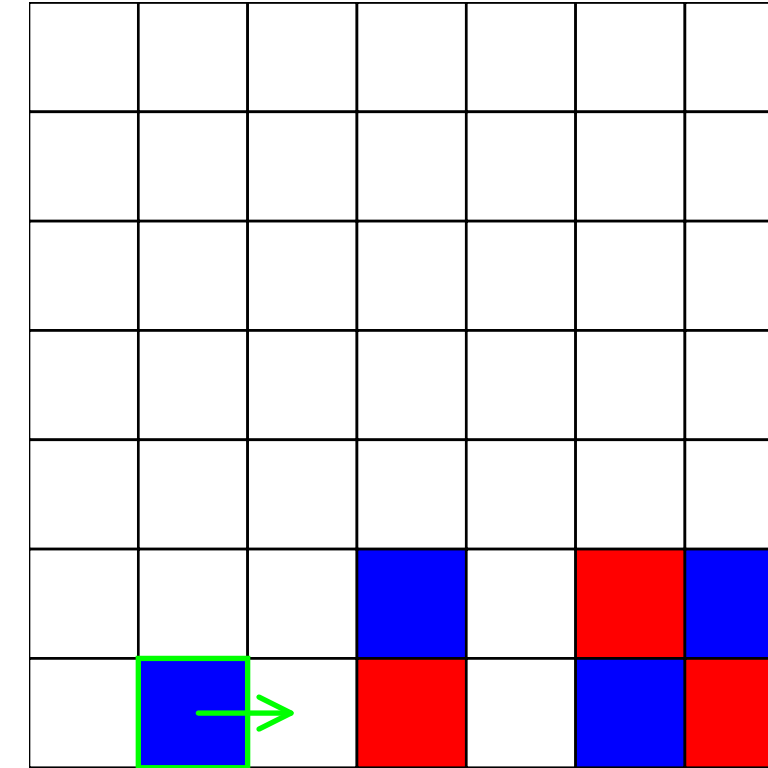
FINAL STATE



...:SOLUTION:...: Solvable in 5 moves (blocks positions: {(5, 3): <Color: blue>, (5, 5): <Color: red>, (5, 6): <Color: blue>, (6, 1): <Color: blue>, (6, 3): <Color: red>, (6, 5): <Color: blue>, (6, 6): <Color: red>})

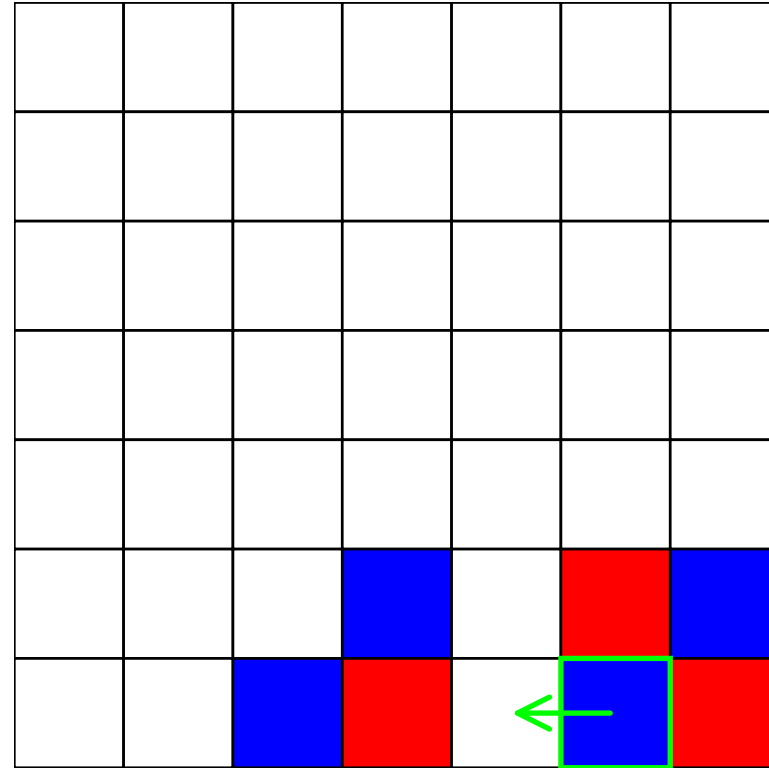
INITIAL STATE: (MOVE 1)

Perform: move_right at position: (6, 1):



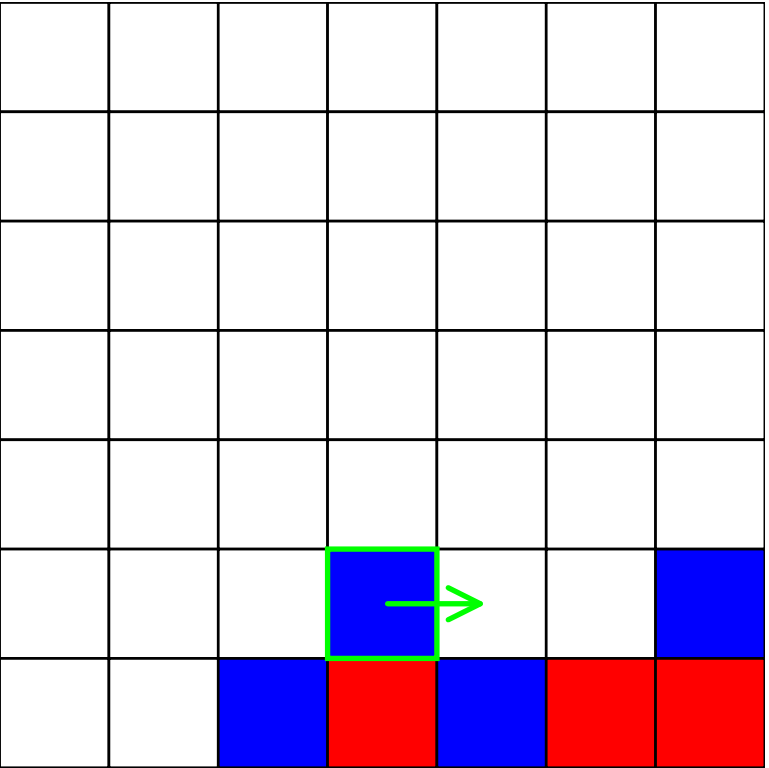
(MOVE 2)

Perform: move_left at position: (6, 5):



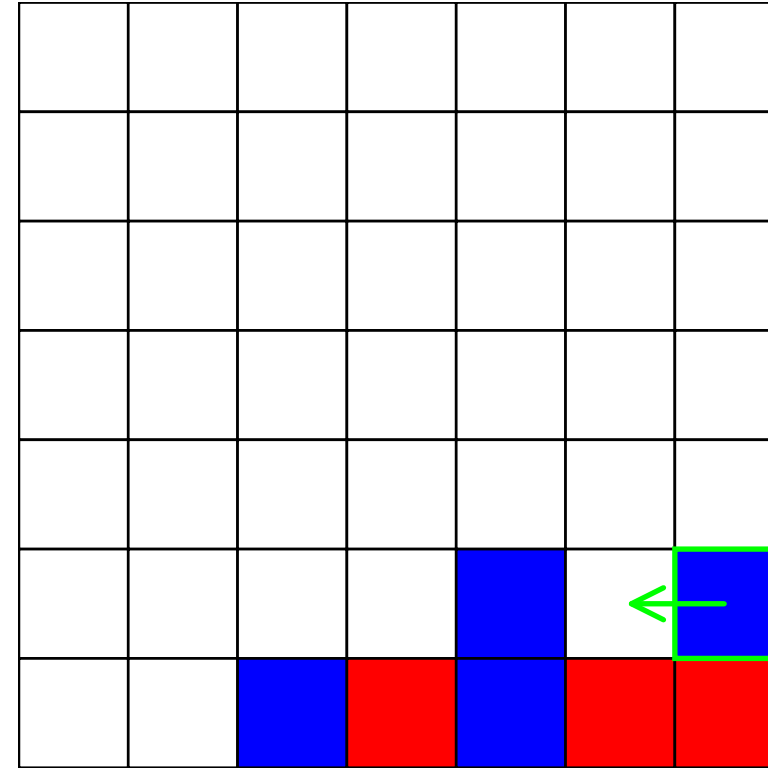
(MOVE 3)

Perform: move_right at position: (5, 3):



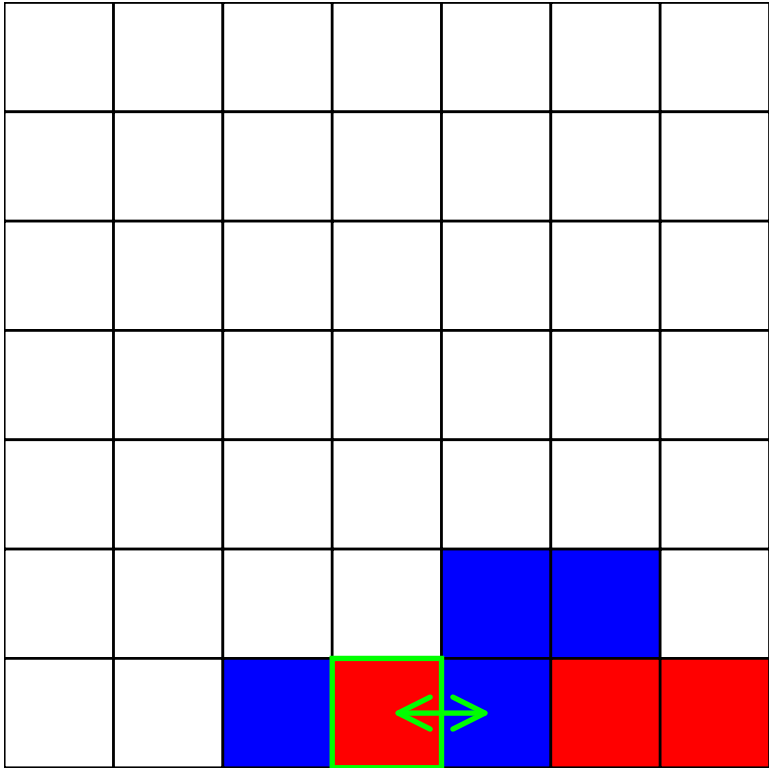
(MOVE 4)

Perform: move_left at position: (5, 6):

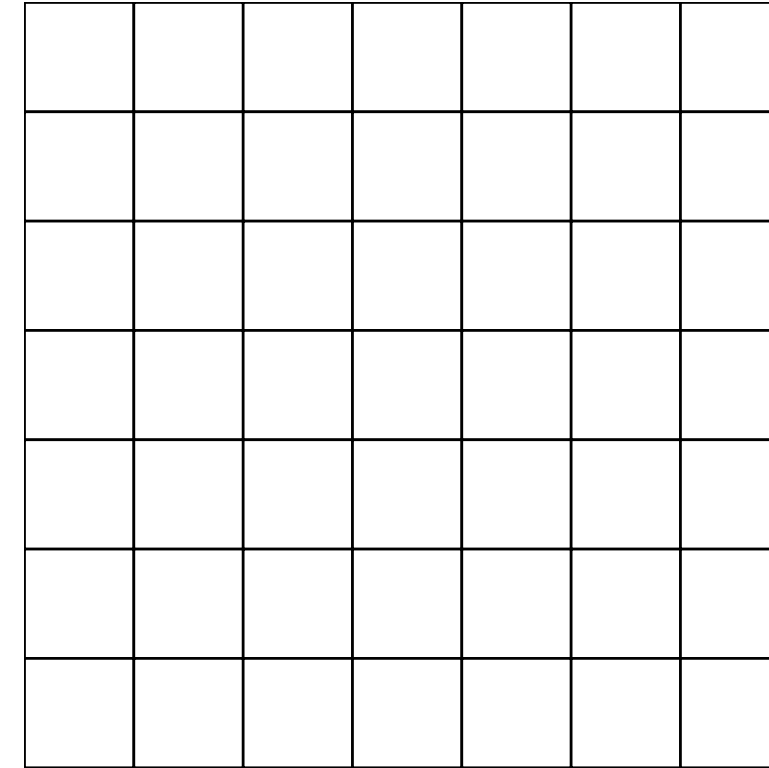


(MOVE 5)

Perform: exchange_right at position: (6, 3):



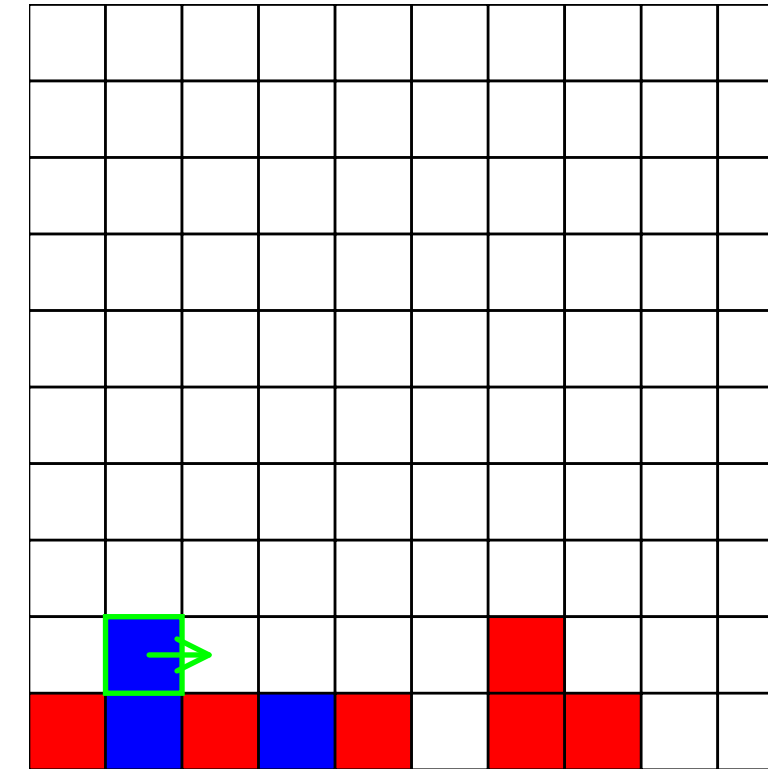
FINAL STATE



...:SOLUTION:...: Solvable in 5 moves (blocks positions: {(8, 1): <Color: blue>, (8, 6): <Color: red>, (9, 0): <Color: red>, (9, 1): <Color: blue>, (9, 2): <Color: red>, (9, 3): <Color: blue>, (9, 4): <Color: red>, (9, 6): <Color: red>, (9, 7): <Color: red>})

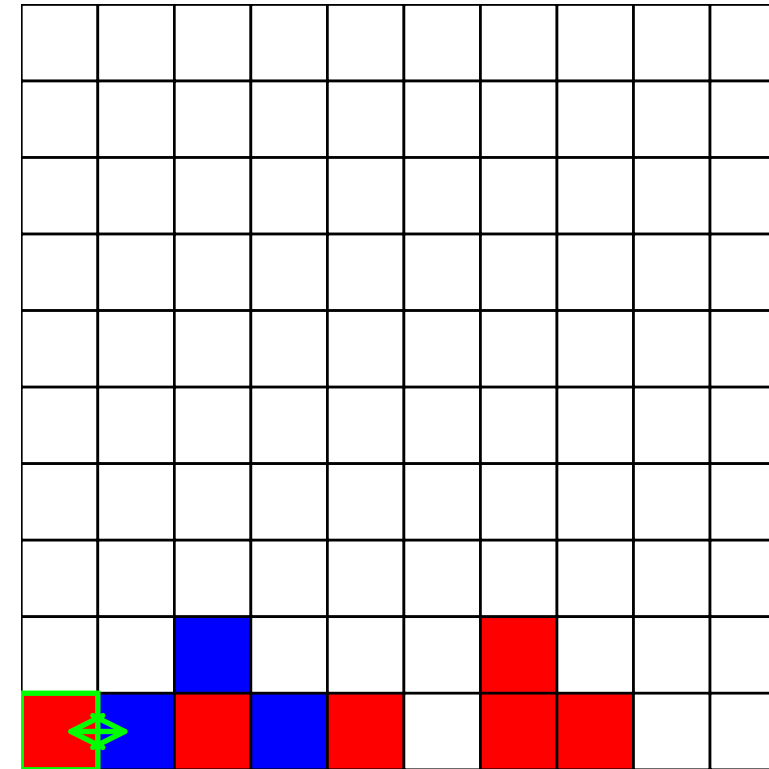
INITIAL STATE: (MOVE 1)

Perform: move_right at position: (8, 1):



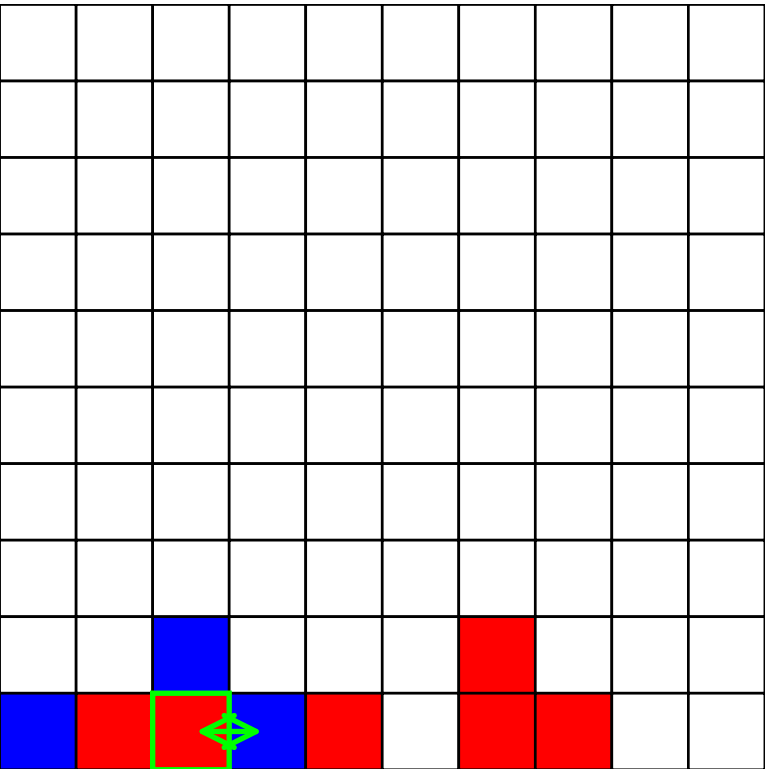
(MOVE 2)

Perform: exchange_right at position: (9, 0):



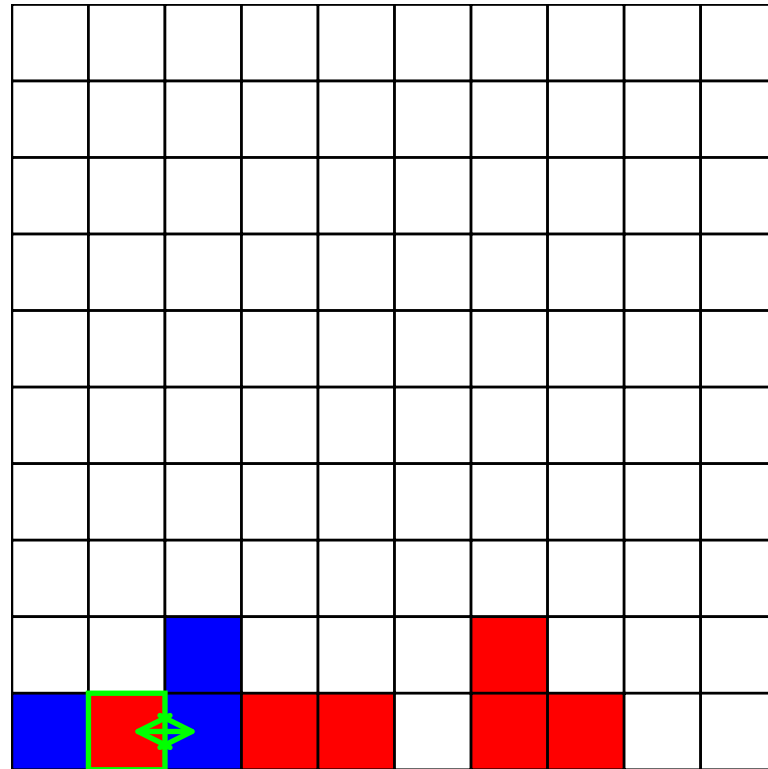
(MOVE 3)

Perform: exchange_right at position: (9, 2):



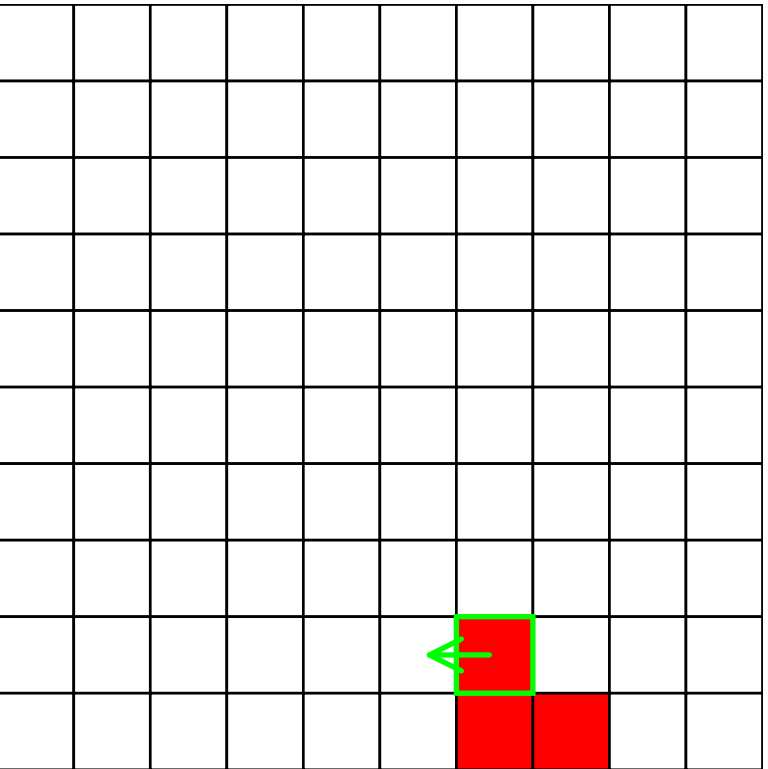
(MOVE 4)

Perform: exchange_right at position: (9, 1):

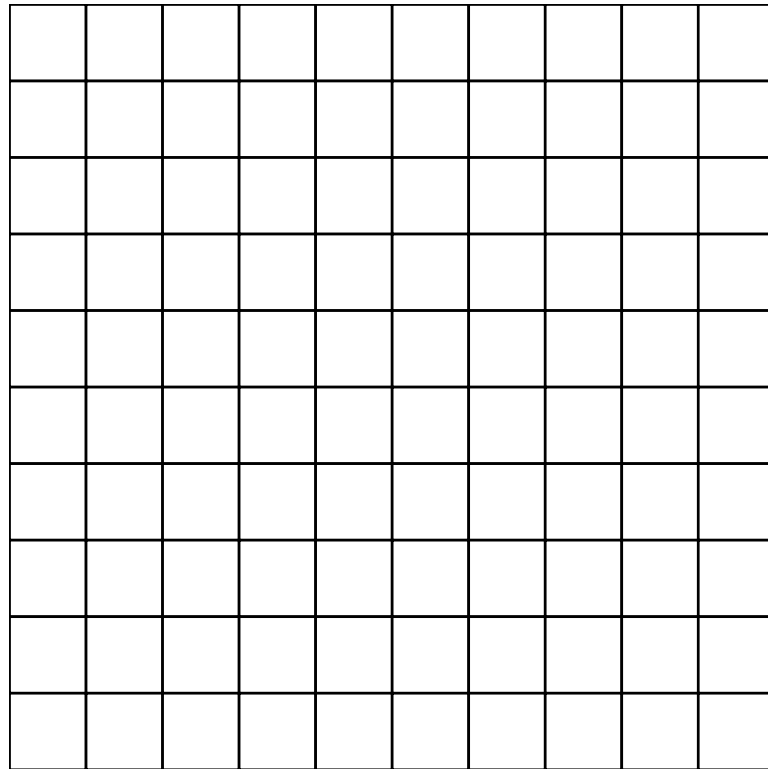


(MOVE 5)

Perform: move_left at position: (8, 6):



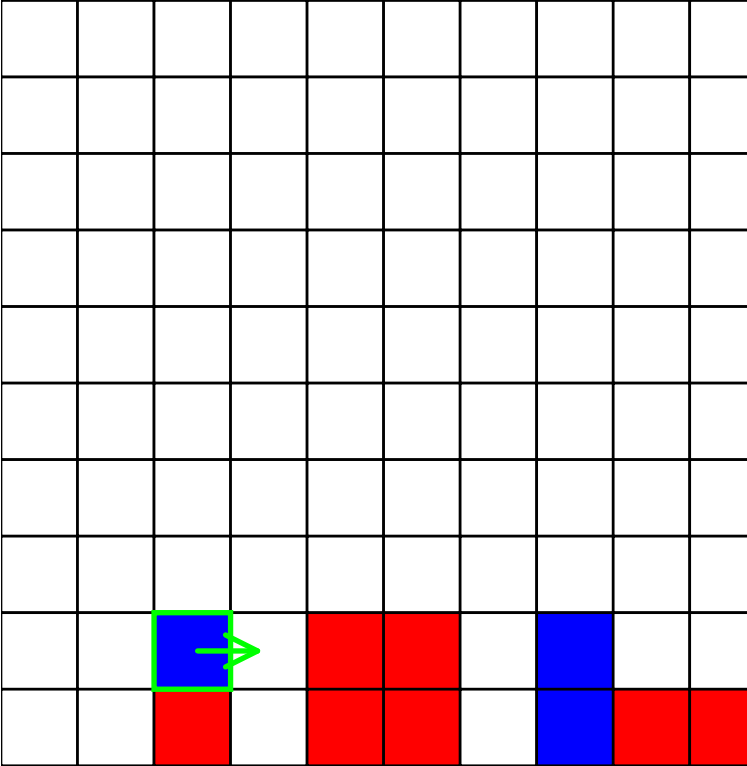
FINAL STATE



...:SOLUTION:...: Solvable in 5 moves (blocks positions: {(8, 2): <Color: blue>, (8, 4): <Color: red>, (8, 5): <Color: red>, (8, 7): <Color: blue>, (9, 2): <Color: red>, (9, 4): <Color: red>, (9, 5): <Color: red>, (9, 7): <Color: blue>, (9, 8): <Color: red>, (9, 9): <Color: red>})

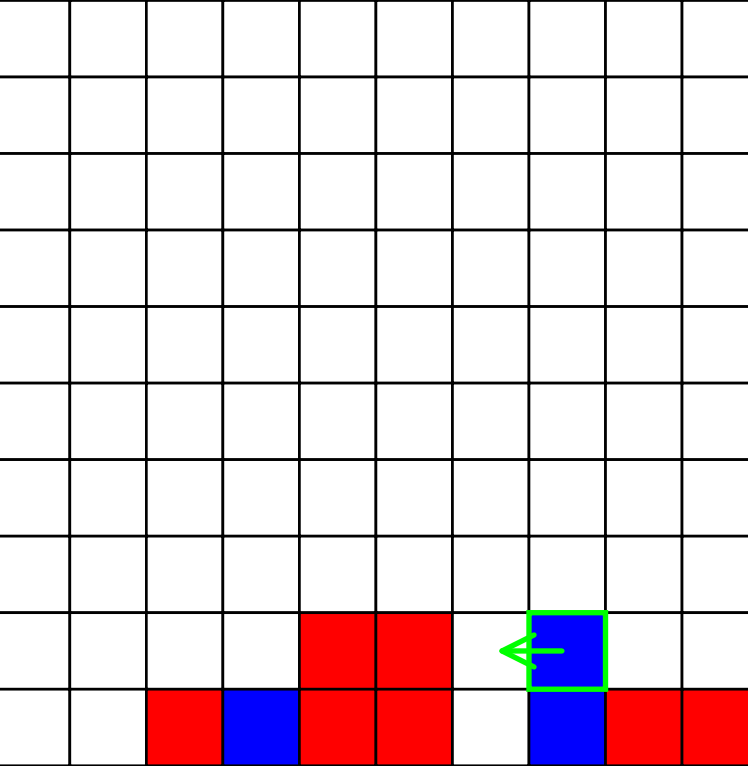
INITIAL STATE: (MOVE

Perform: move_right at position: (8, 2)



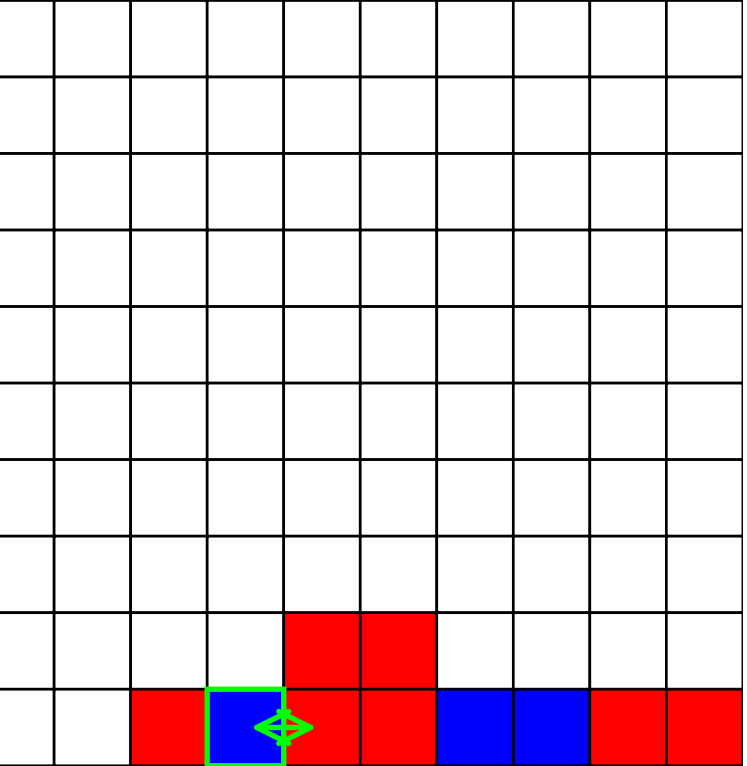
MOVE 2

```
perform: move_left at position: (8, 1):
```



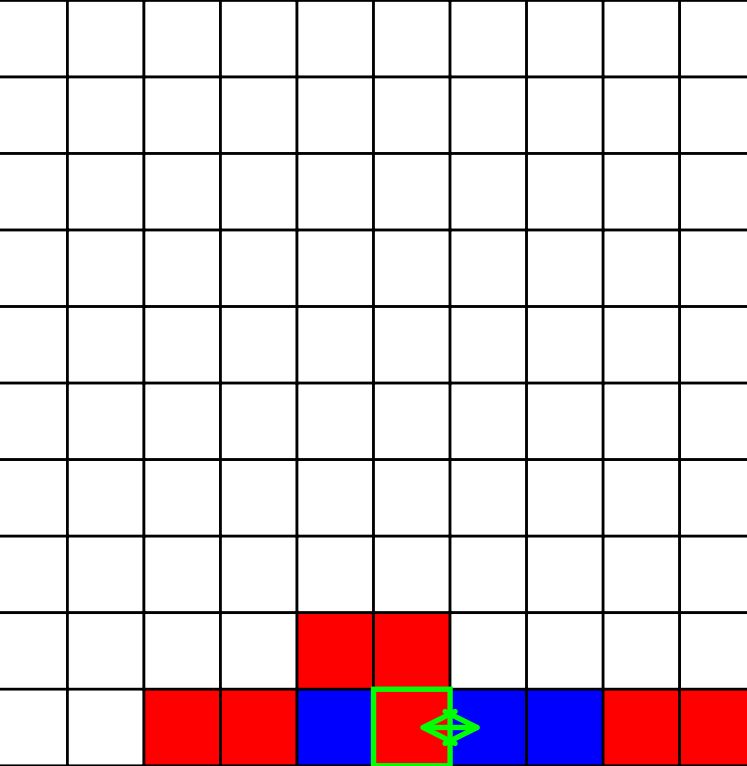
MOVE 3)

```
perform: exchange_right at position: (9, 3):
```



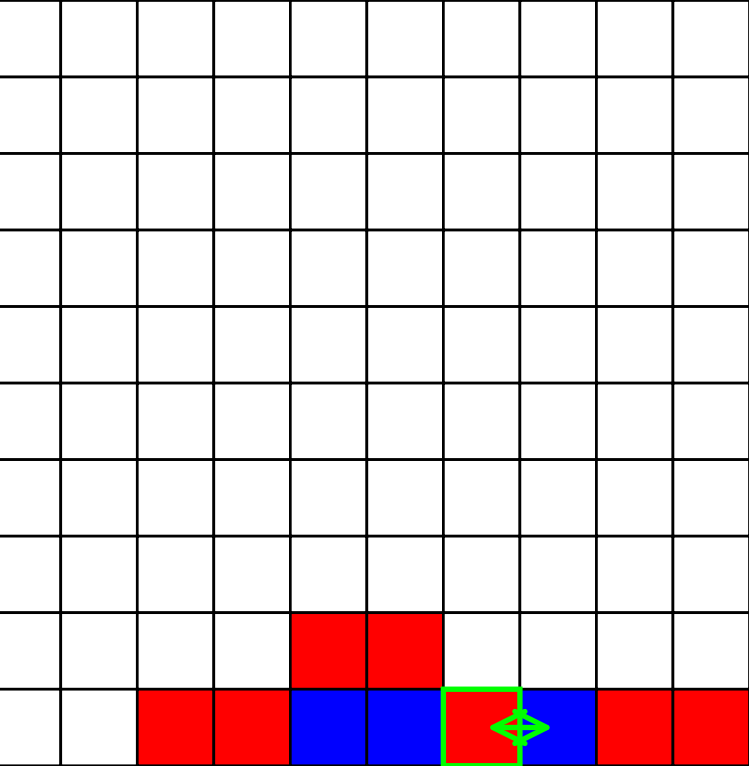
MOVE 4

perform: exchange_right at position: (9, 5)

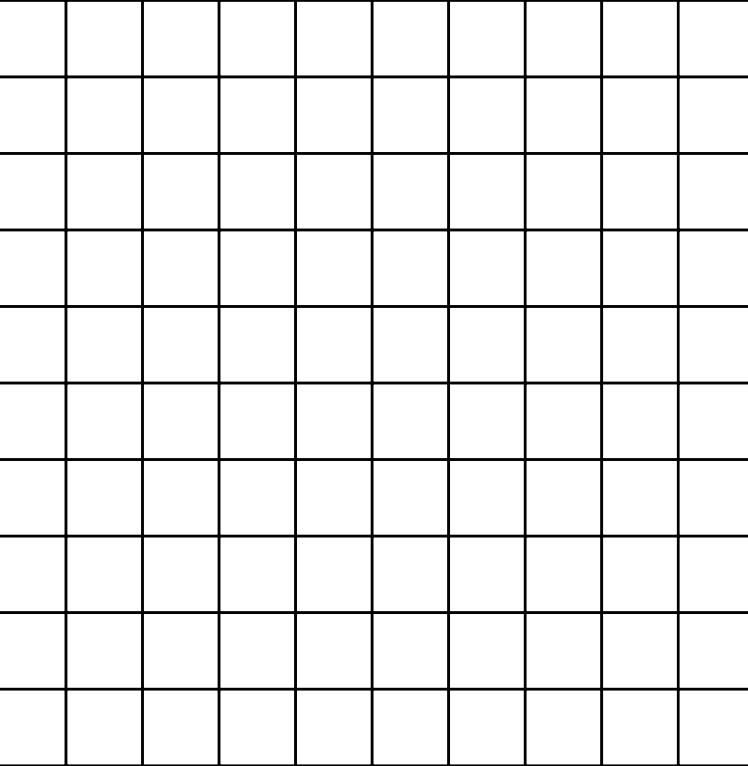


MOVE 5.

```
perform: exchange_right at position: (9, 6):
```



FINAL STATE



INITIAL STATE: (MOVE 1

(MOVE 2)

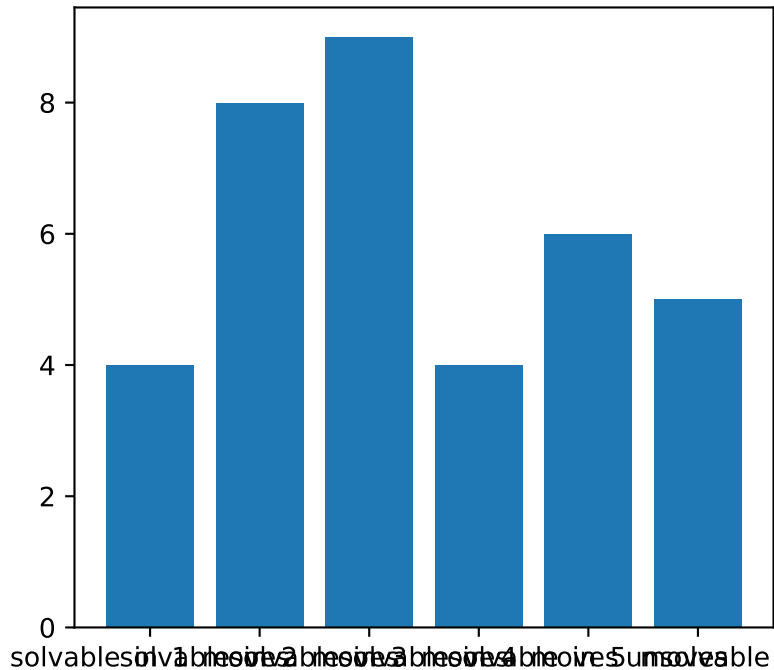
(MOVE 3)

(MOVE 4)

(MOVE 5)

FINAL STATE

Number of Puzzles Generated (Bar Chart)



Number of Puzzles Generated (Pie Chart)

