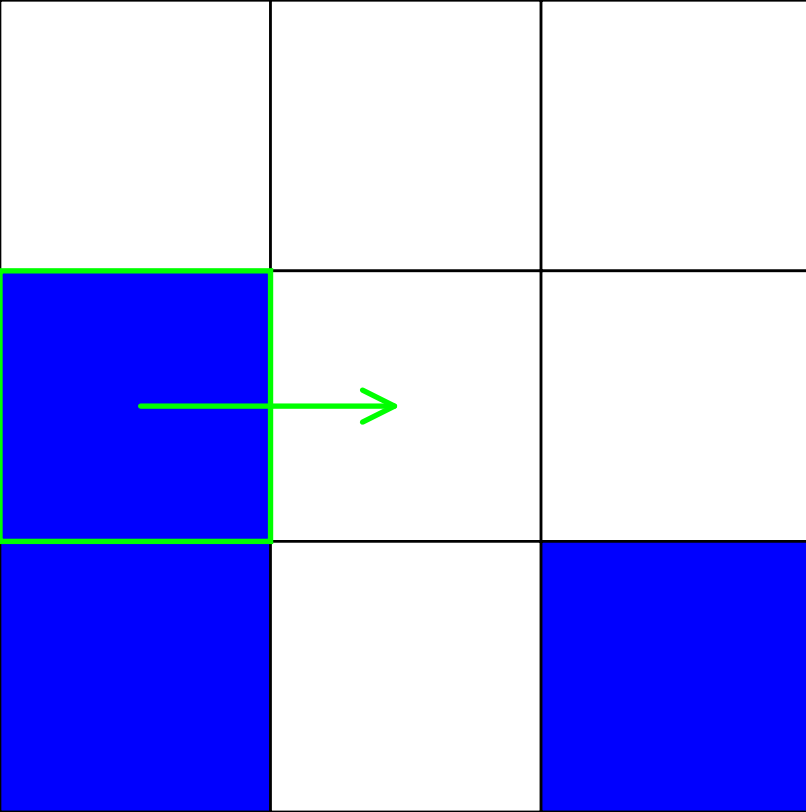


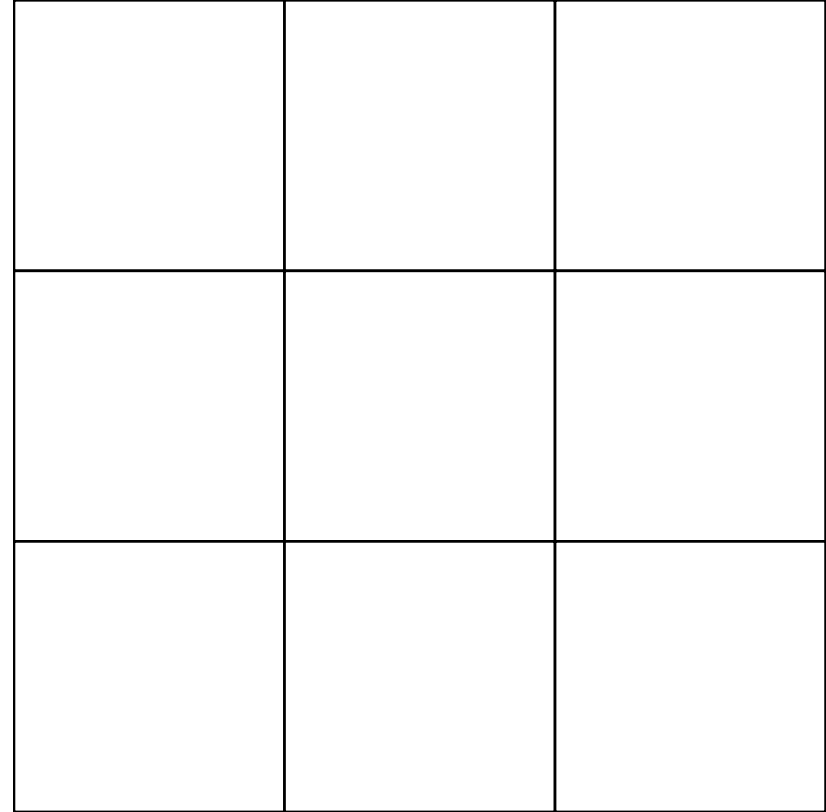
...:SOLUTION:...: Solvable in 1 moves (blocks positions: {(1, 0): <Color: blue>, (2, 0): <Color: blue>, (2, 2): <Color: blue>})

INITIAL STATE: (MOVE 1)

Perform: move_right at position: (1, 0):



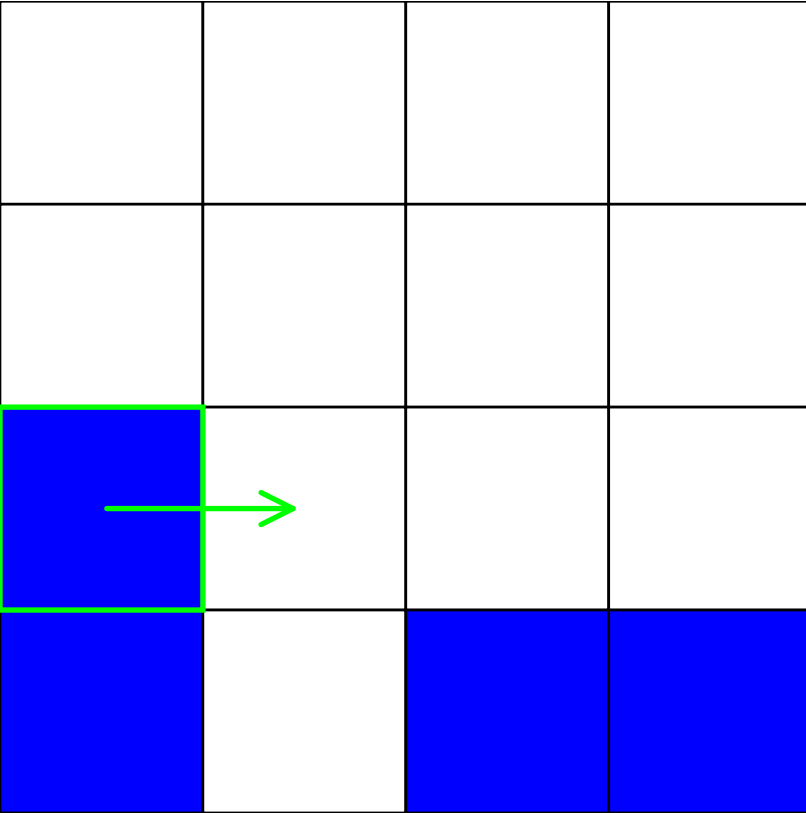
FINAL STATE



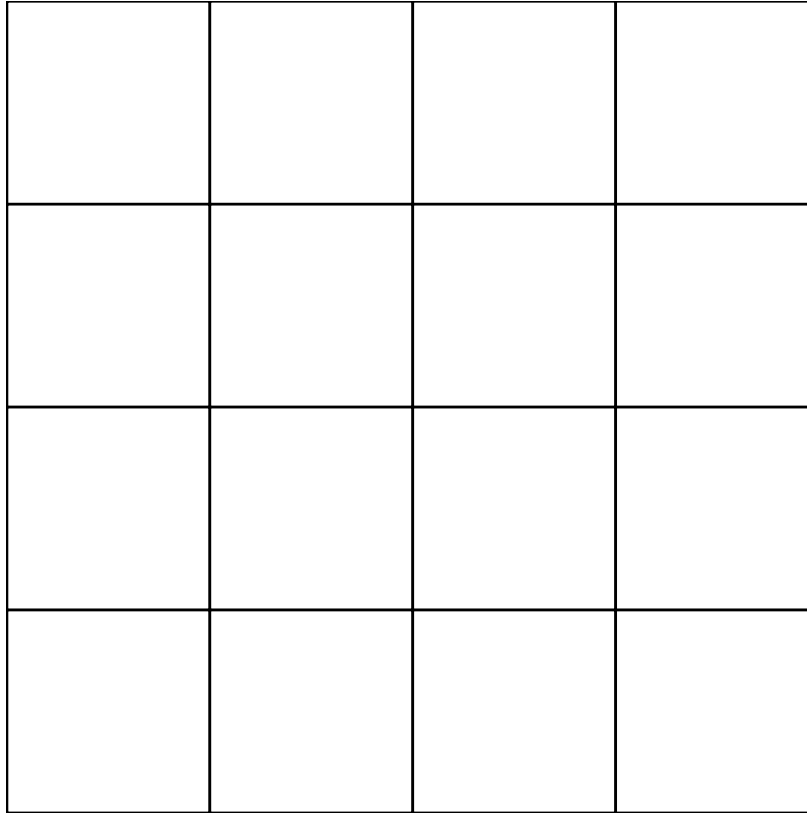
...:SOLUTION::...: Solvable in 1 moves (blocks positions: {(2, 0): <Color: blue>, (3, 0): <Color: blue>, (3, 2): <Color: blue>, (3,

INITIAL STATE: (MOVE 1)

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



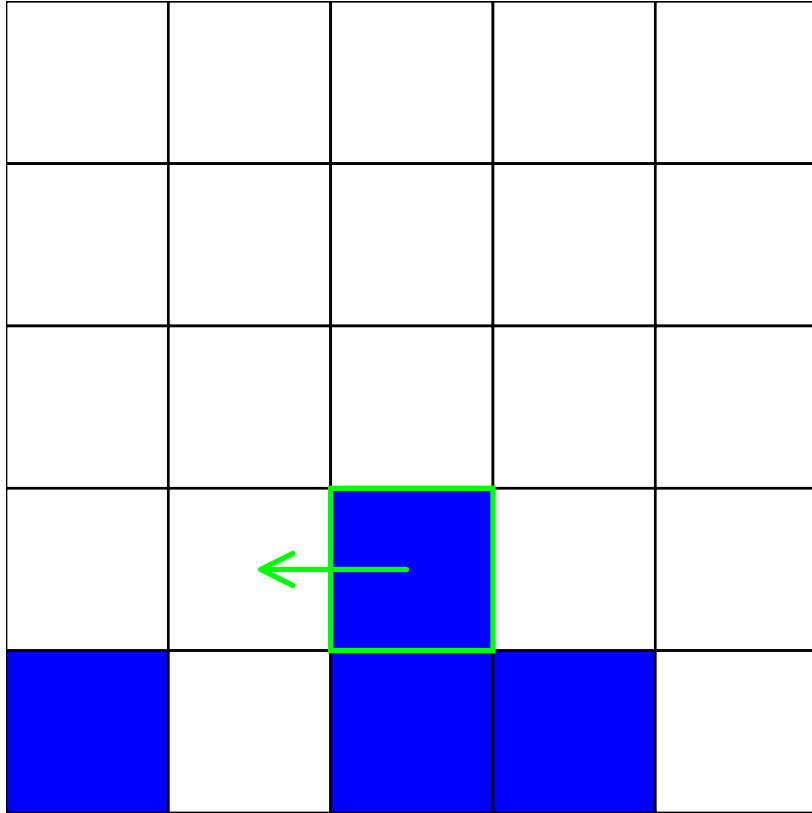
FINAL STATE



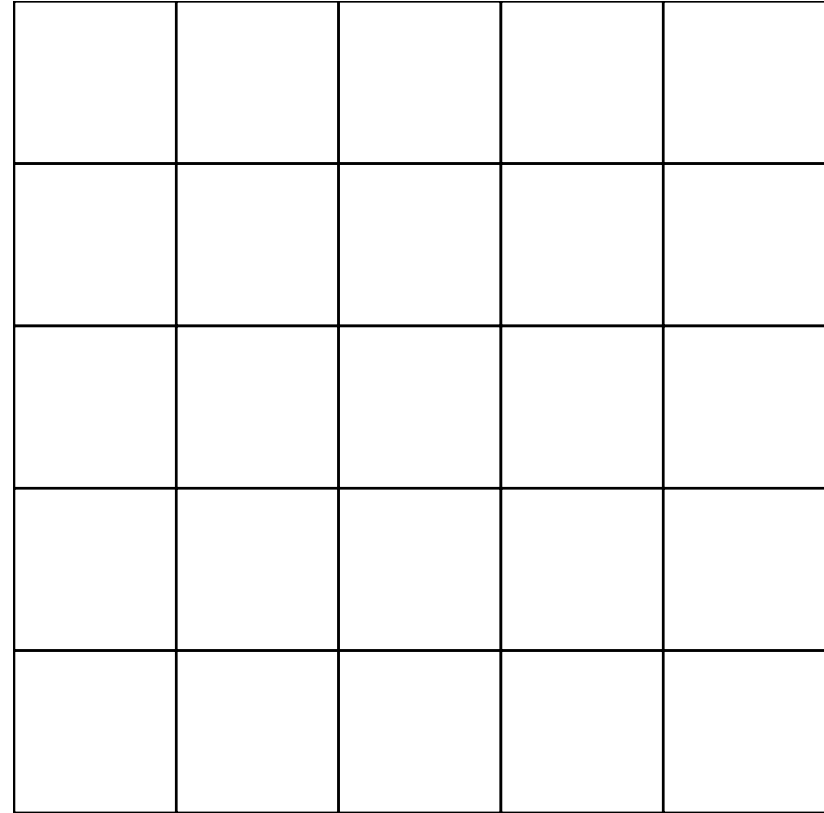
...:SOLUTION:...: Solvable in 1 moves (blocks positions: {(3, 2): <Color: blue>, (4, 0): <Color: blue>, (4, 2): <Color: blue>, (4,

INITIAL STATE: (MOVE 1)

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



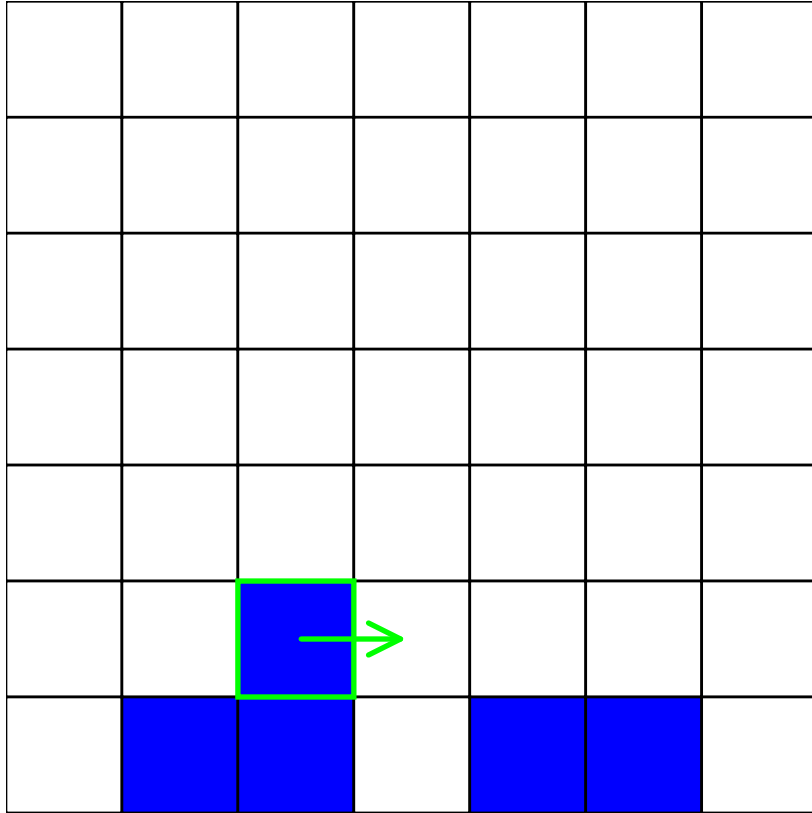
FINAL STATE



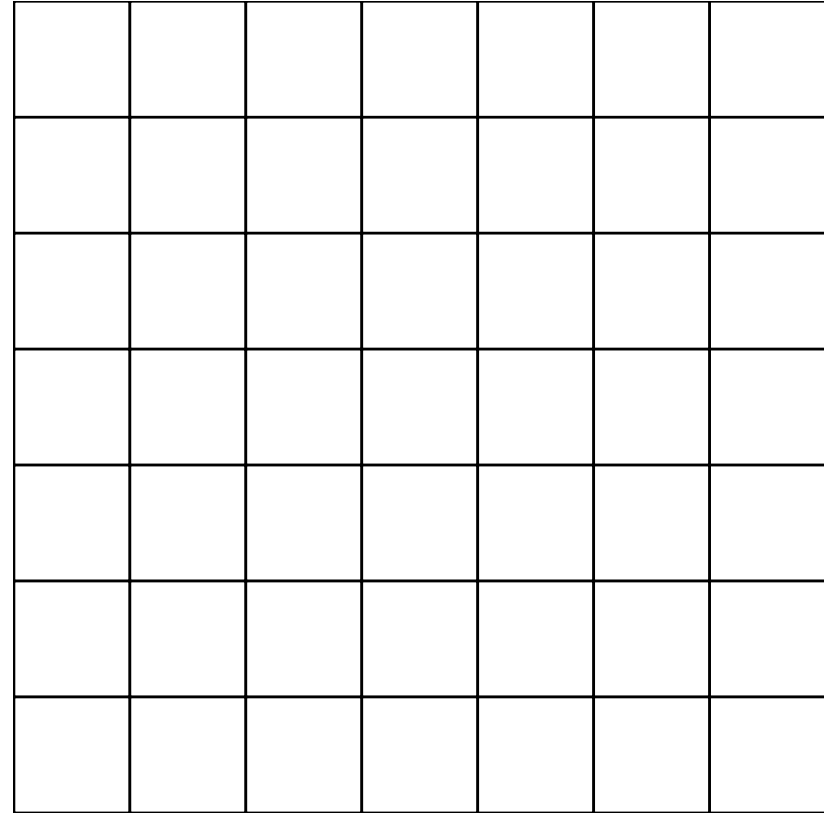
...:SOLUTION:...: Solvable in 1 moves (blocks positions: {(5, 2): <Color: blue>, (6, 1): <Color: blue>, (6, 2): <Color: blue>, (6,

INITIAL STATE: (MOVE 1)

Perform: move_right at position: (5, 2):



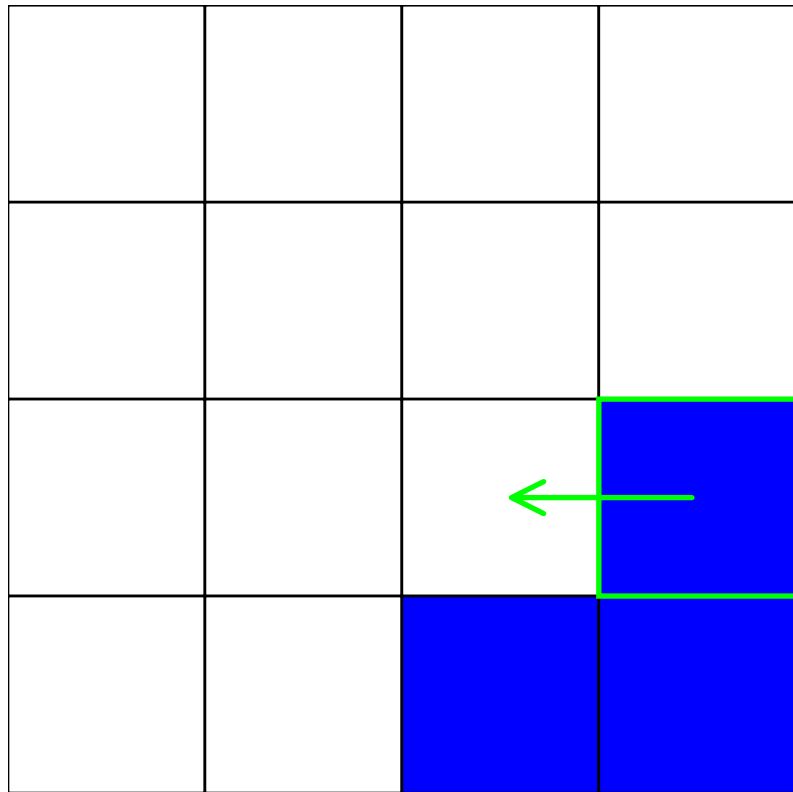
FINAL STATE



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

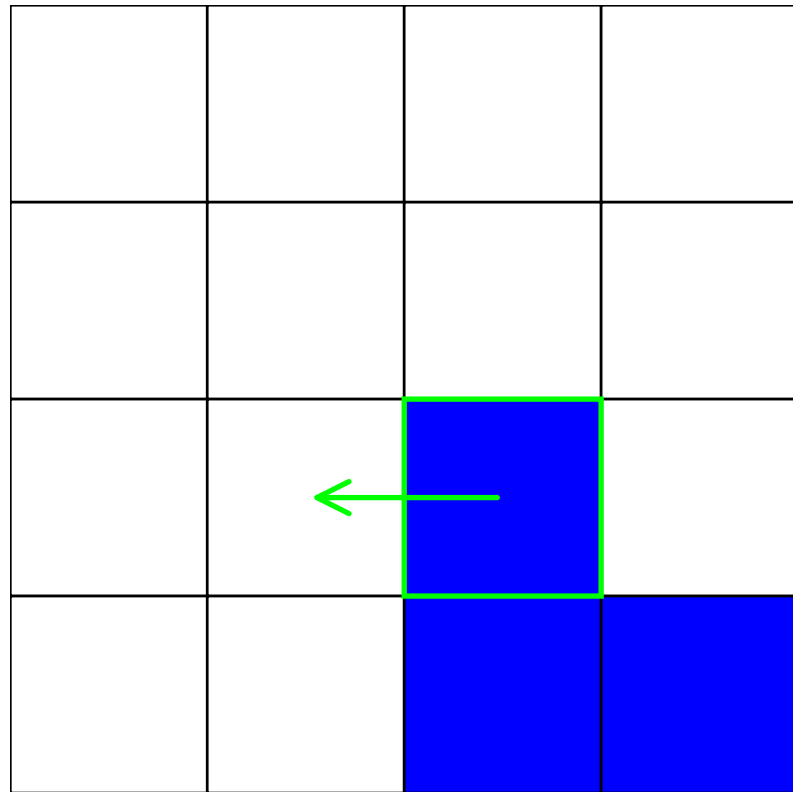
INITIAL STATE: (MOVE 1)

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

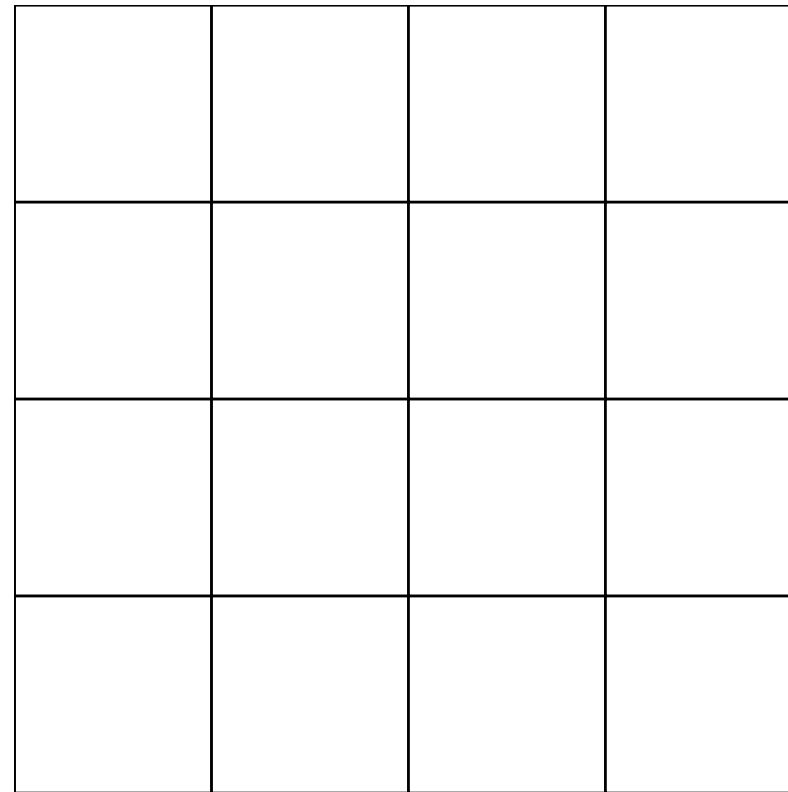


(MOVE 2)

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

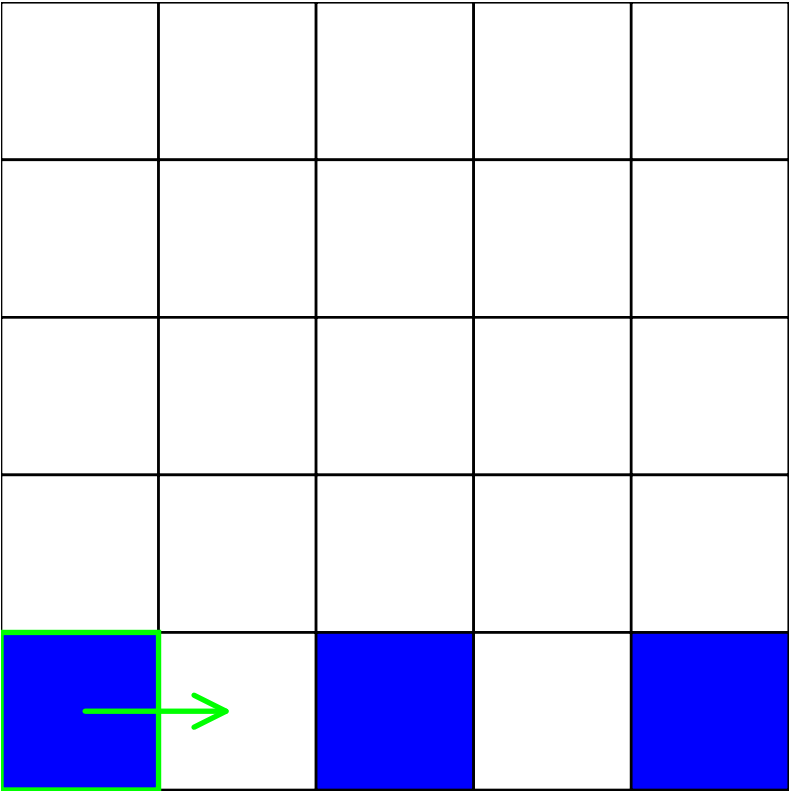


FINAL STATE

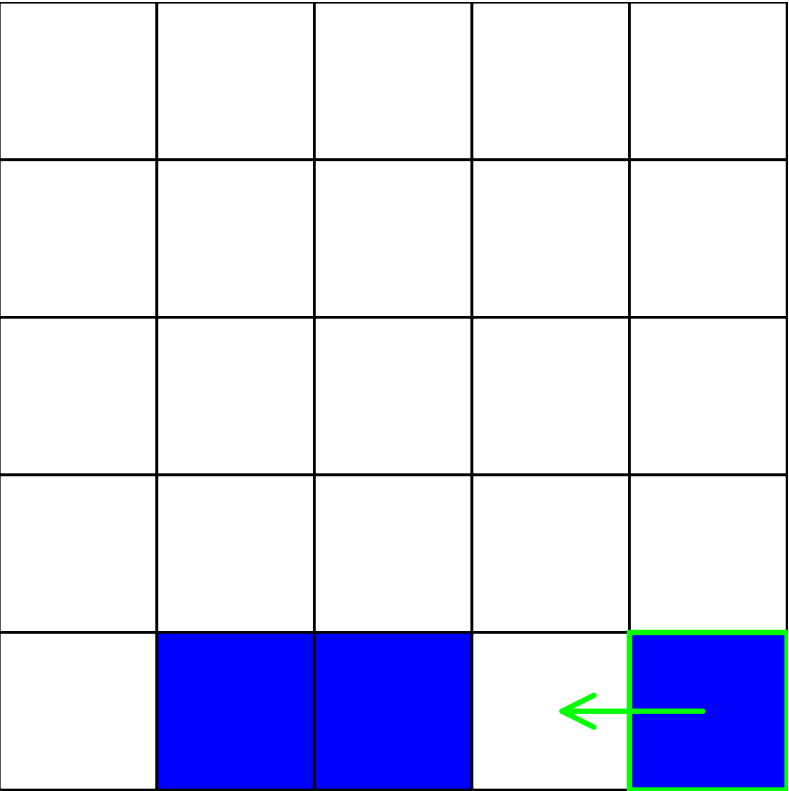


...:SOLUTION:...: Solvable in 2 moves (blocks positions: {(4, 0): <Color: blue>, (4, 2): <Color: blue>, (4, 4): <Color: blue>})

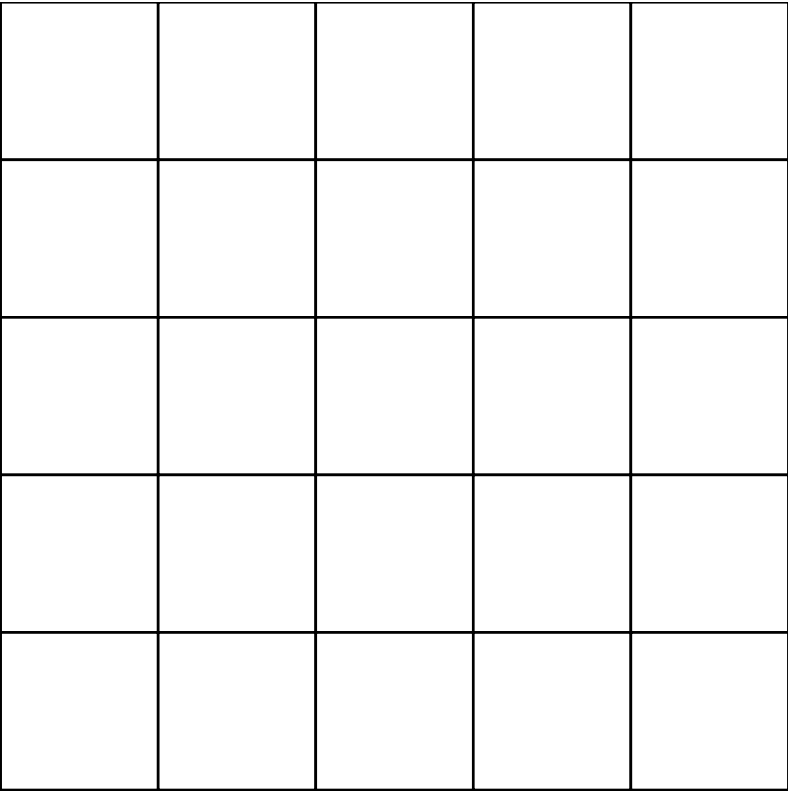
INITIAL STATE: (MOVE 1)
Perform: move_right at position: (4, 0):



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



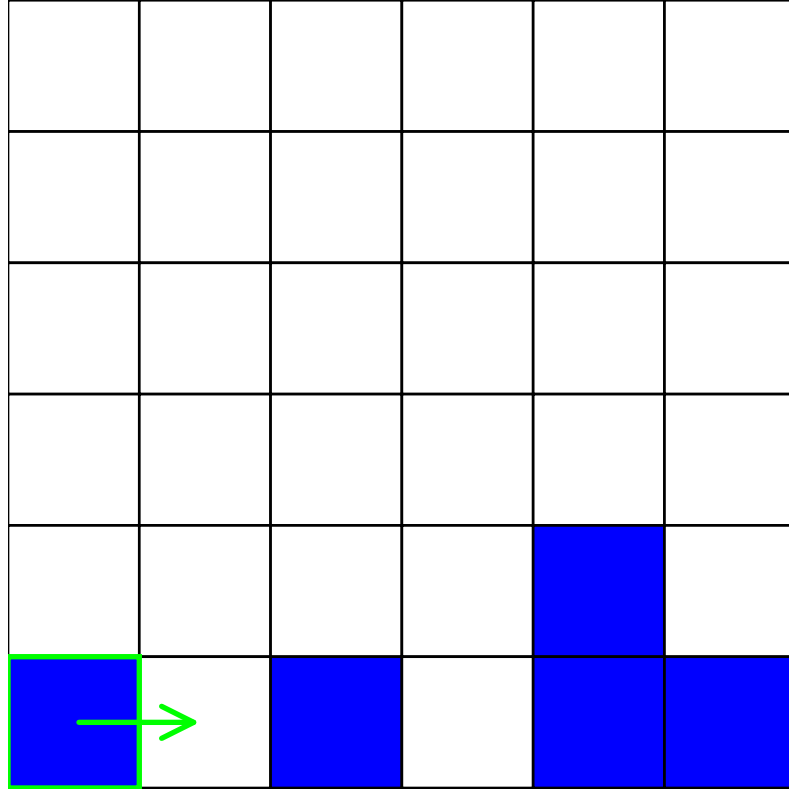
FINAL STATE



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

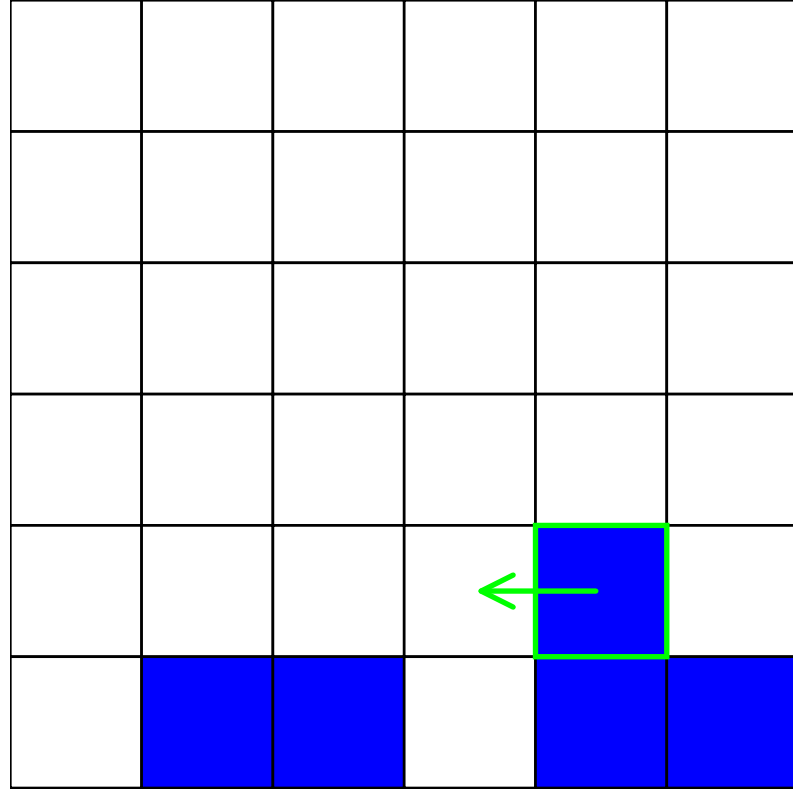
INITIAL STATE: (MOVE 1)

Perform: move_right at position: (5, 0):

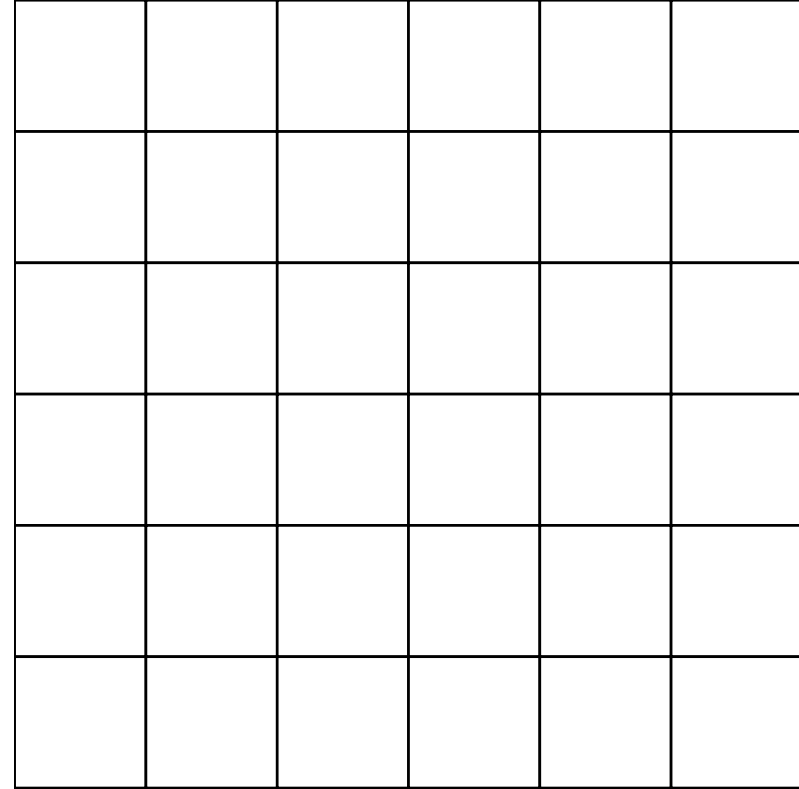


(MOVE 2)

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



FINAL STATE



INITIAL STATE: (MOVE 1)

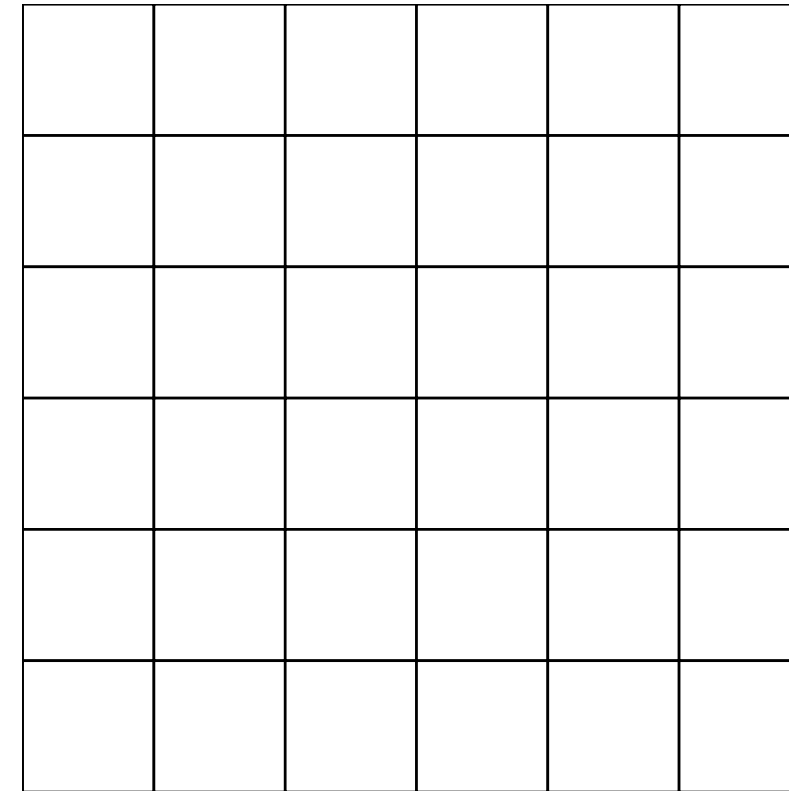
A 5x5 grid with blue cells at (1,1), (1,2), (1,4), (2,1), (2,2), and (2,4). A green arrow points left from the blue cell at (2,1).

(MOVE 2)

A 5x5 grid with a blue square at (row 4, col 3) and a green square at (row 5, col 5). A green arrow points from the green square to the blue square.

FINAL STATE

FINAL STATE



INITIAL STATE: (MOVE 1)

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

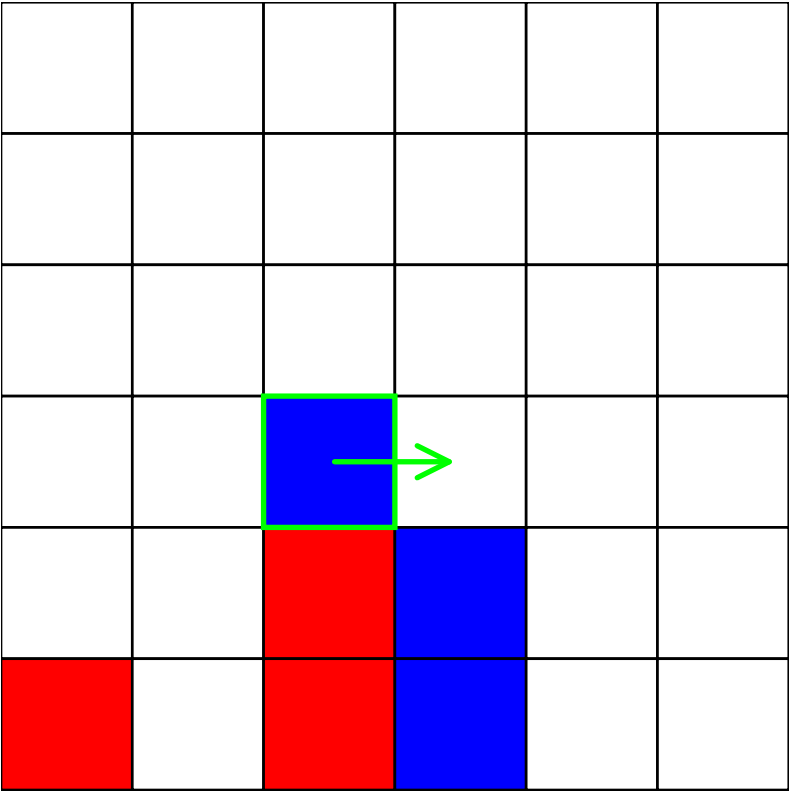
[illegible]

FINAL STATE

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

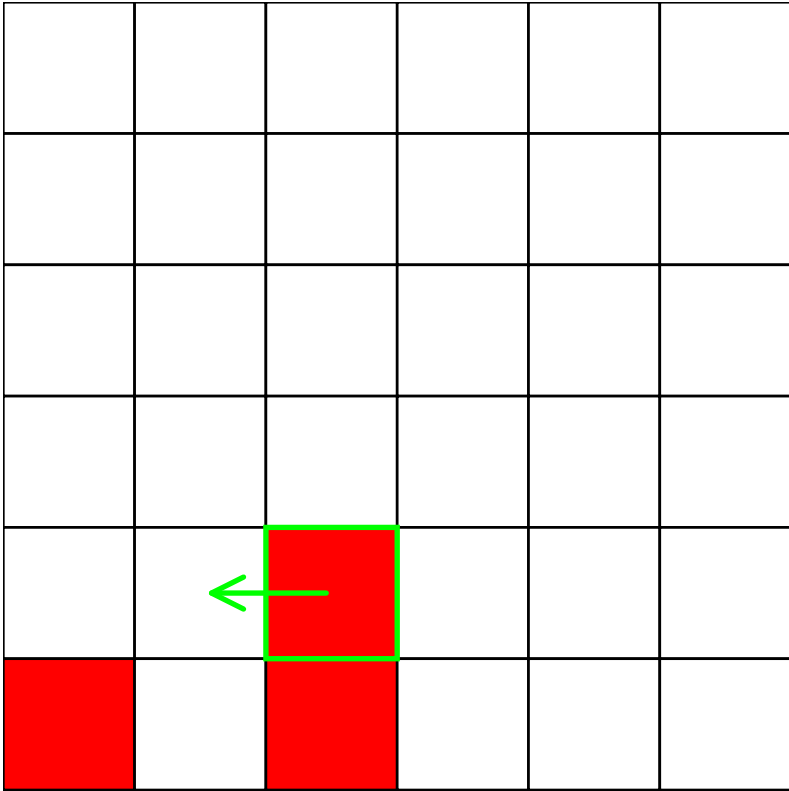
INITIAL STATE: (MOVE 1)

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

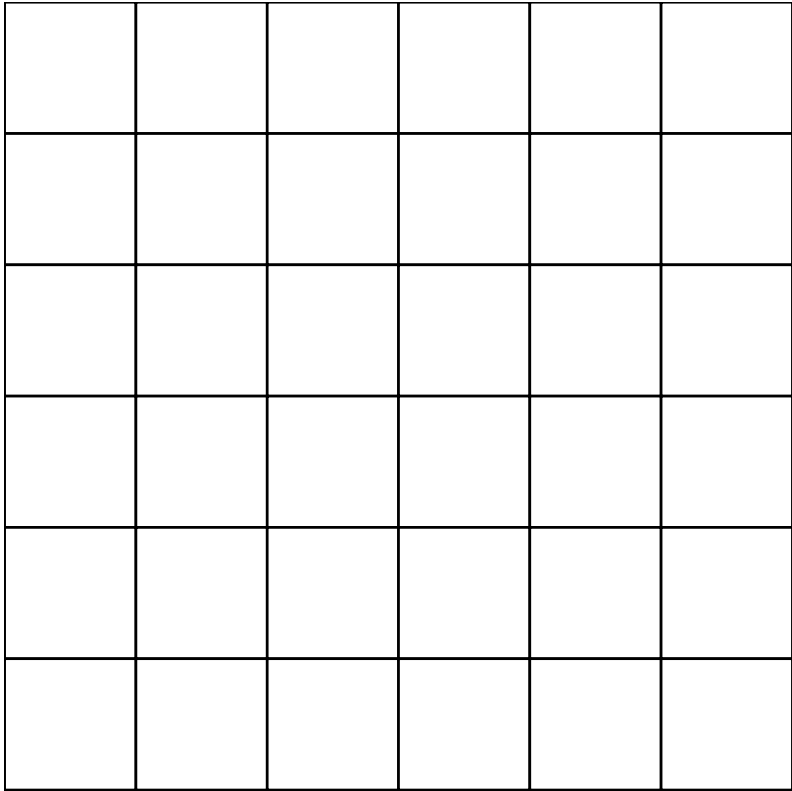


(MOVE 2)

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



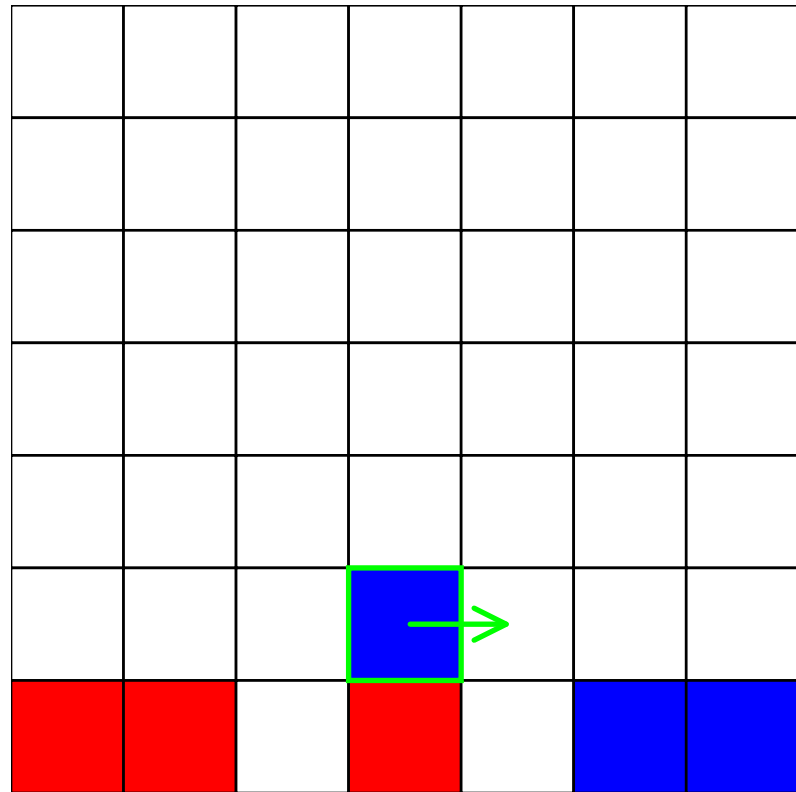
FINAL STATE



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

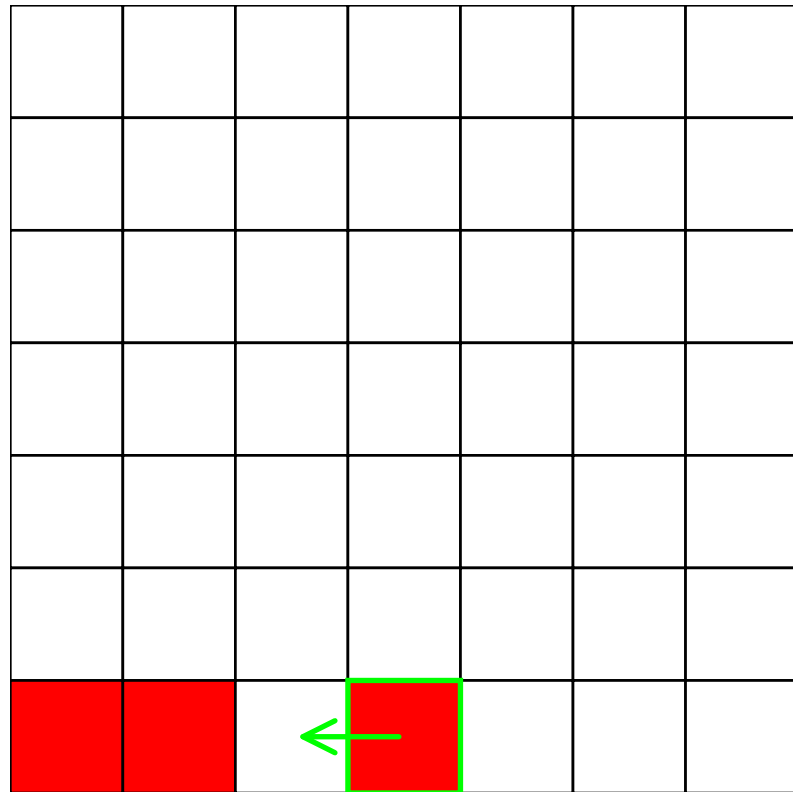
INITIAL STATE: (MOVE 1)

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

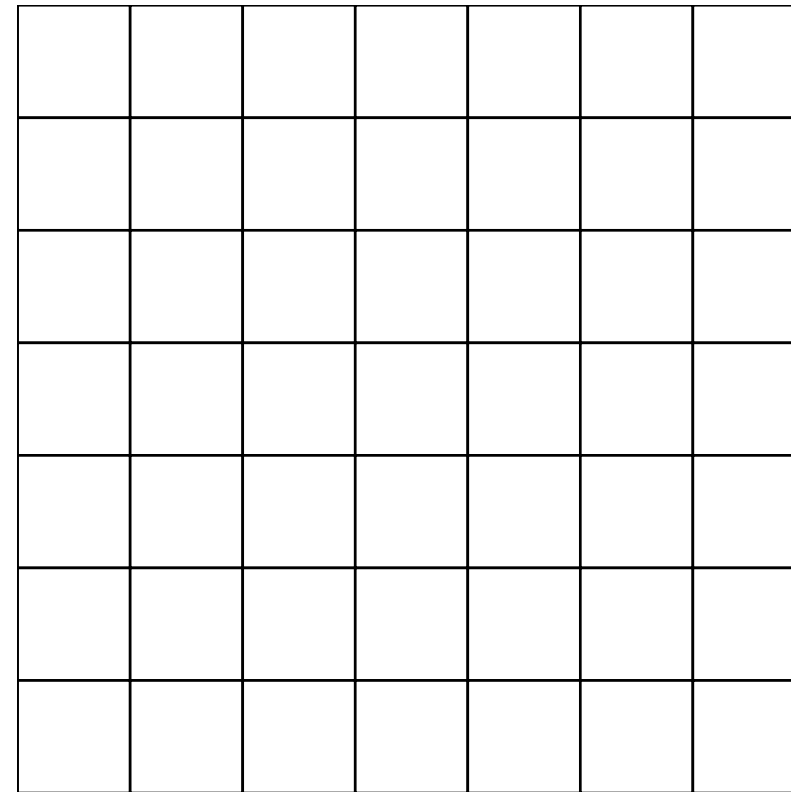


(MOVE 2)

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



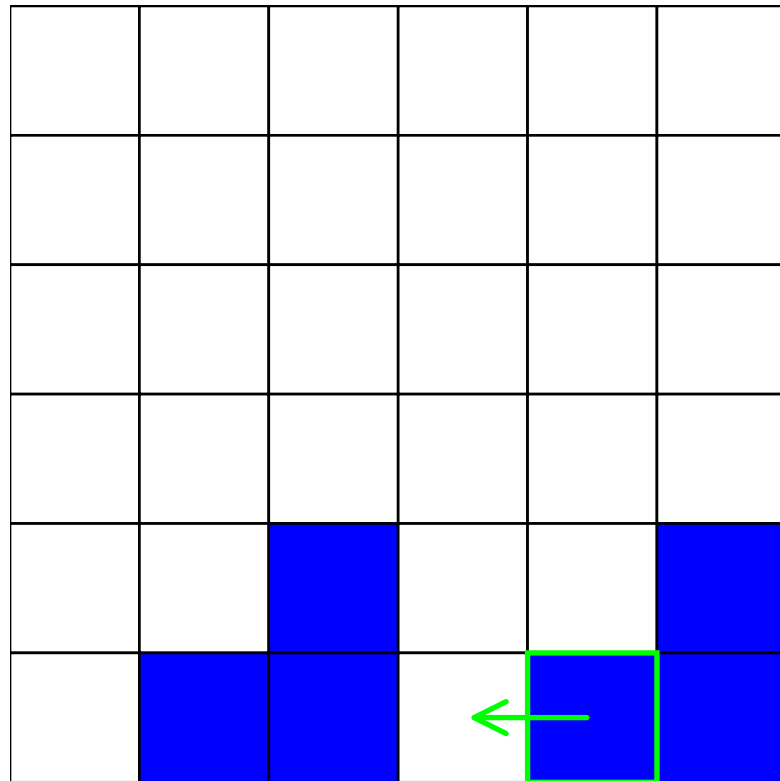
FINAL STATE



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

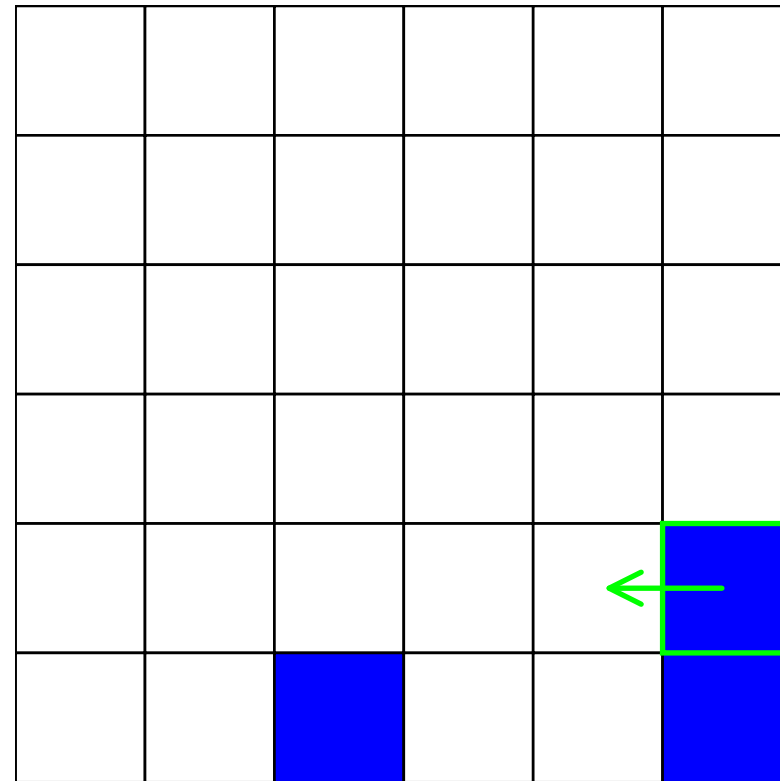
INITIAL STATE: (MOVE 1)

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



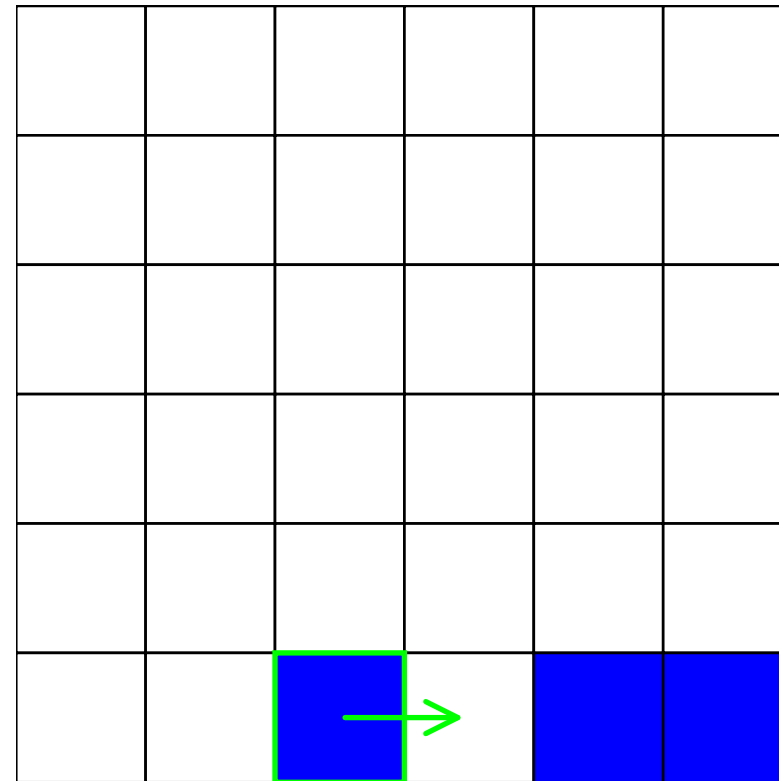
(MOVE 2)

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

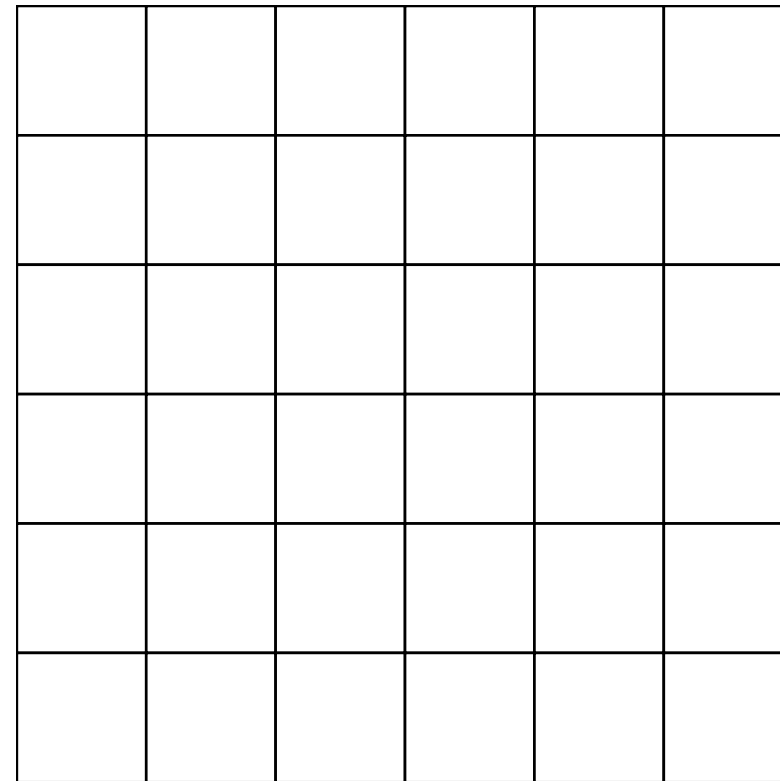


(MOVE 3)

Perform: move_right at position: (5, 2):



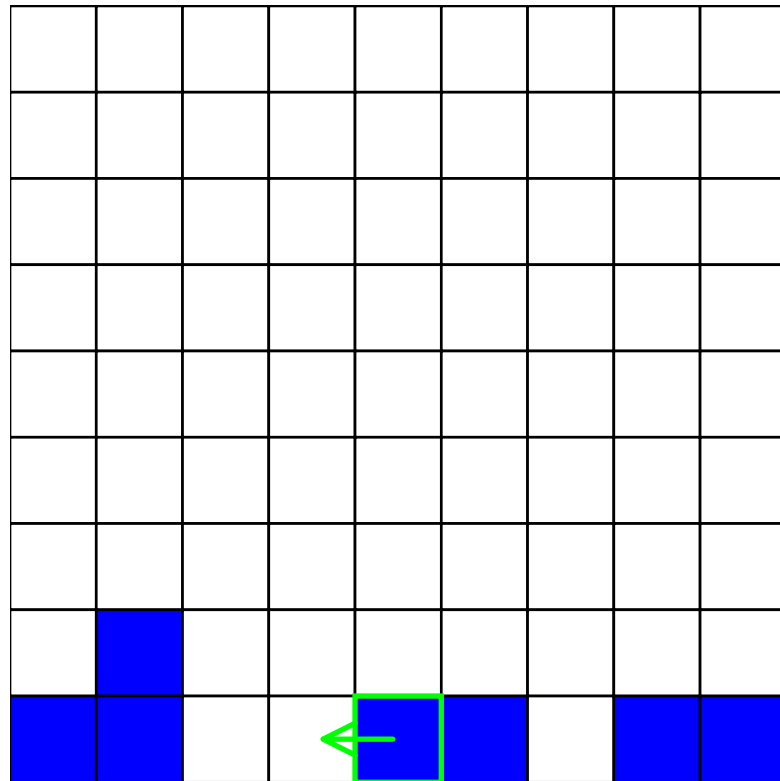
FINAL STATE



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

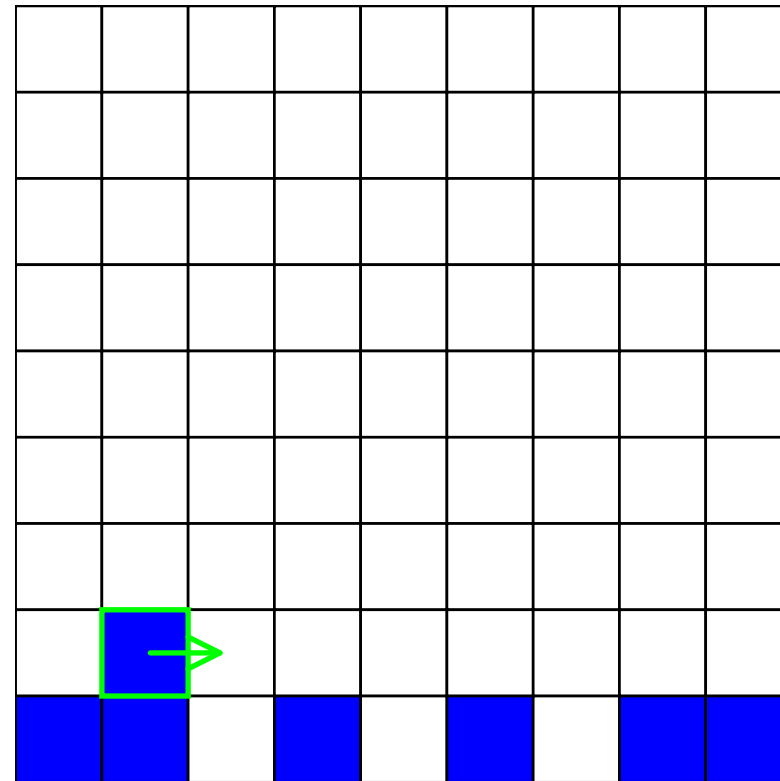
INITIAL STATE: (MOVE 1)

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



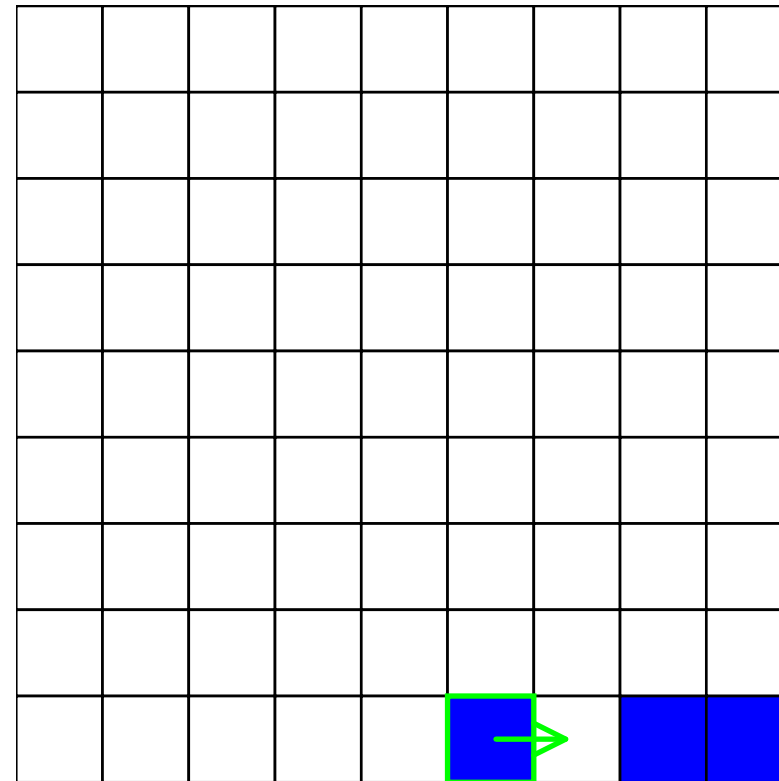
(MOVE 2)

Perform: move_right at position: (7, 1):

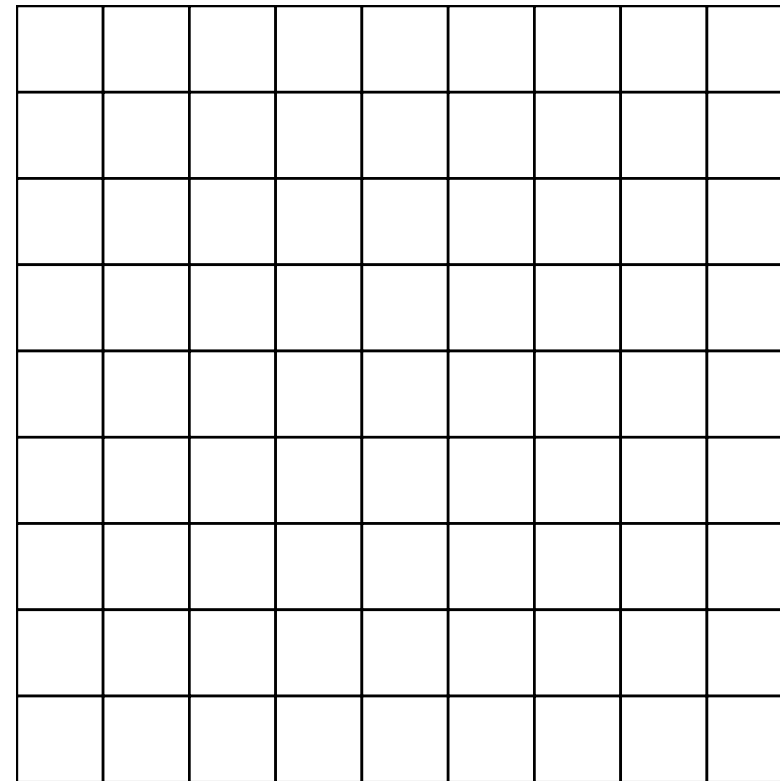


(MOVE 3)

Perform: move_right at position: (8, 5):



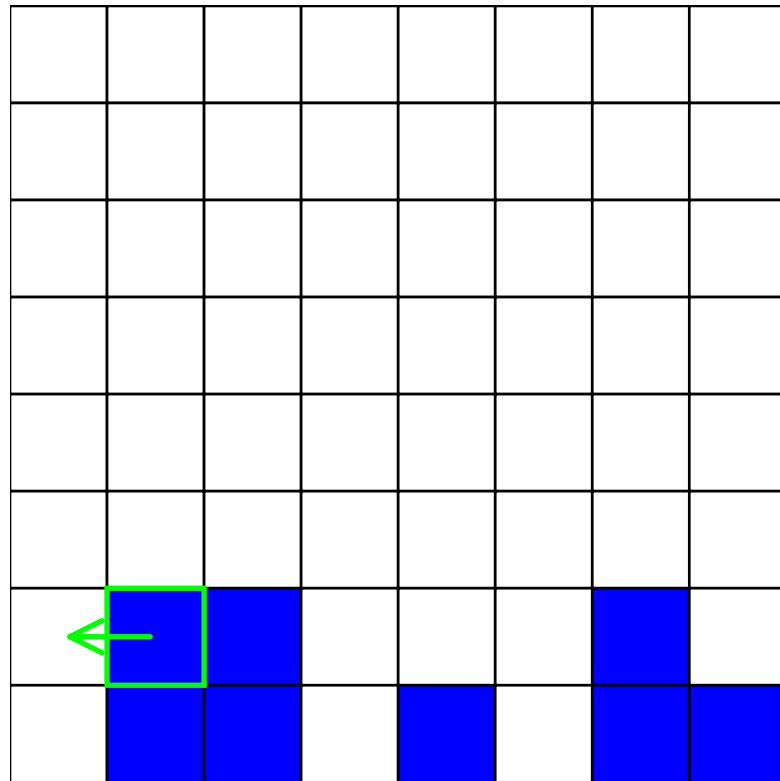
FINAL STATE



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

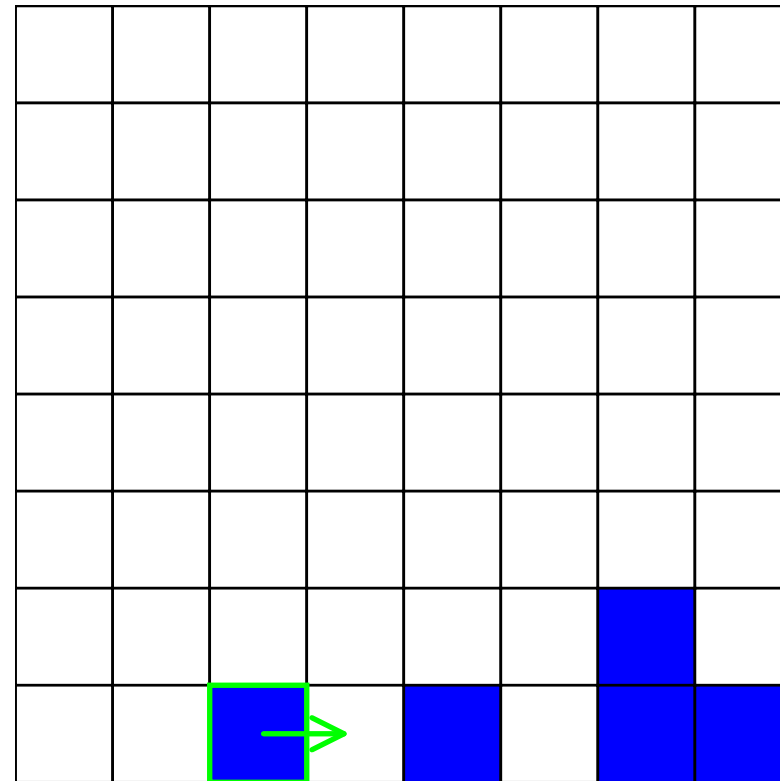
INITIAL STATE: (MOVE 1)

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



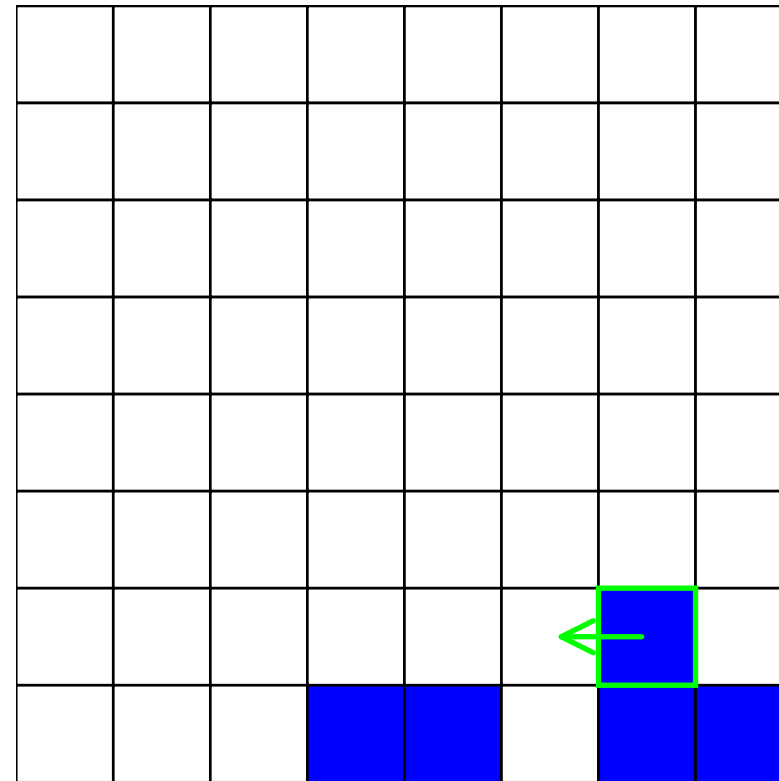
(MOVE 2)

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

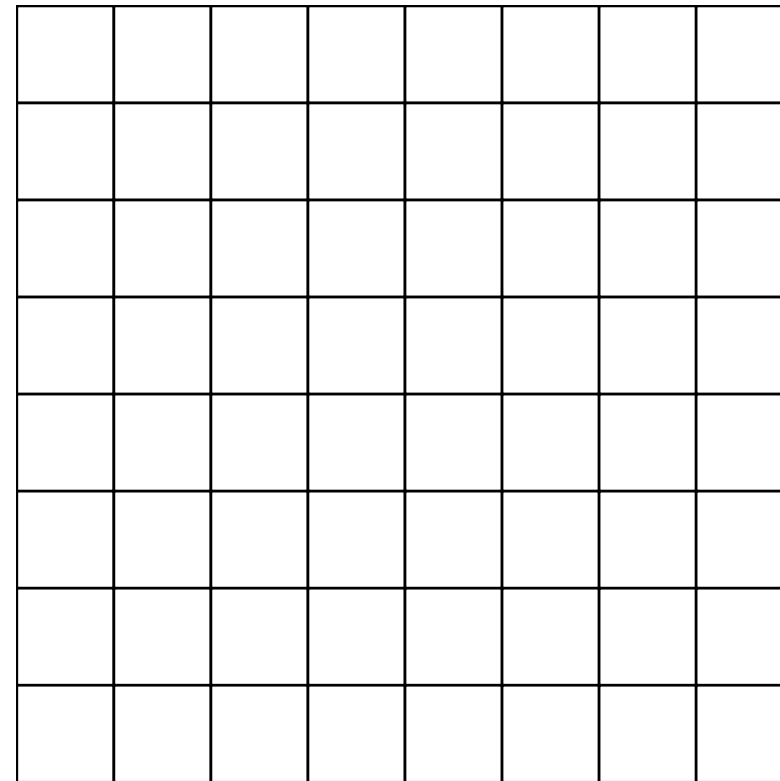


(MOVE 3)

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



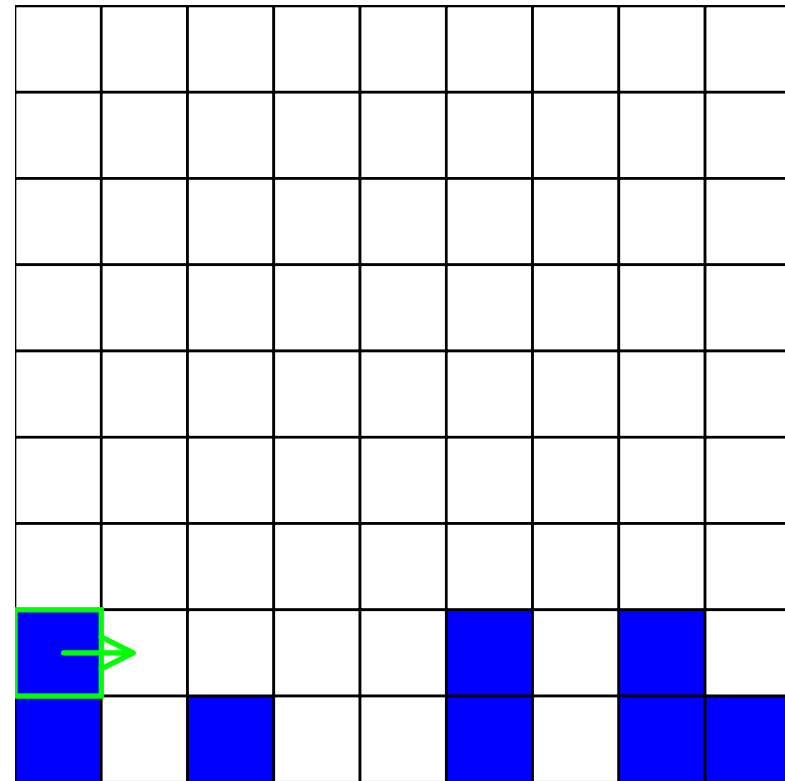
FINAL STATE



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

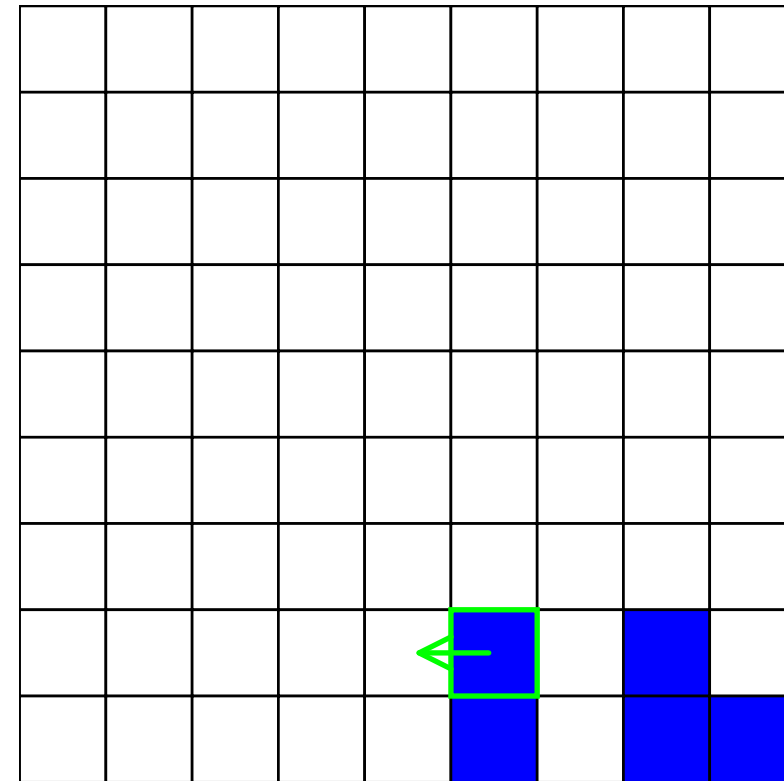
INITIAL STATE: (MOVE 1)

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



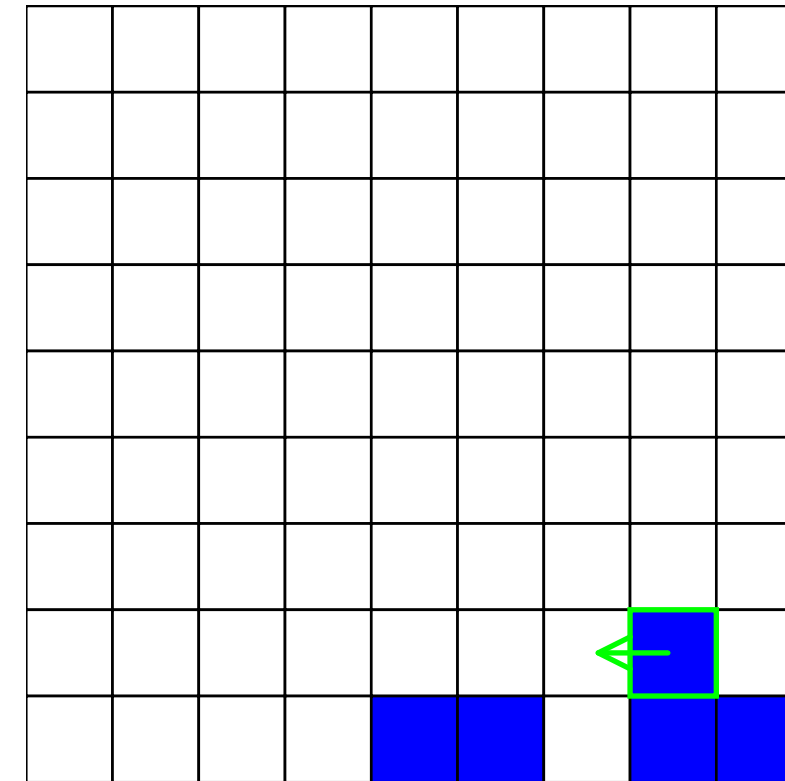
(MOVE 2)

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

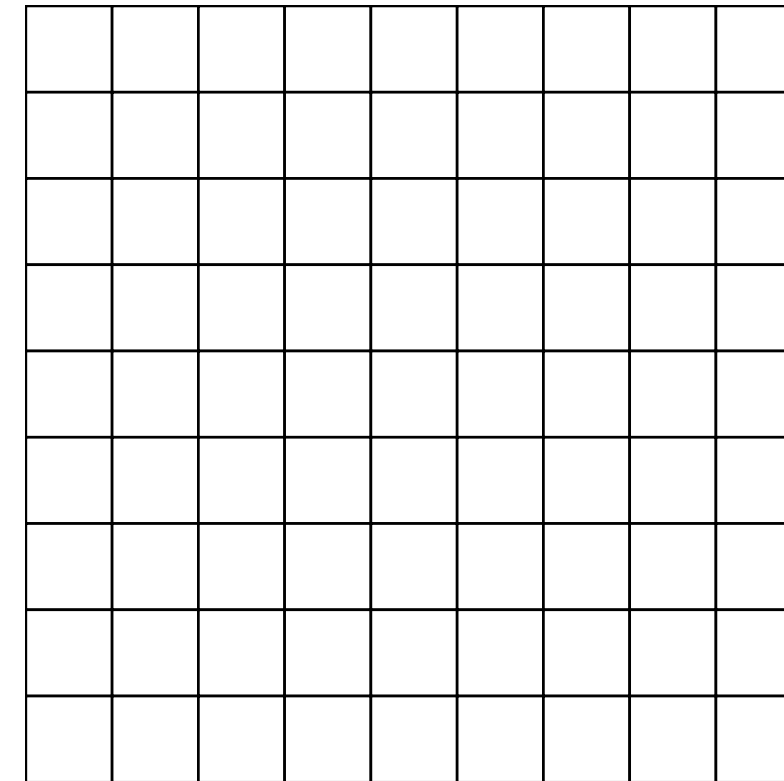


(MOVE 3)

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



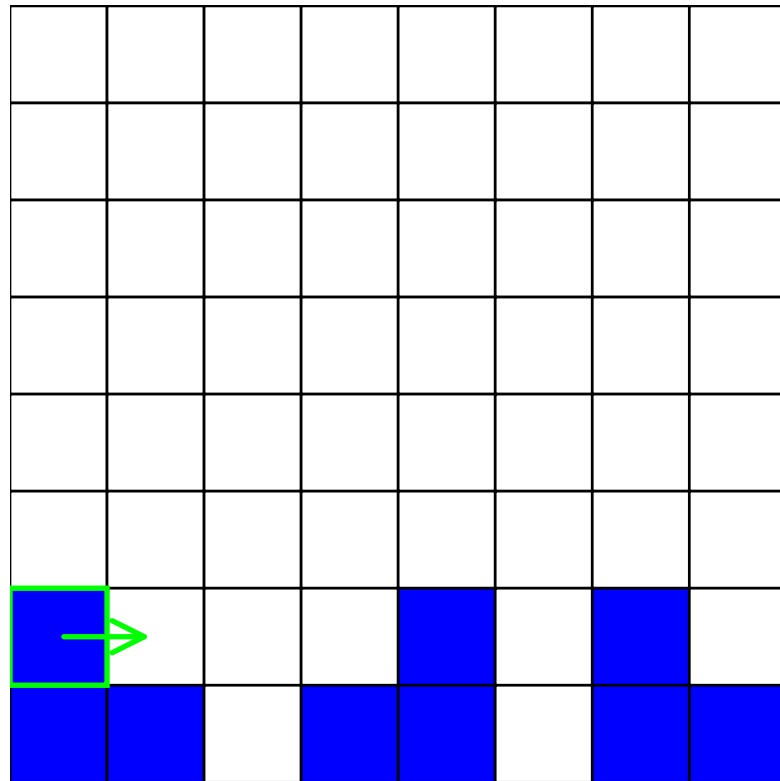
FINAL STATE



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

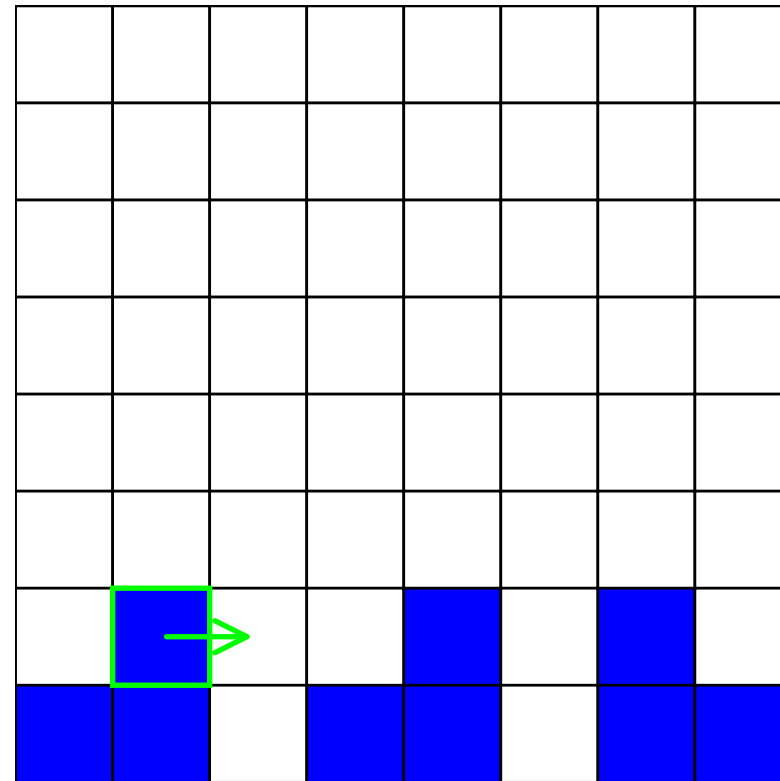
INITIAL STATE: (MOVE 1)

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



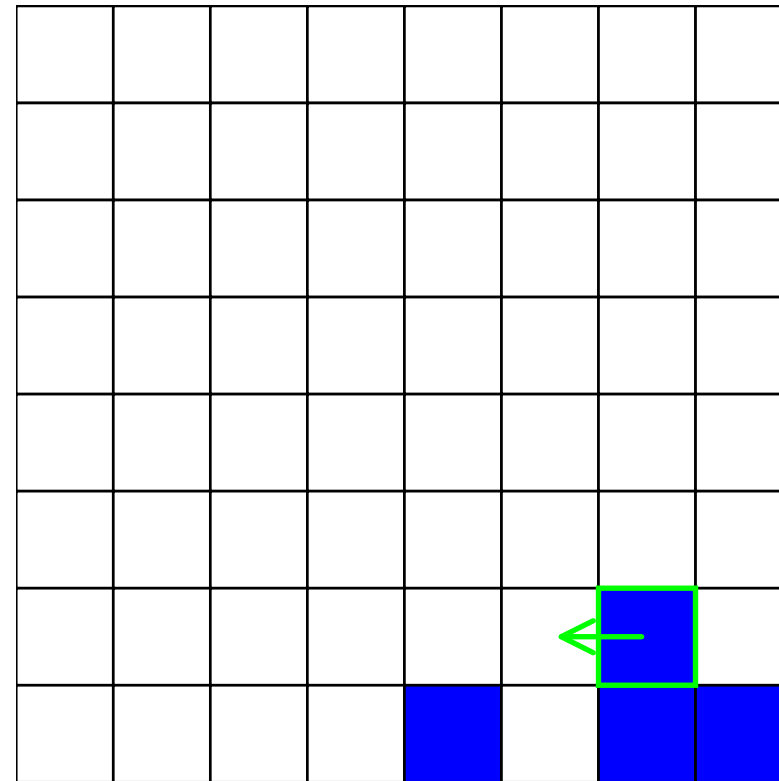
(MOVE 2)

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

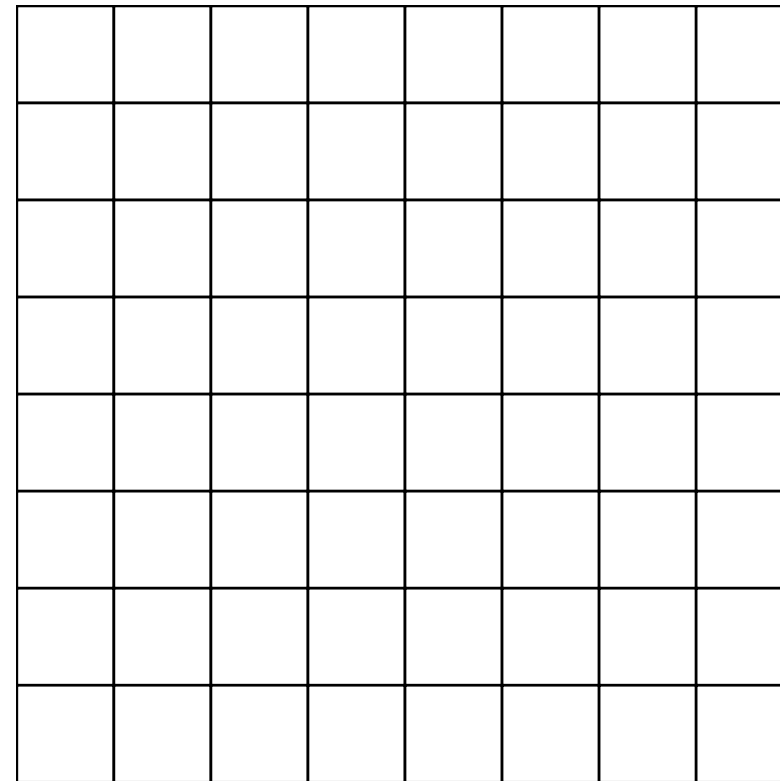


(MOVE 3)

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



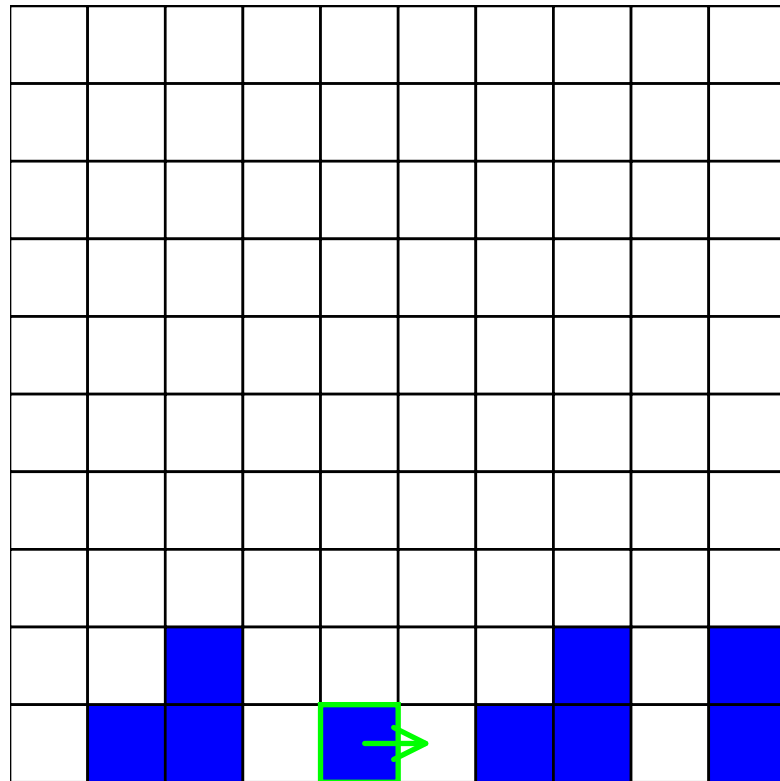
FINAL STATE



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

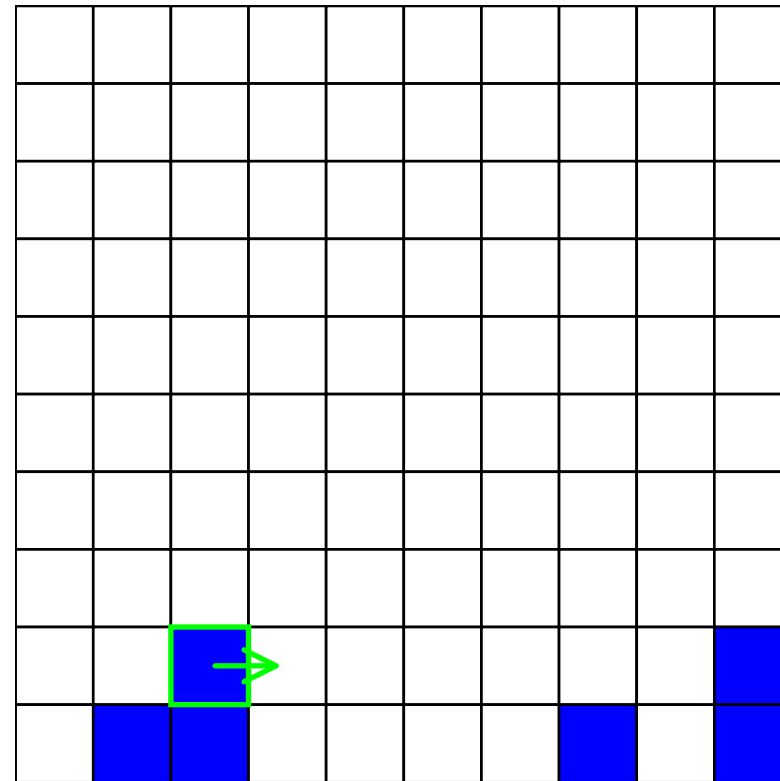
INITIAL STATE: (MOVE 1)

Perform: move_right at position: (9, 4):



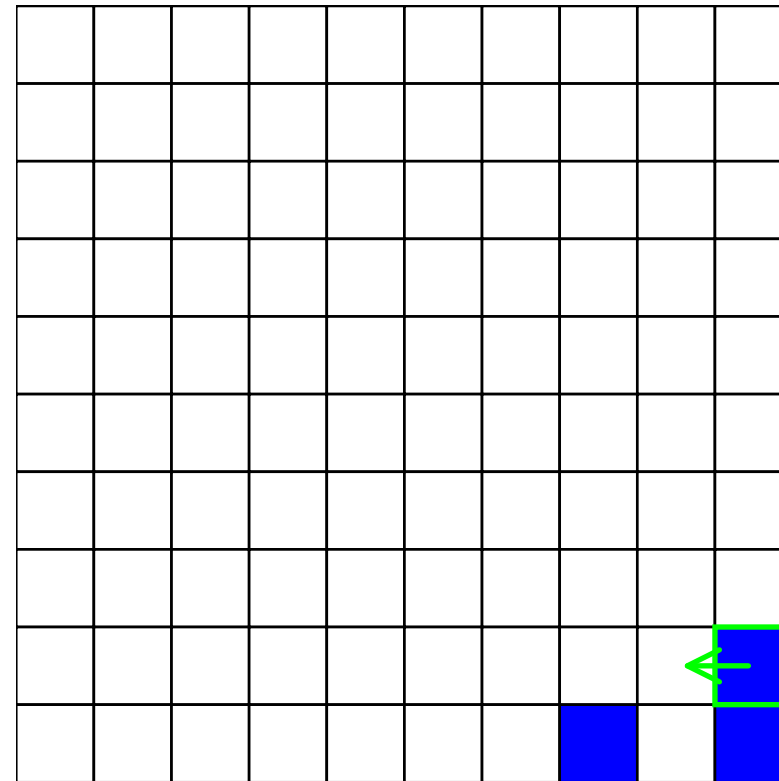
(MOVE 2)

Perform: move_right at position: (8, 2):

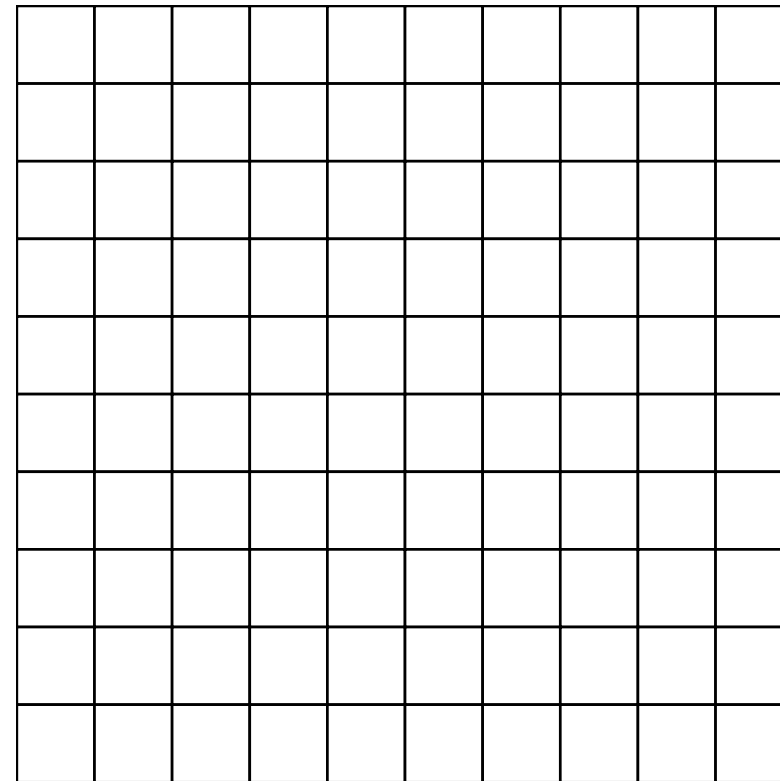


(MOVE 3)

Perform: move_left at position: (8, 9):



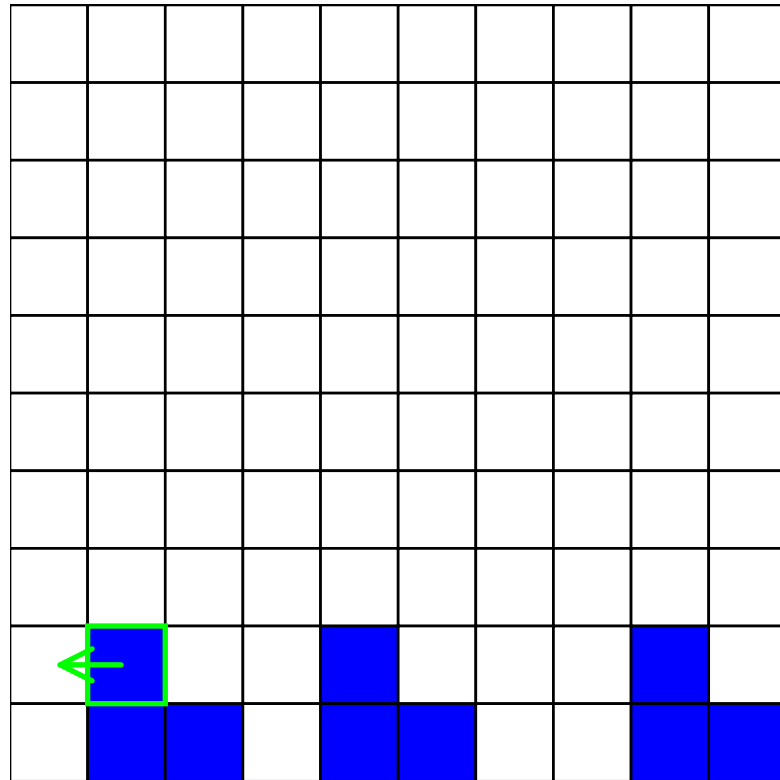
FINAL STATE



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

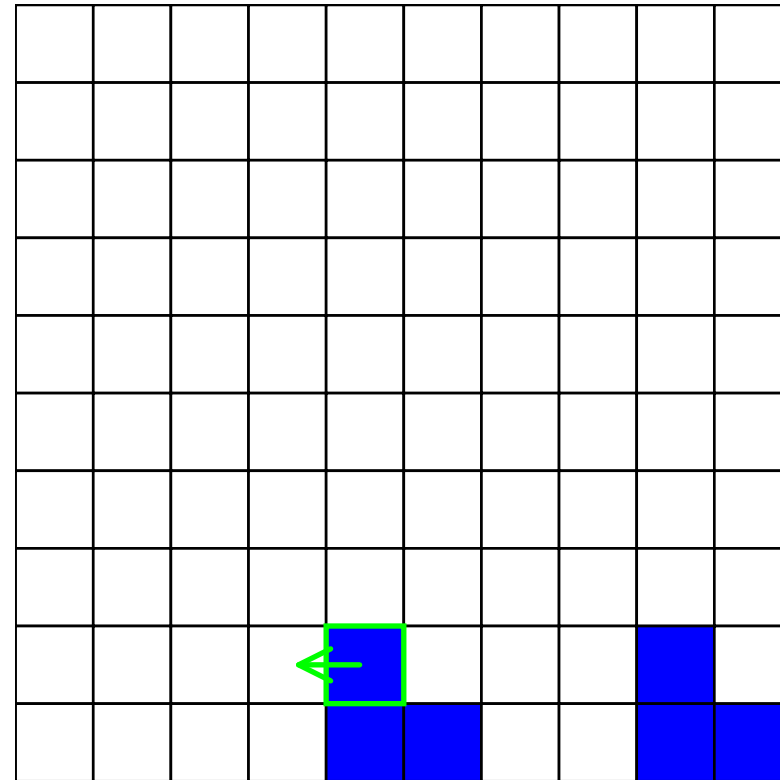
INITIAL STATE: (MOVE 1)

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



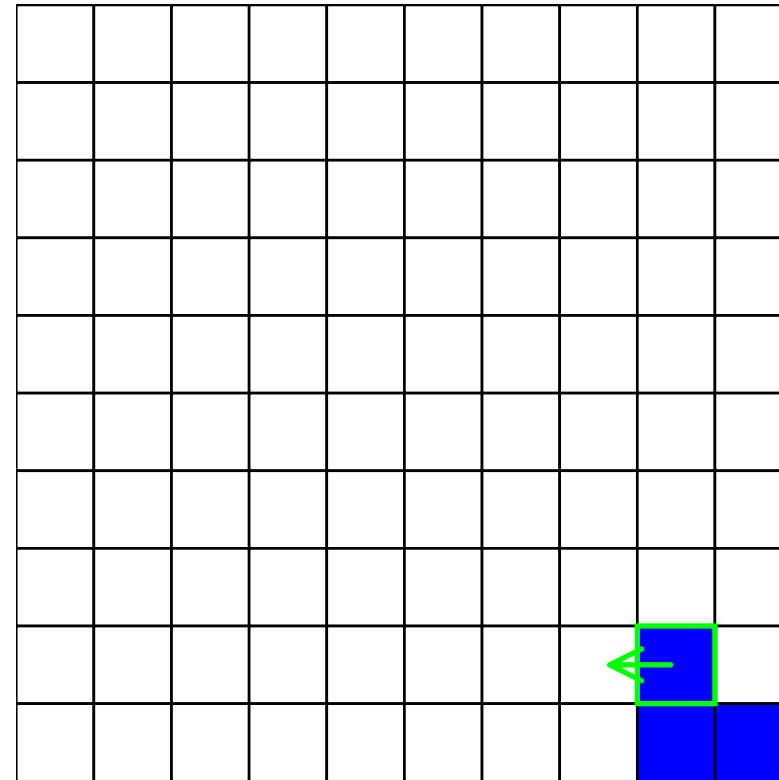
(MOVE 2)

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

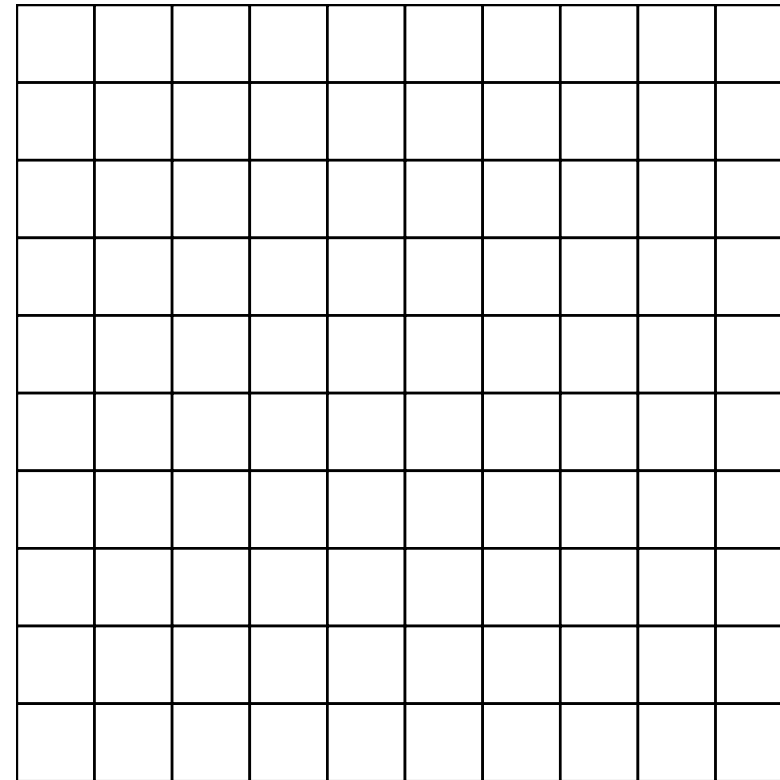


(MOVE 3)

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



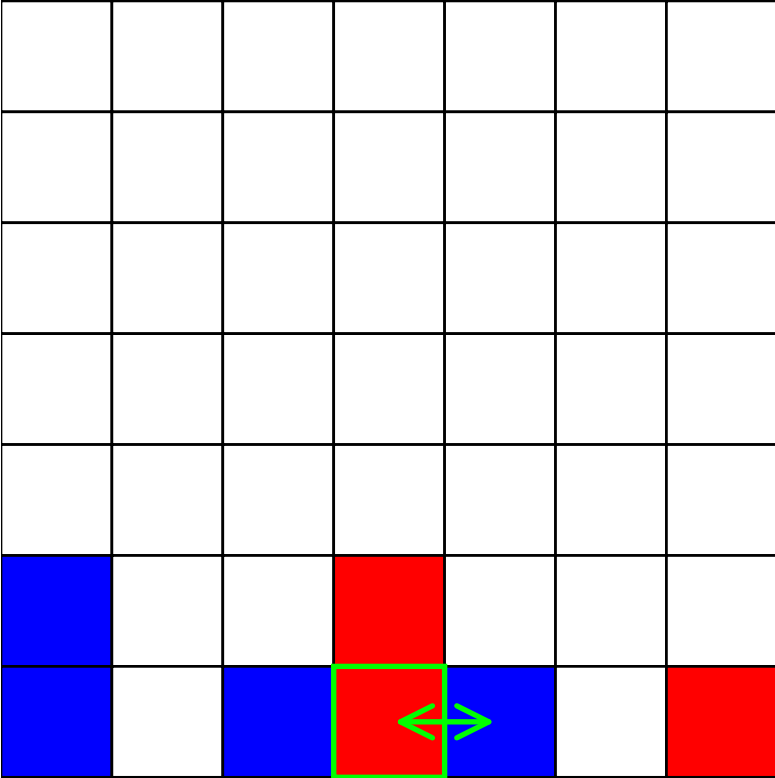
FINAL STATE



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

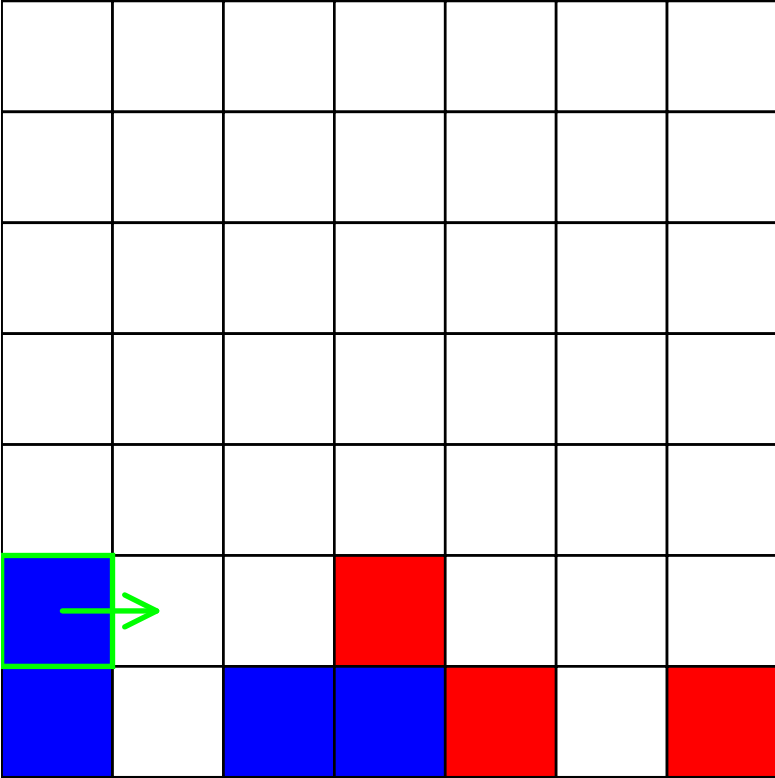
INITIAL STATE: (MOVE 1)

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



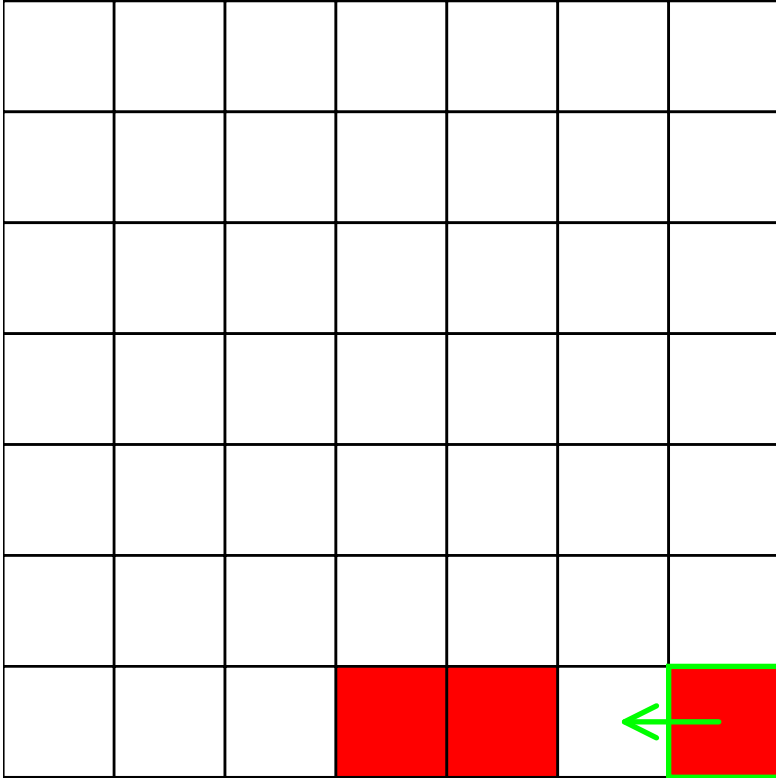
(MOVE 2)

Perform: move_right at position: (5, 0):

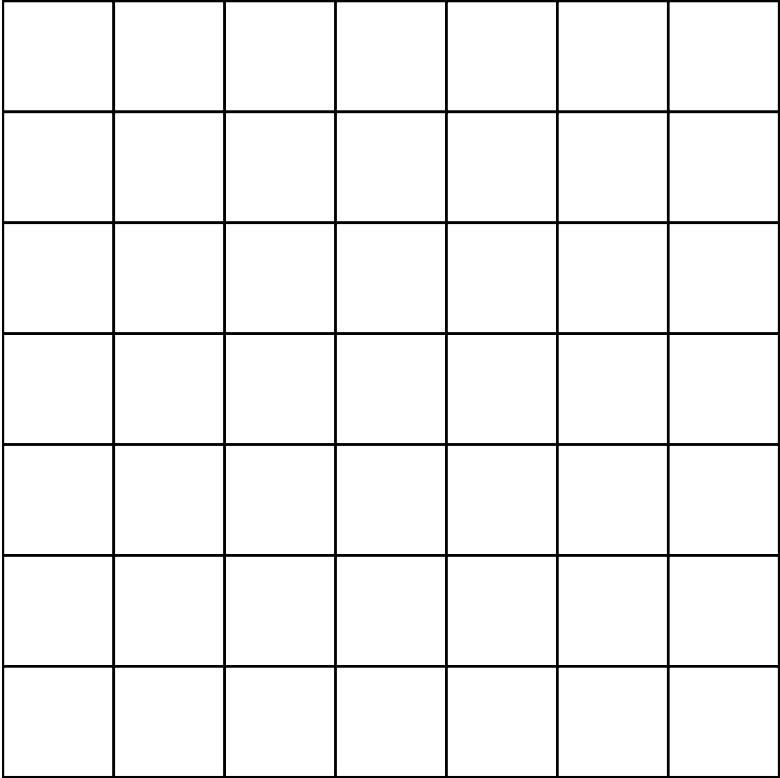


(MOVE 3)

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



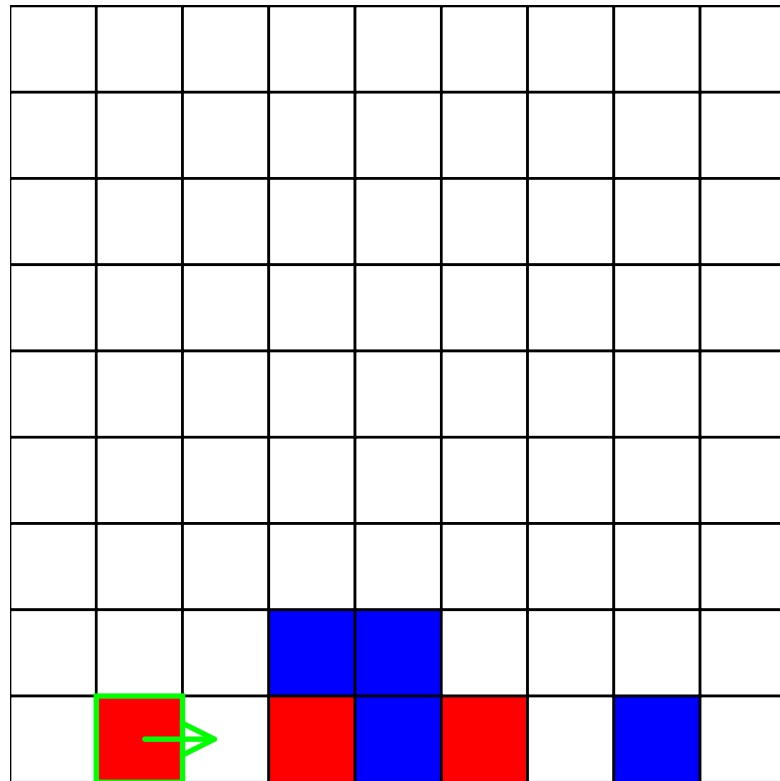
FINAL STATE



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

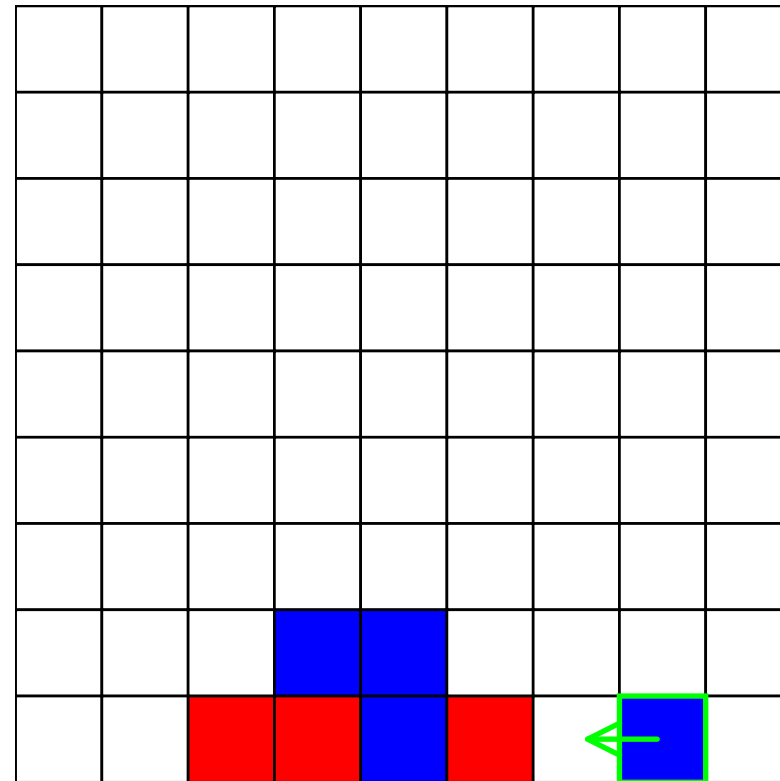
INITIAL STATE: (MOVE 1)

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



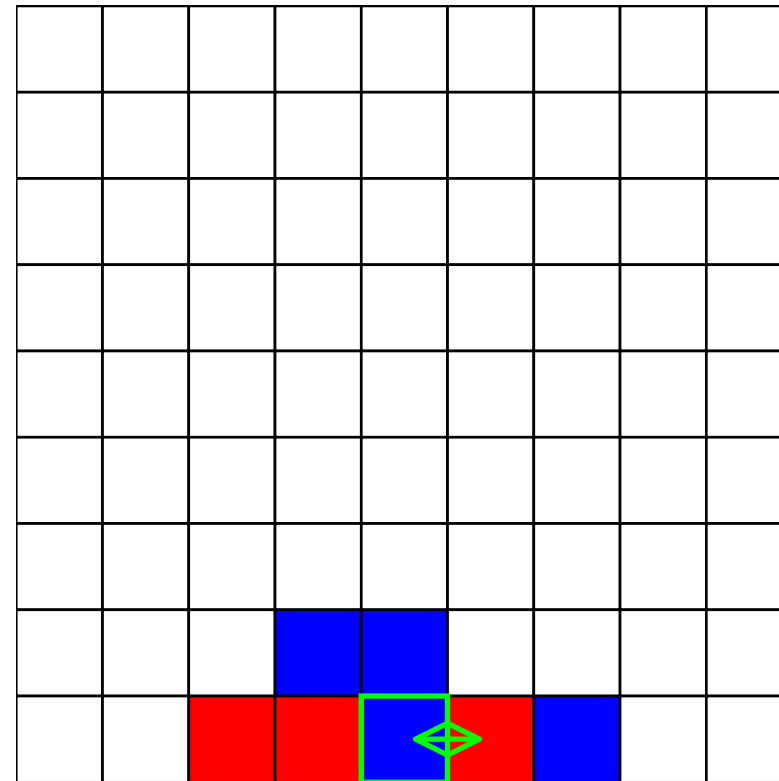
(MOVE 2)

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

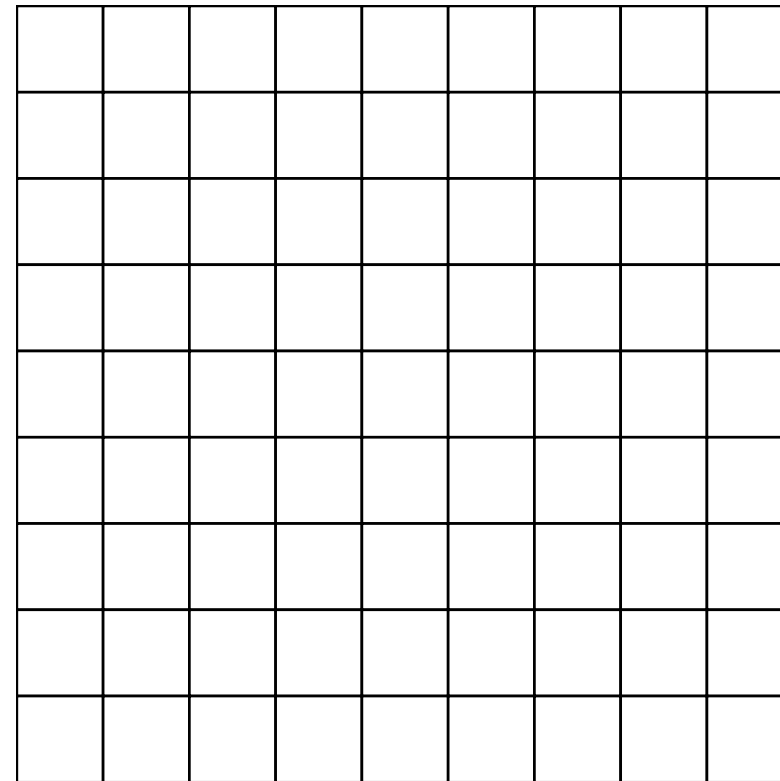


(MOVE 3)

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



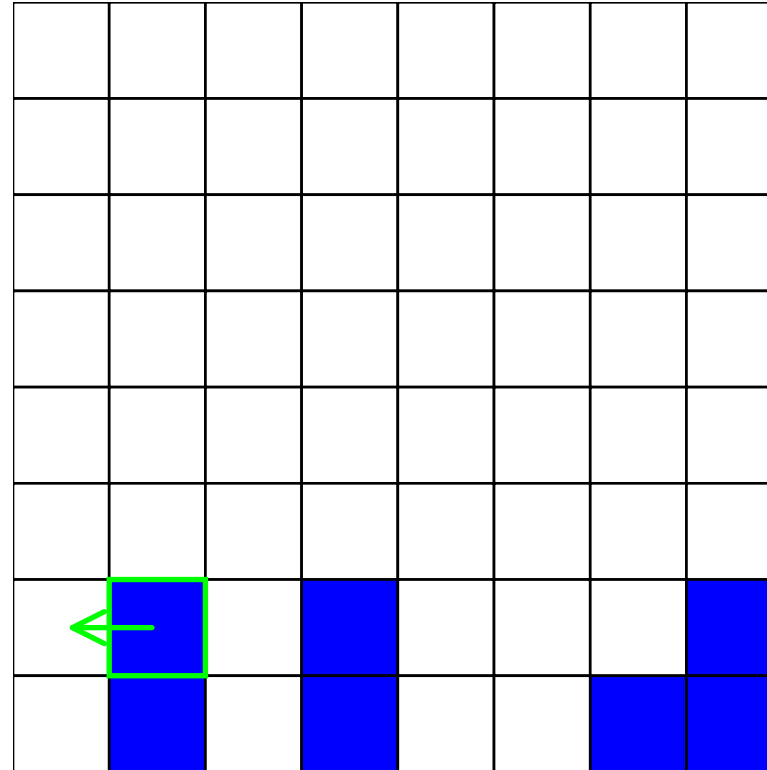
FINAL STATE



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

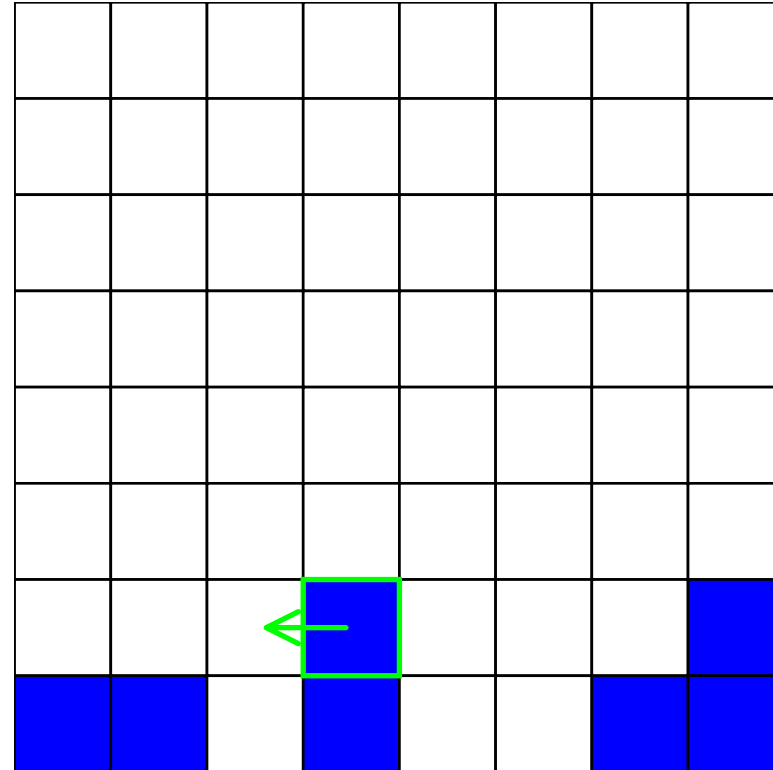
INITIAL STATE: (MOVE 1)

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



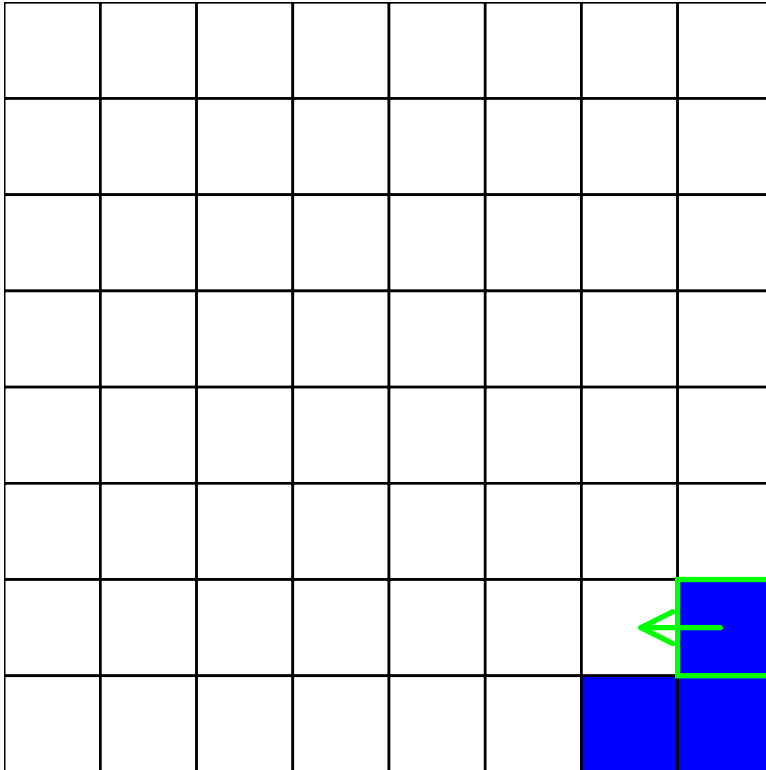
(MOVE 2)

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



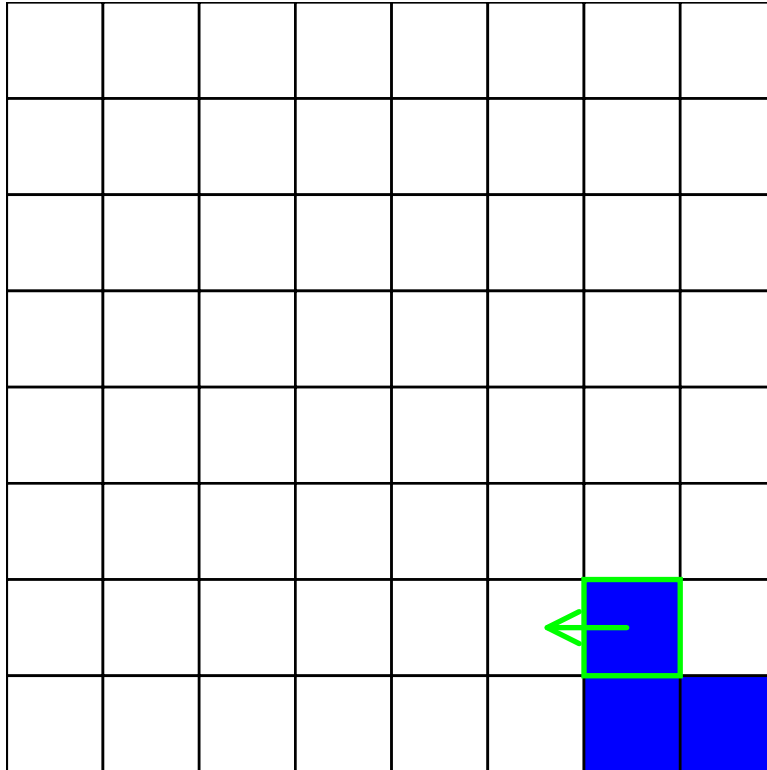
(MOVE 3)

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

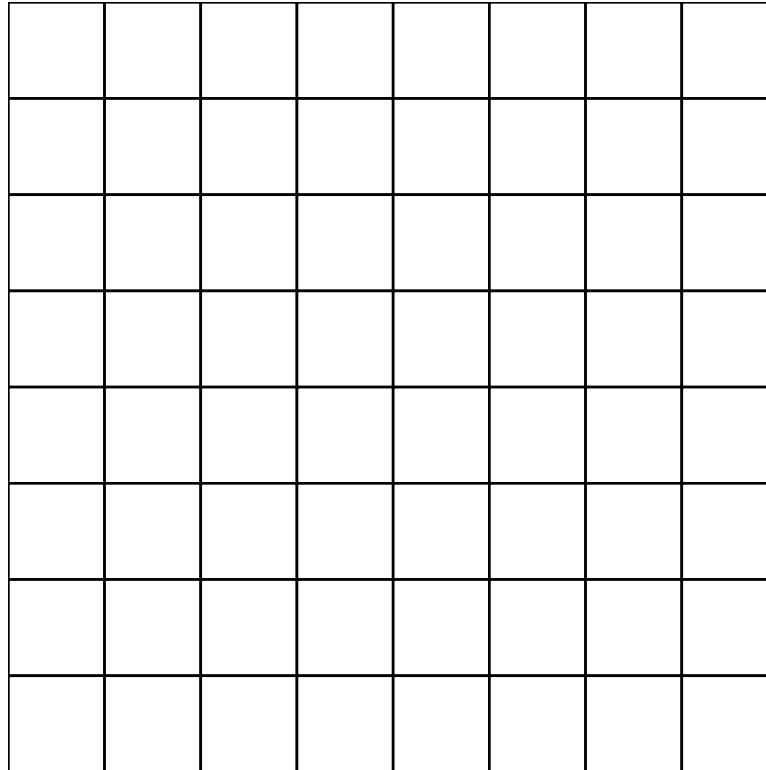


(MOVE 4)

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



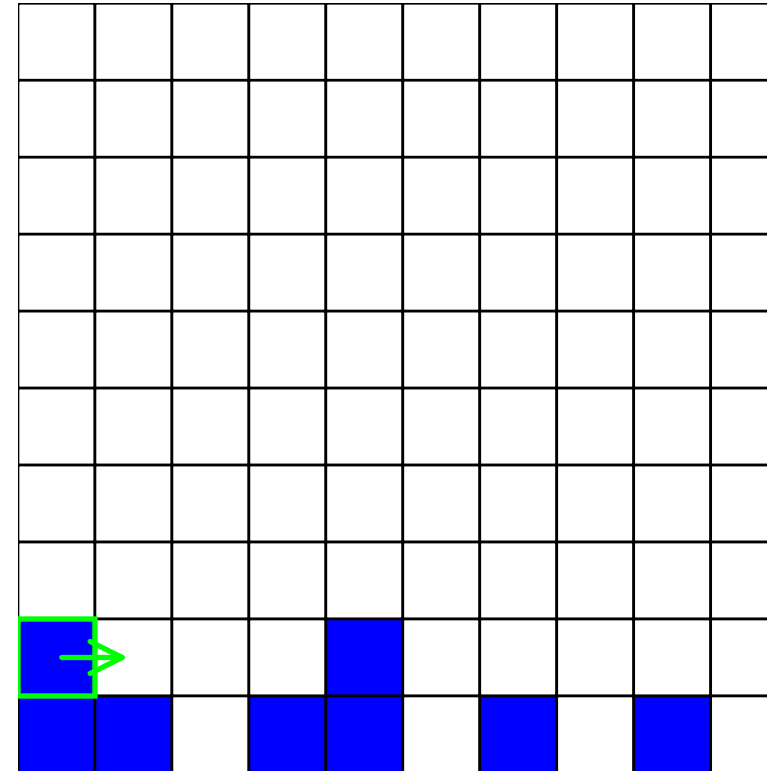
FINAL STATE



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

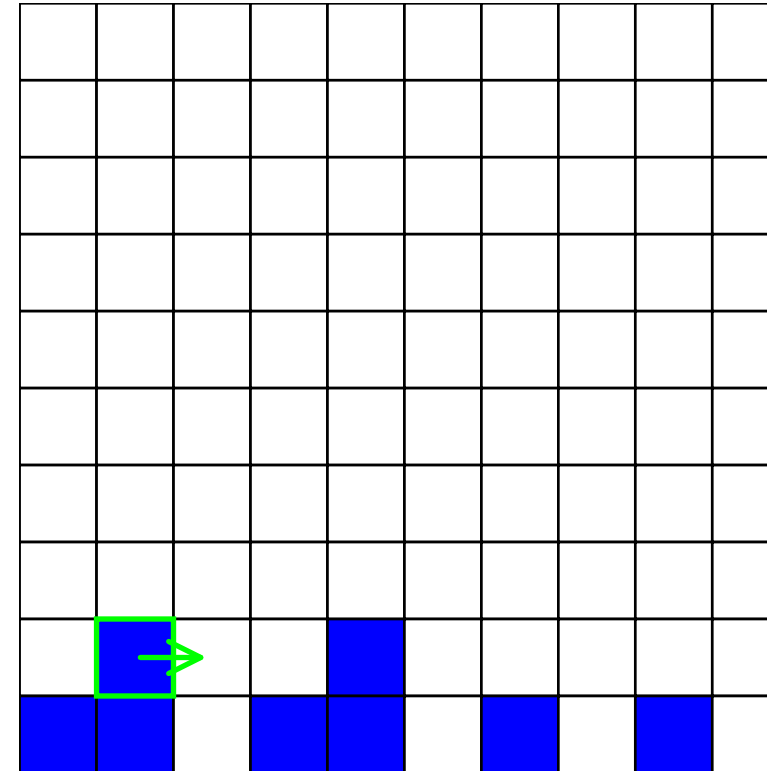
INITIAL STATE: (MOVE 1)

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



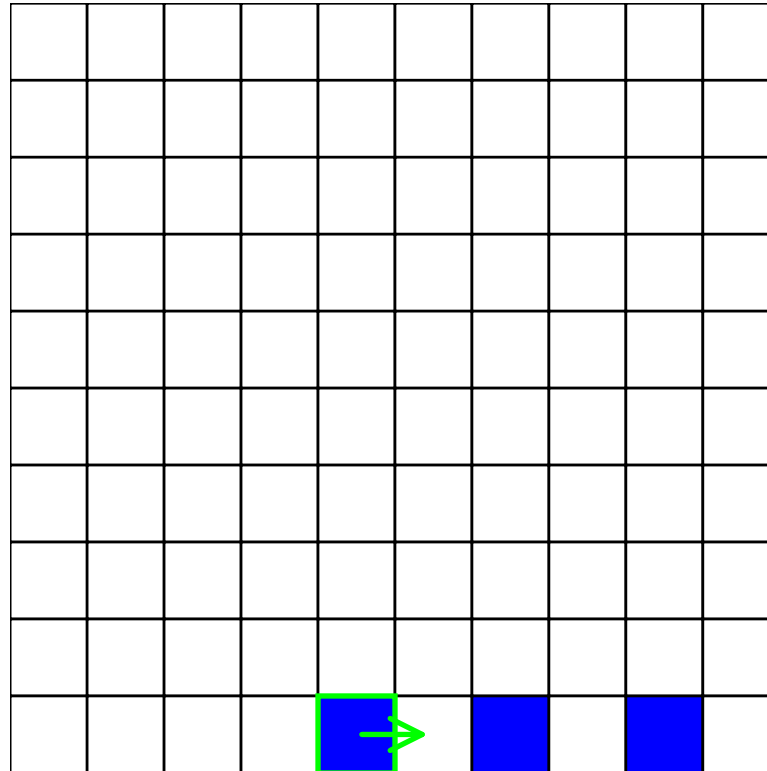
(MOVE 2)

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



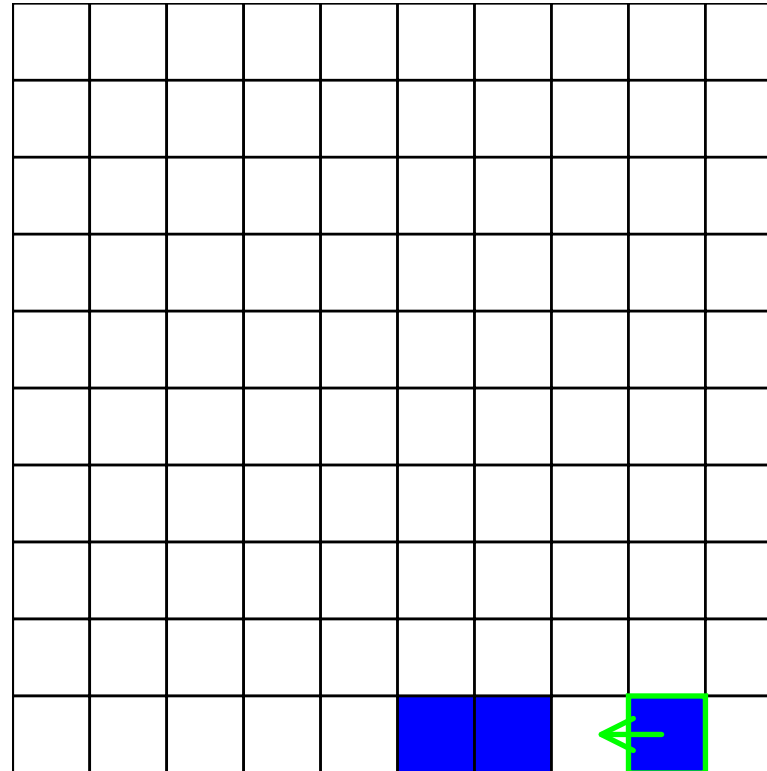
(MOVE 3)

Perform: move_right at position: (9, 4):

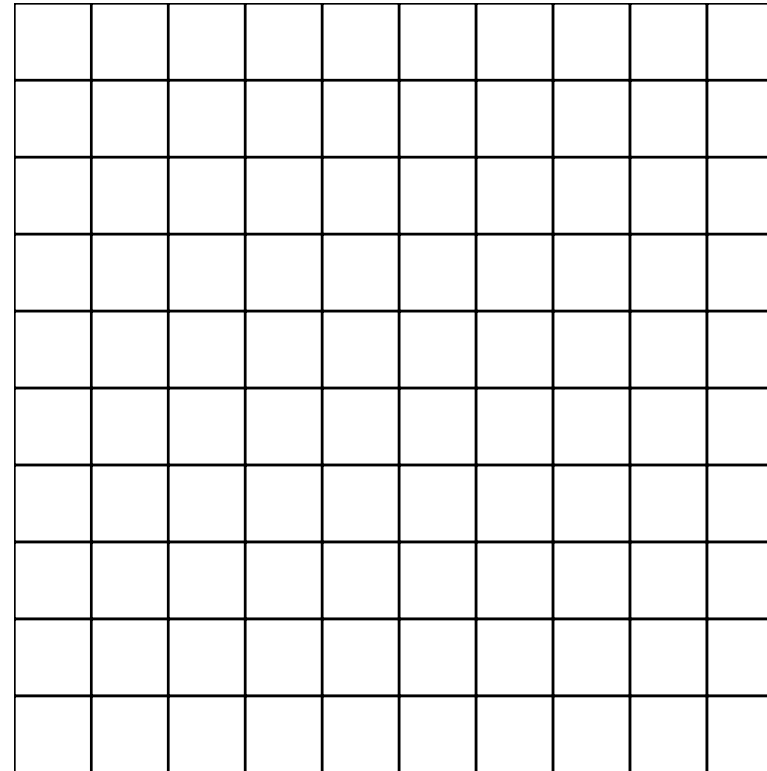


(MOVE 4)

Perform: move_left at position: (9, 8):



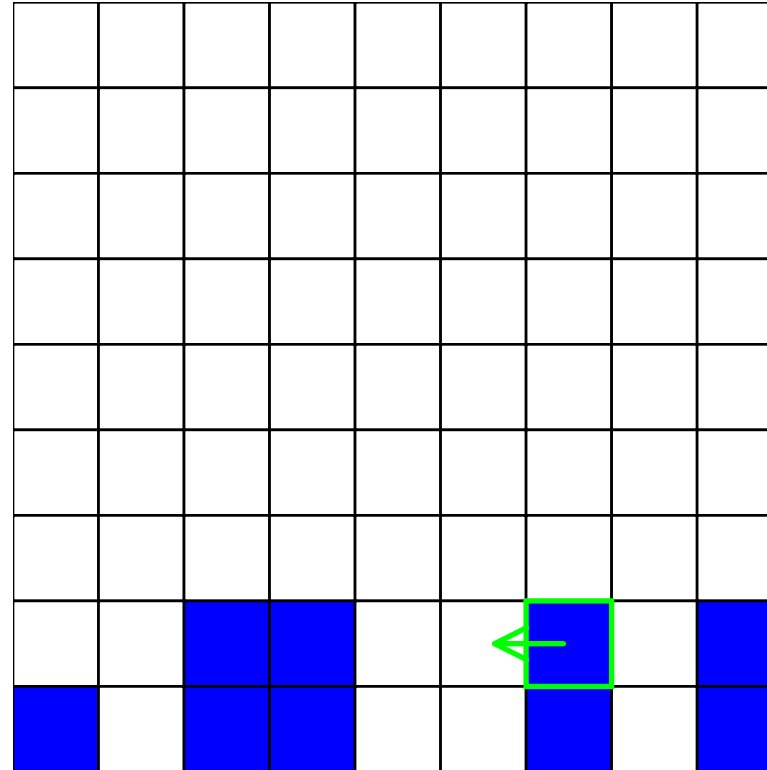
FINAL STATE



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

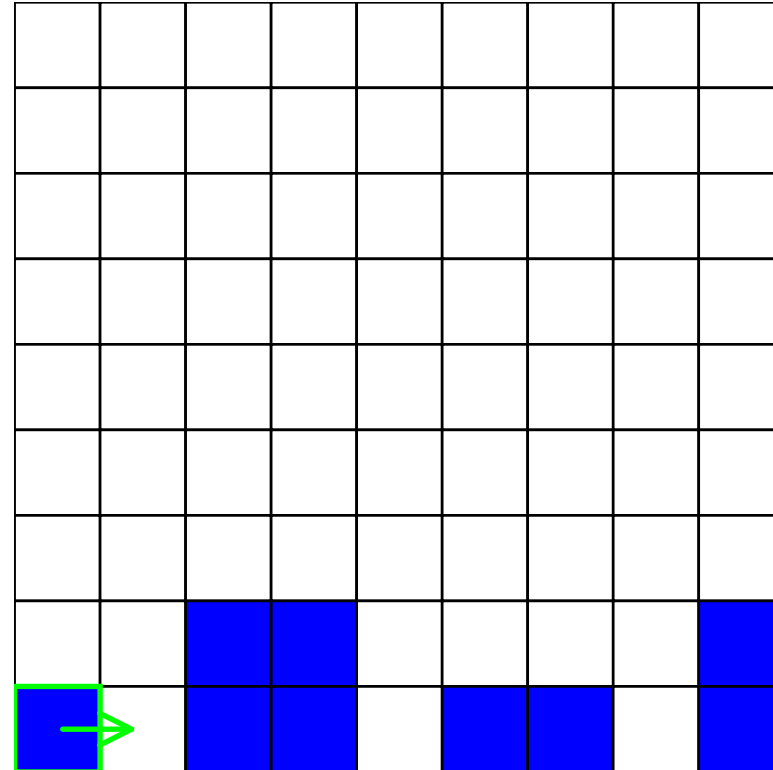
INITIAL STATE: (MOVE 1)

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



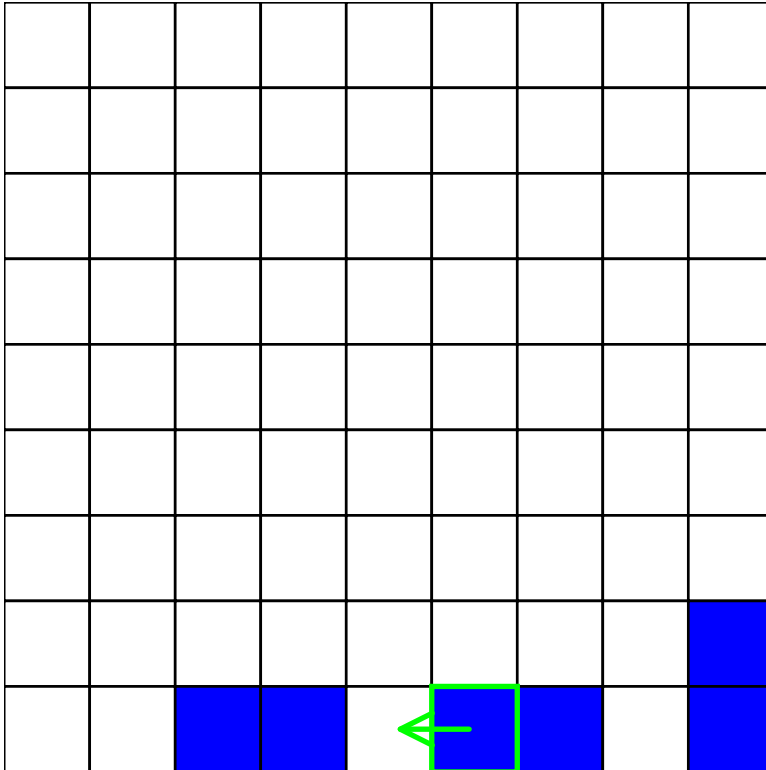
(MOVE 2)

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



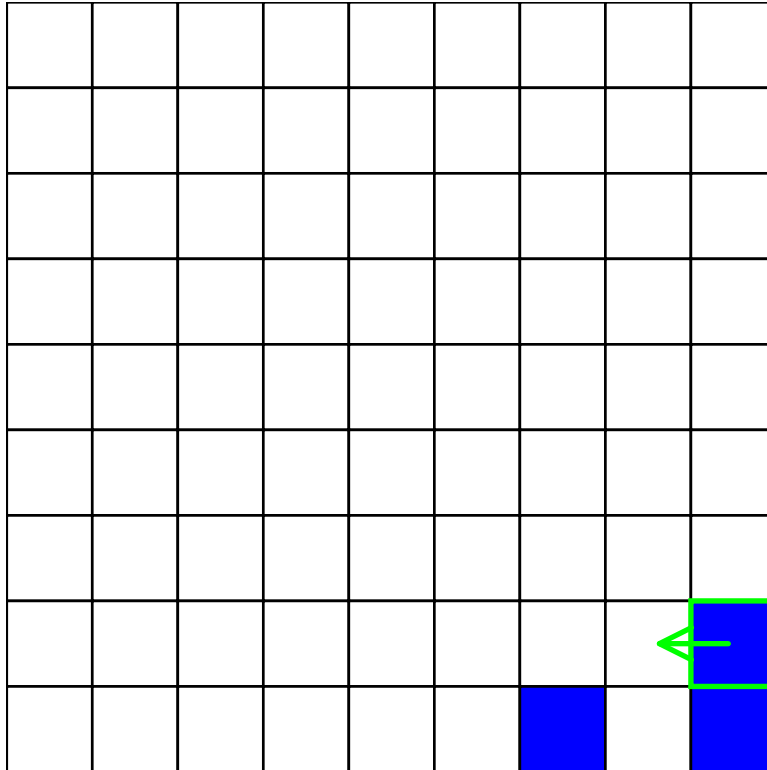
(MOVE 3)

Perform: move_left at position: (8, 5):

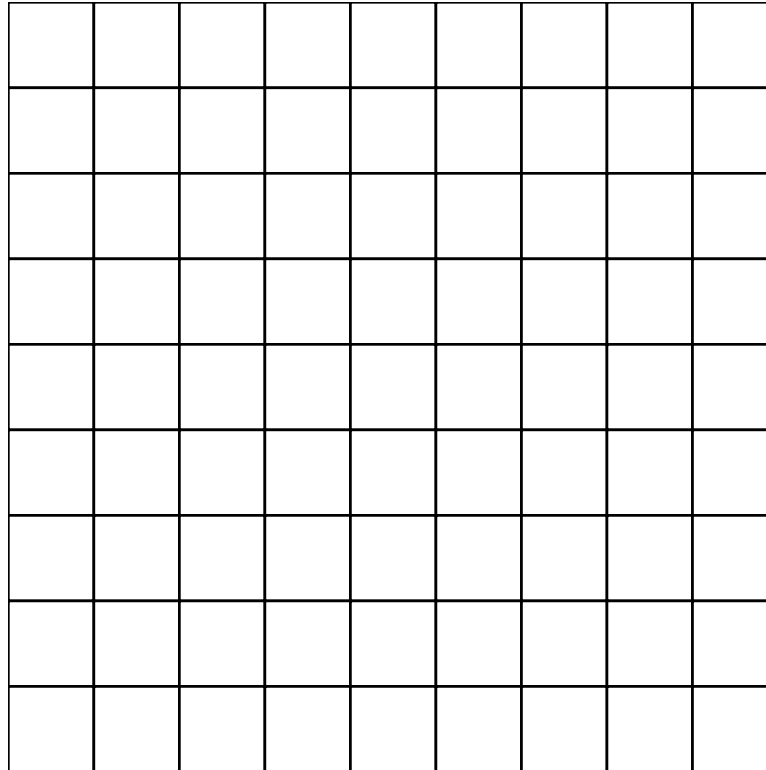


(MOVE 4)

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



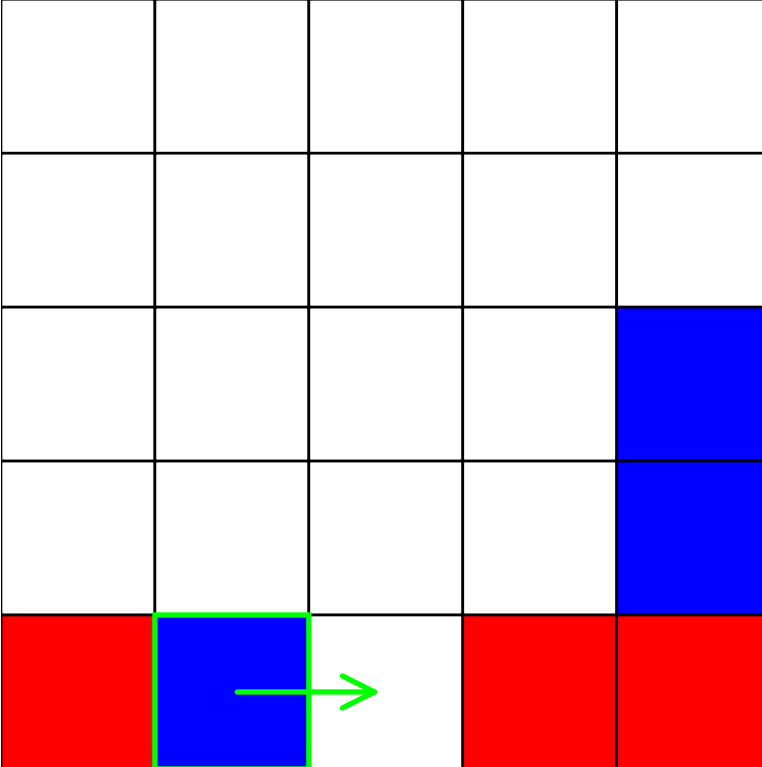
FINAL STATE



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

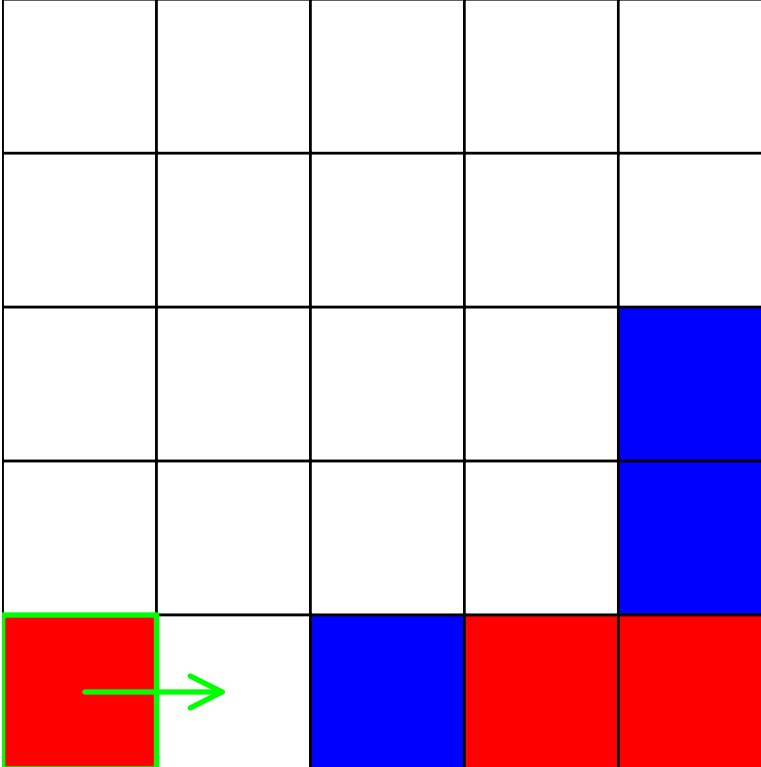
INITIAL STATE: (MOVE 1)

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



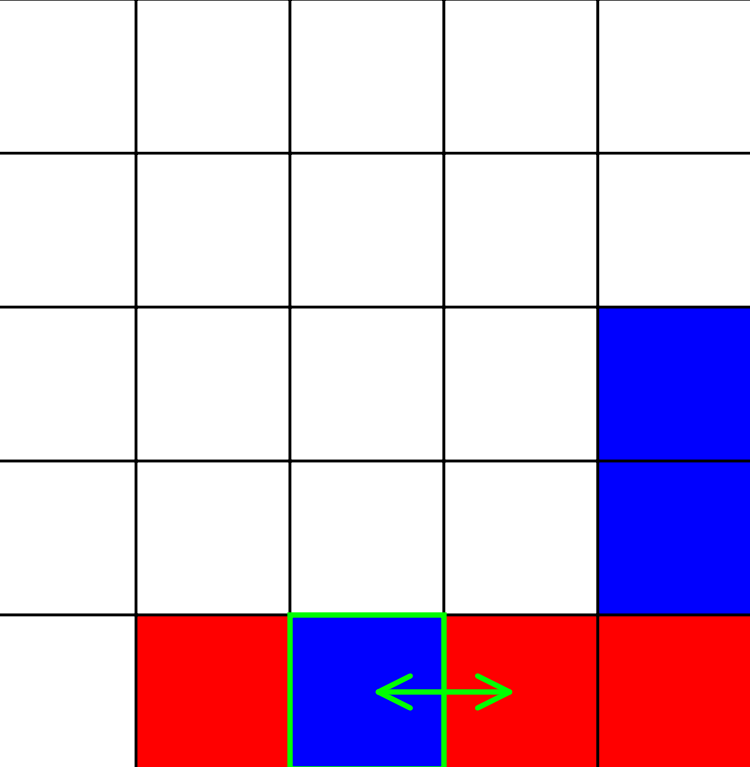
(MOVE 2)

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



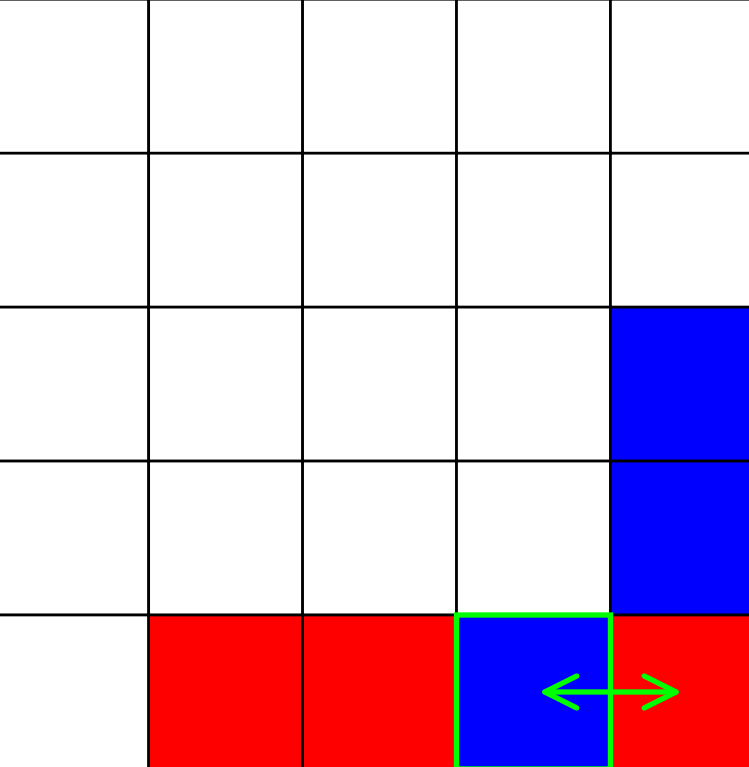
(MOVE 3)

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

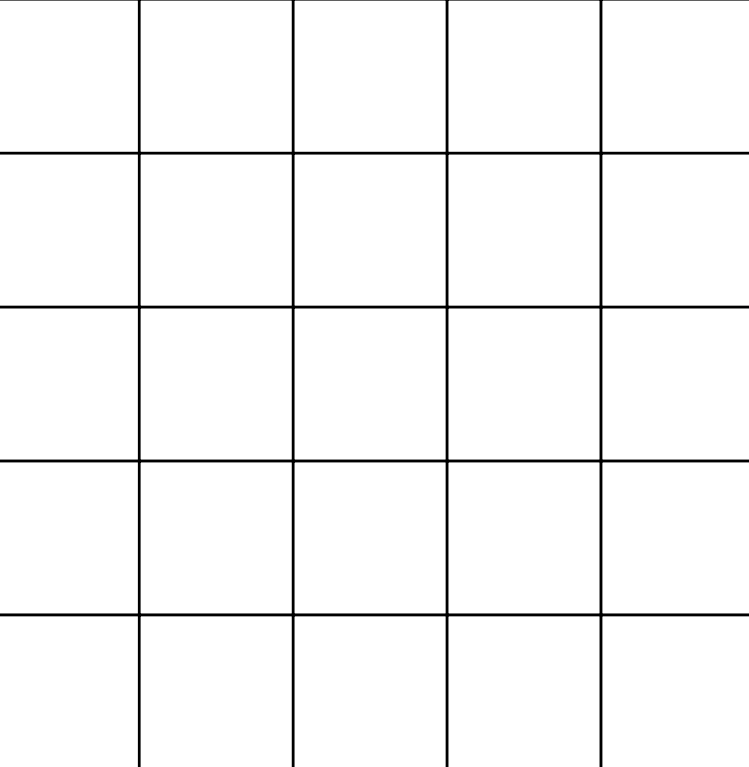


(MOVE 4)

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



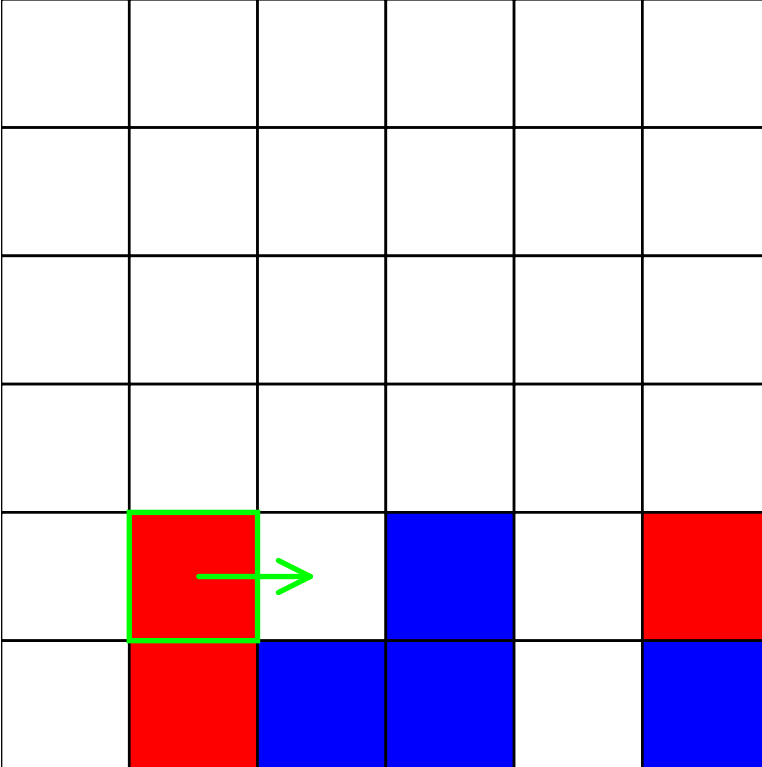
FINAL STATE



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

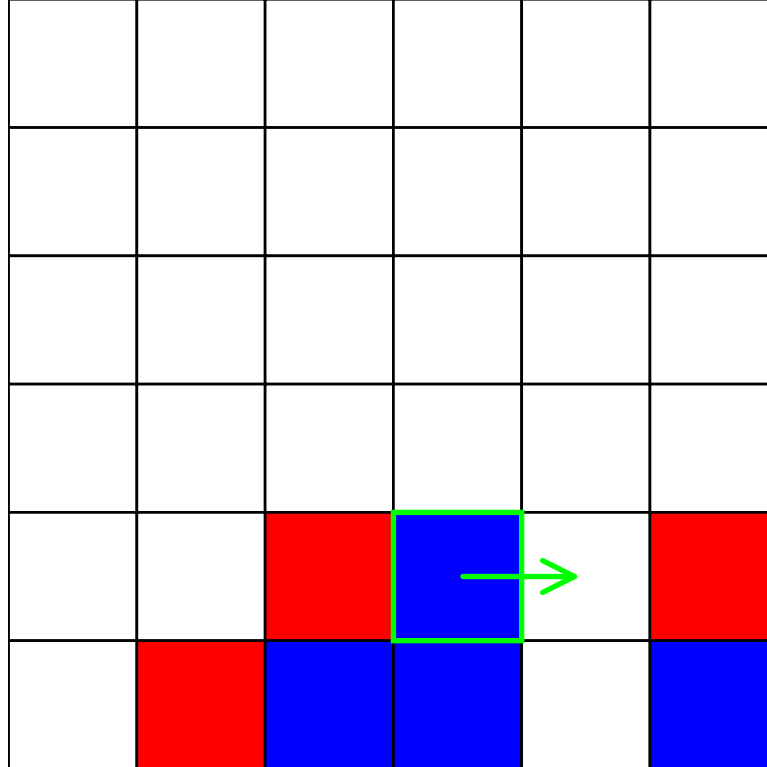
INITIAL STATE: (MOVE 1)

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



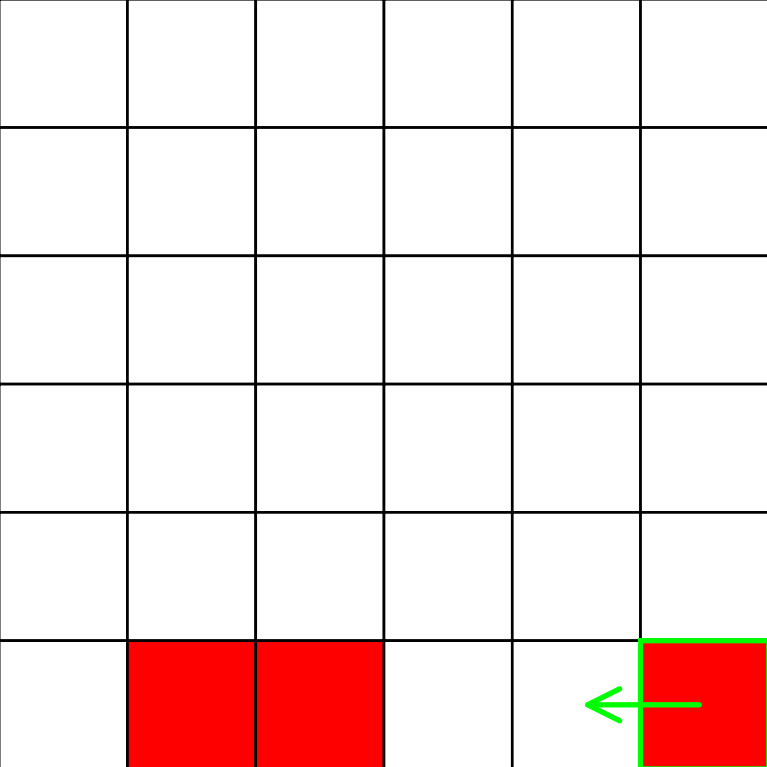
(MOVE 2)

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



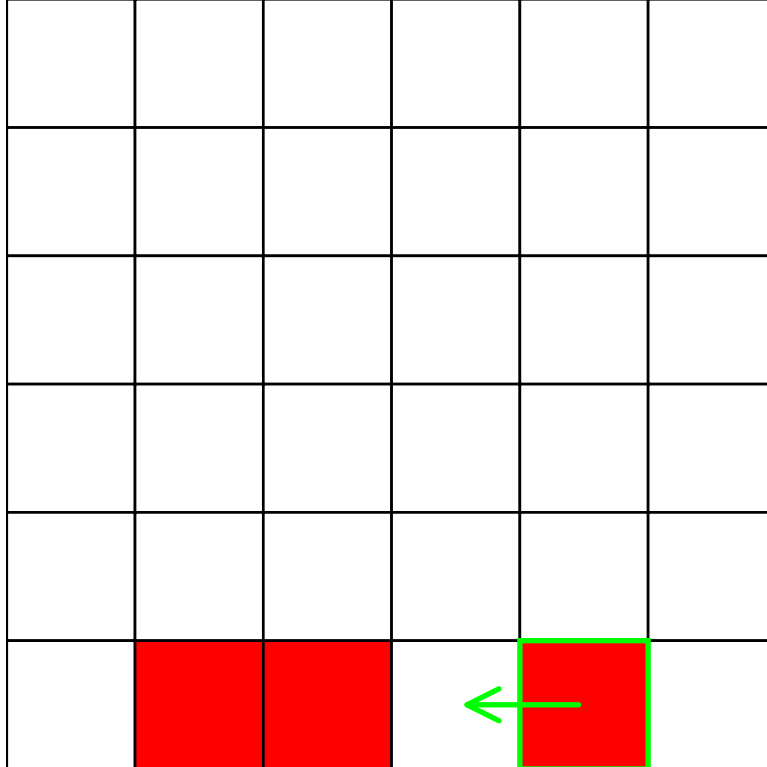
(MOVE 3)

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

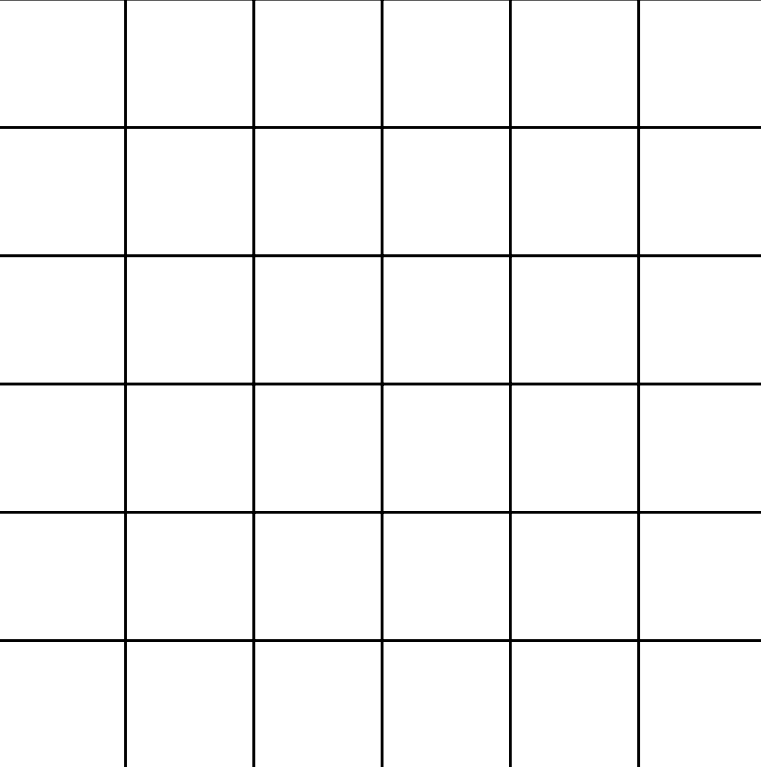


(MOVE 4)

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



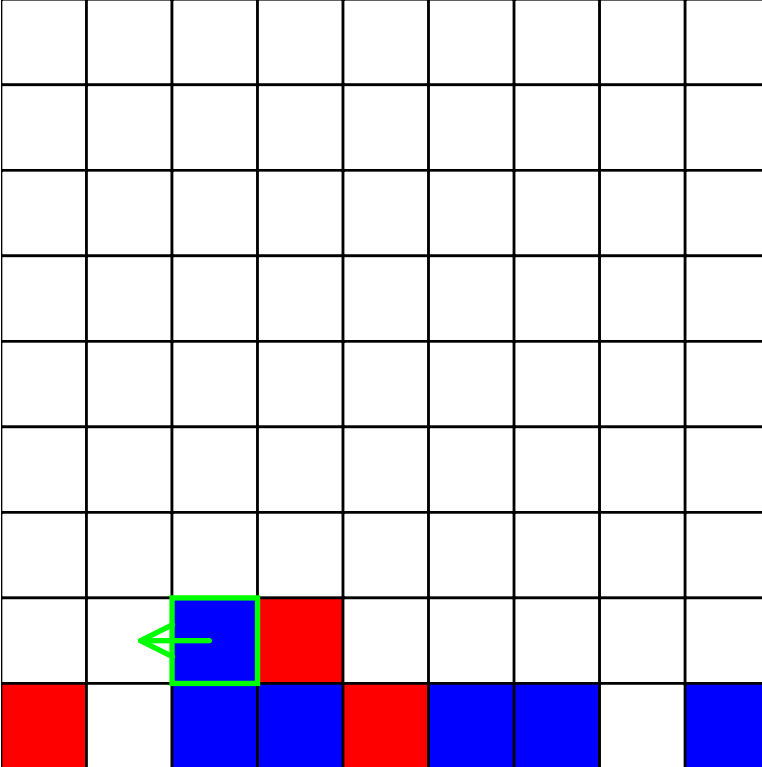
FINAL STATE



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

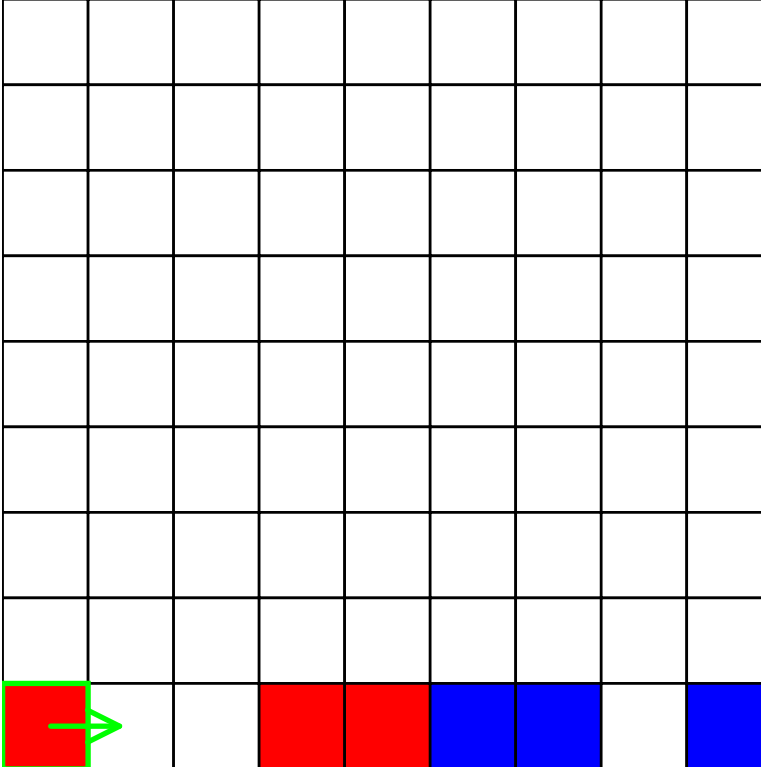
INITIAL STATE: (MOVE 1)

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



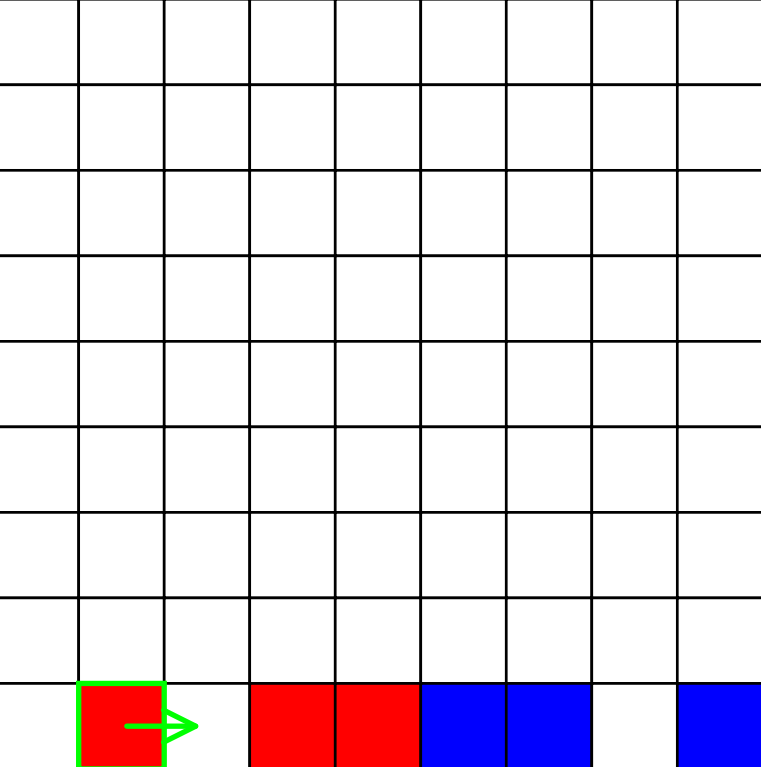
(MOVE 2)

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



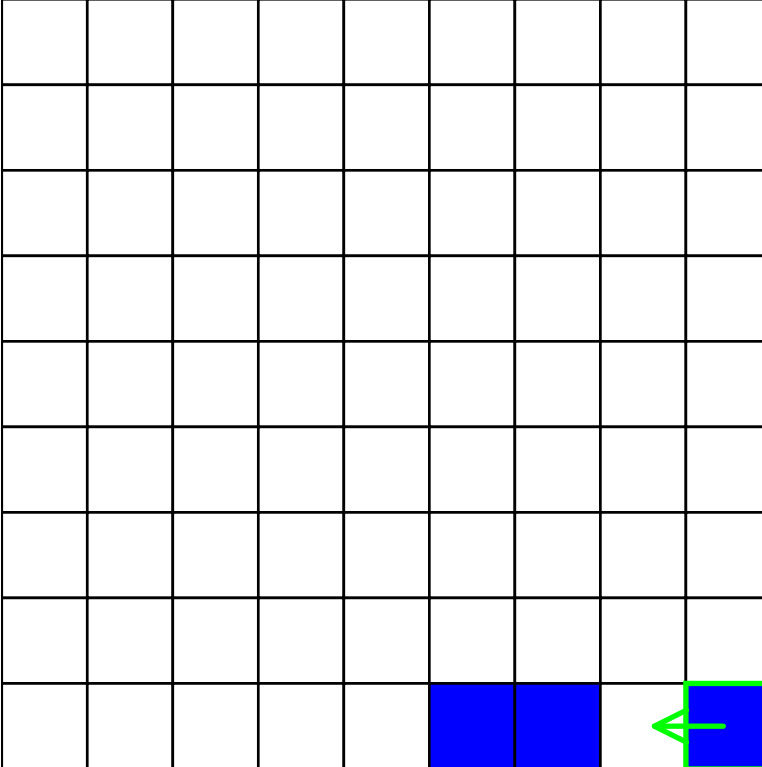
(MOVE 3)

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

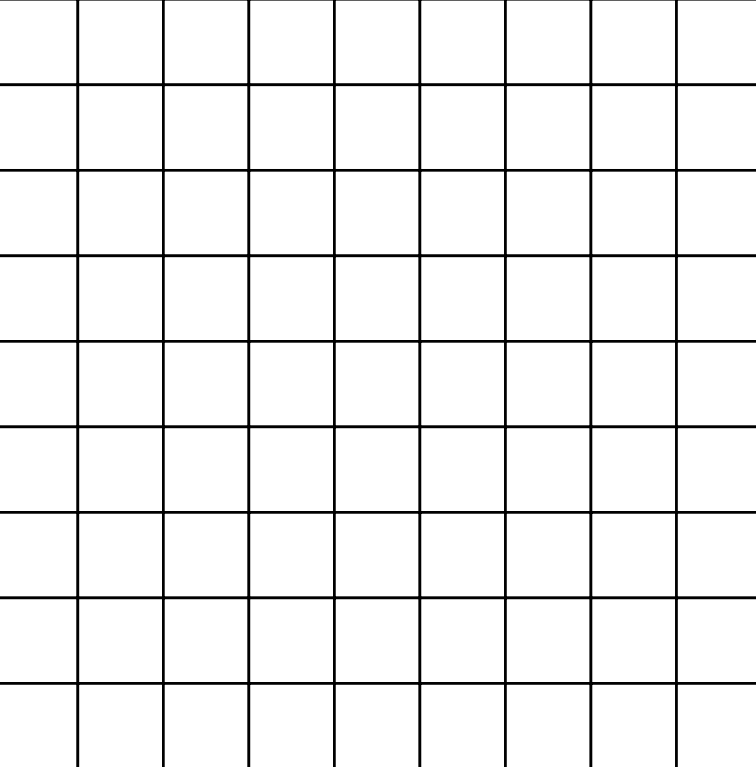


(MOVE 4)

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



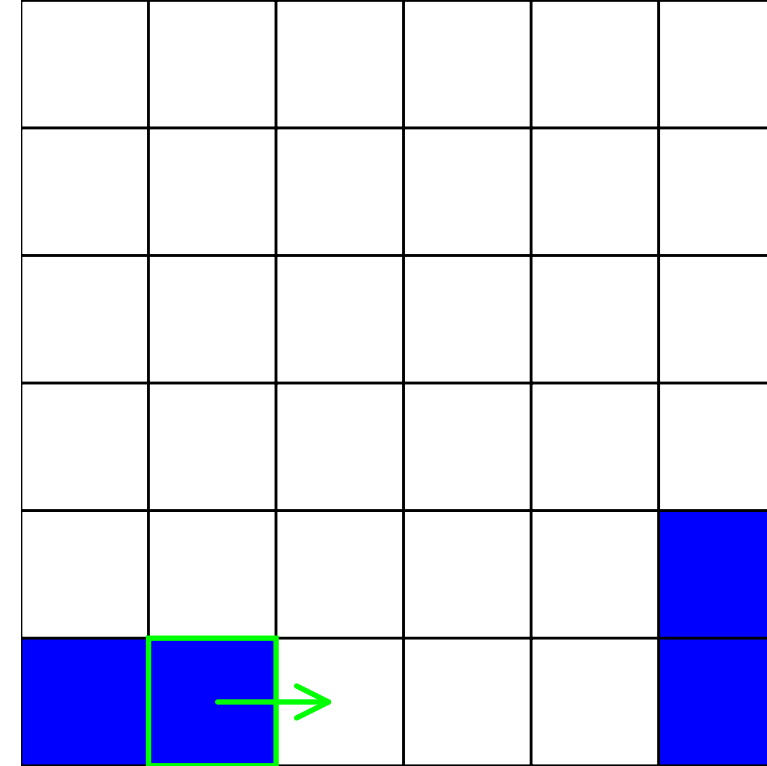
FINAL STATE



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

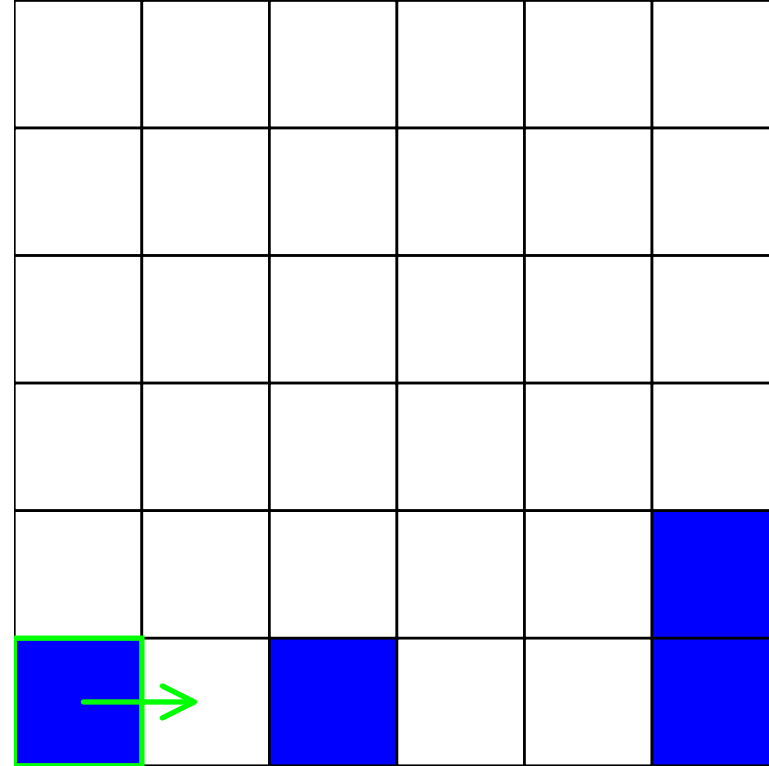
INITIAL STATE: (MOVE 1)

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



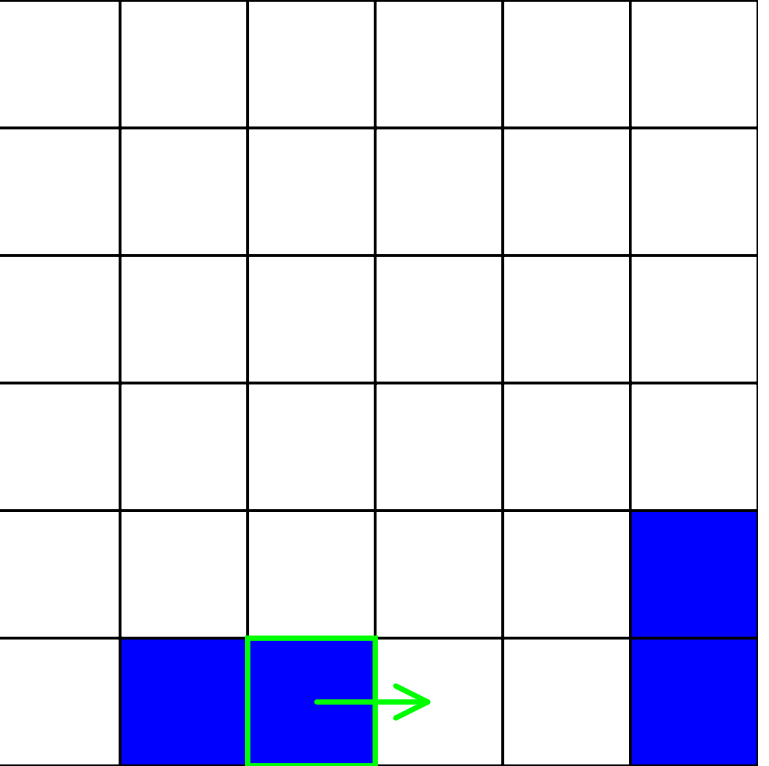
(MOVE 2)

Perform: move_right at position: (5, 0):



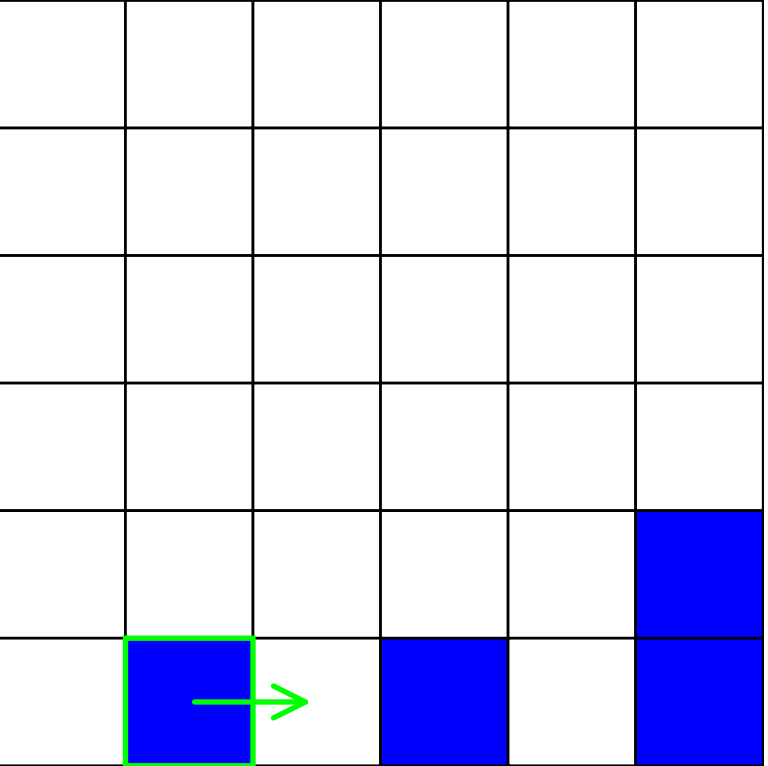
(MOVE 3)

Perform: move_right at position: (5, 2):



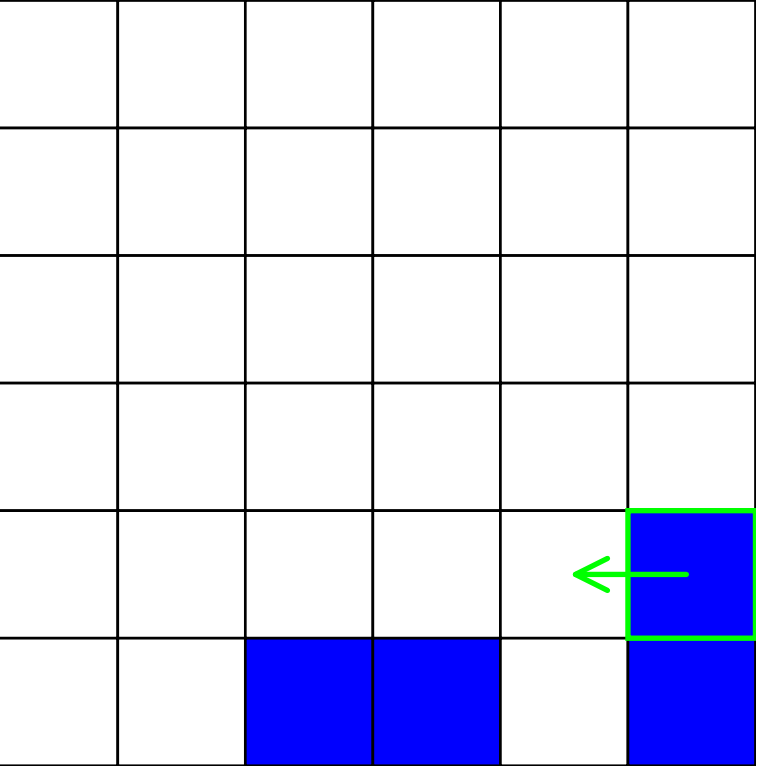
(MOVE 4)

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

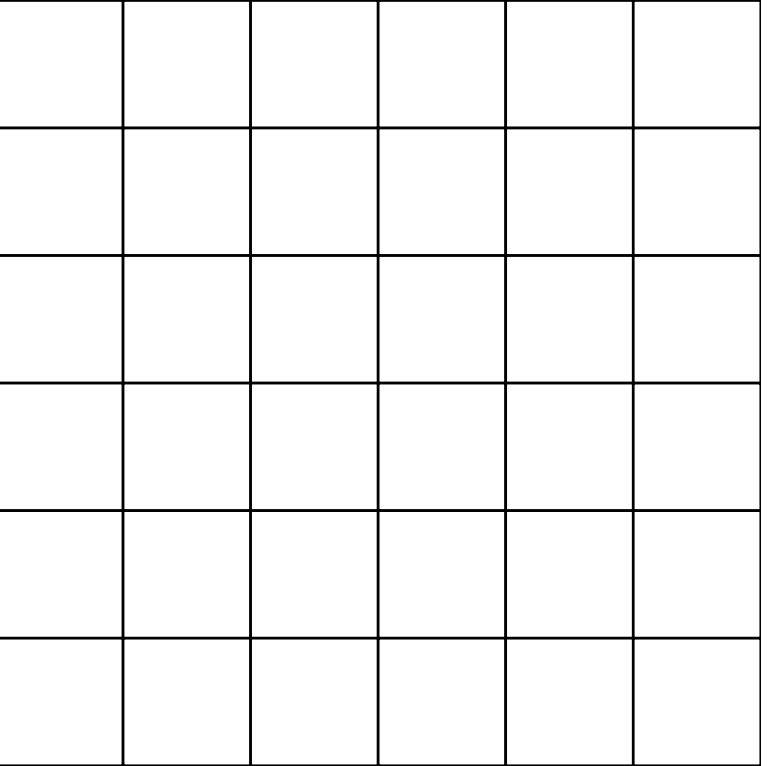


(MOVE 5)

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



FINAL STATE



INITIAL STATE: (MOVE 1

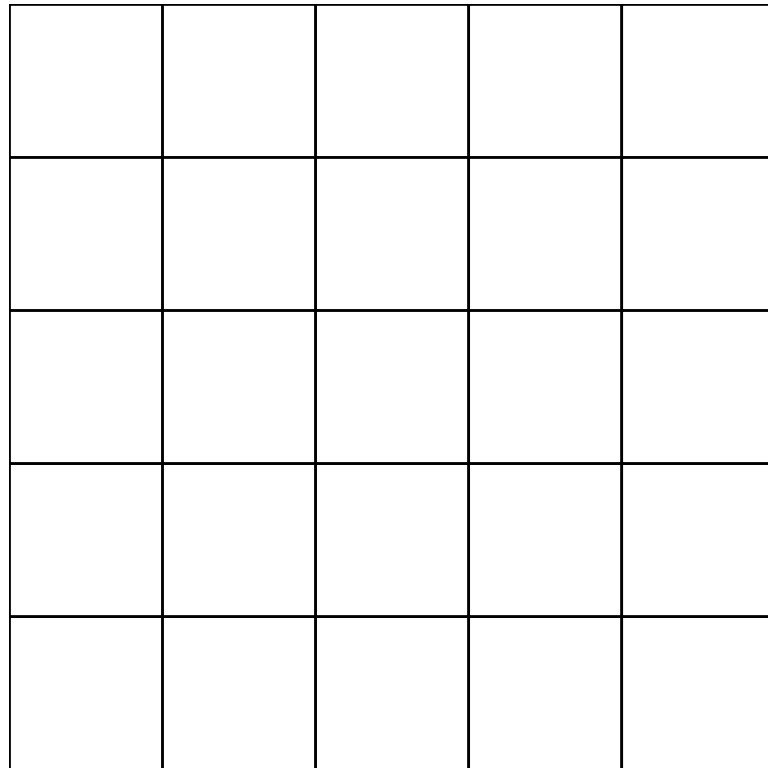
(MOVE 2)

(MOVE 3)

(MOVE 4)

(MOVE 5)

FINAL STATE



INITIAL STATE: (MOVE 1

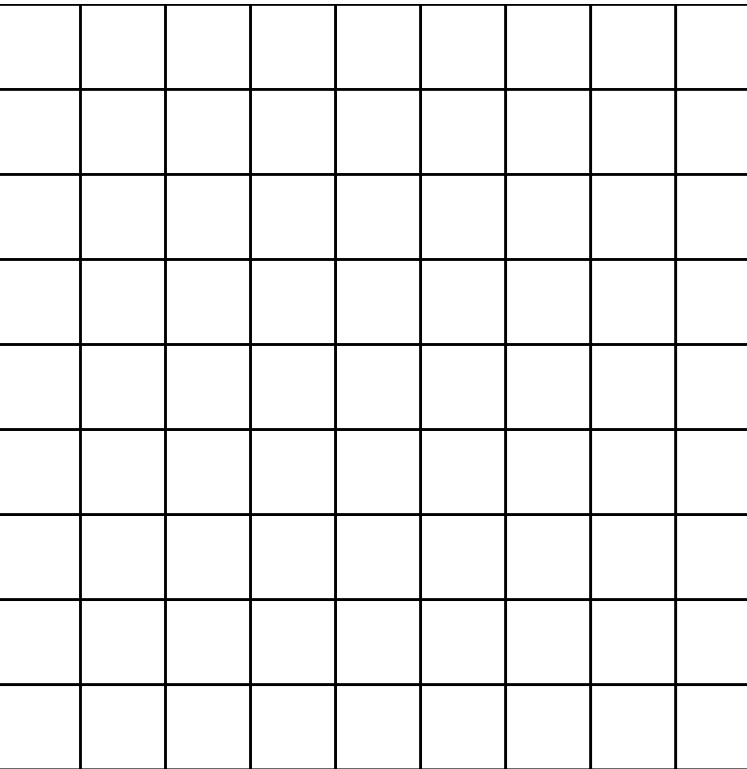
(MOVE 2)

(MOVE 3)

(MOVE 4)

(MOVE 5)

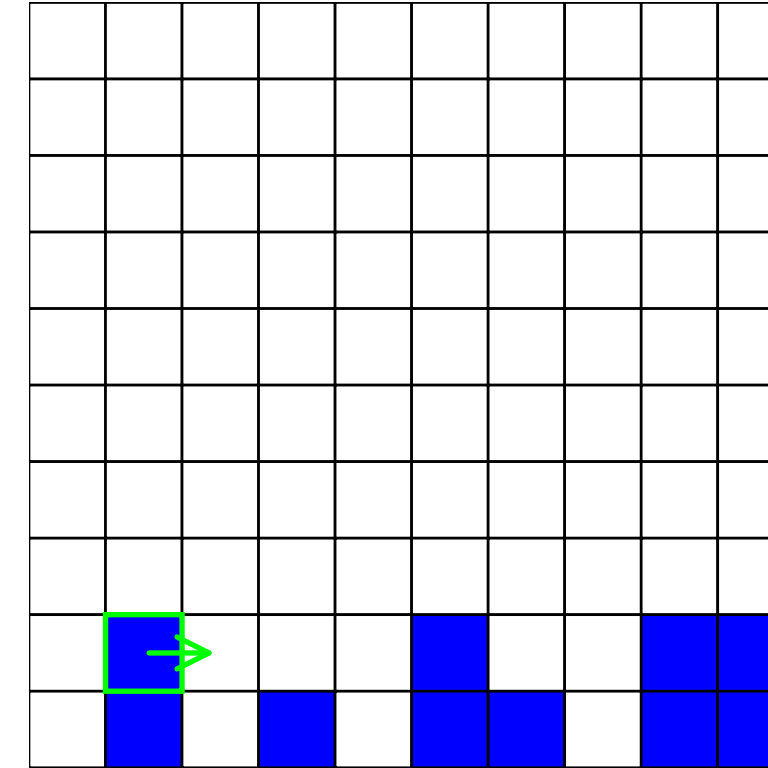
FINAL STATE



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

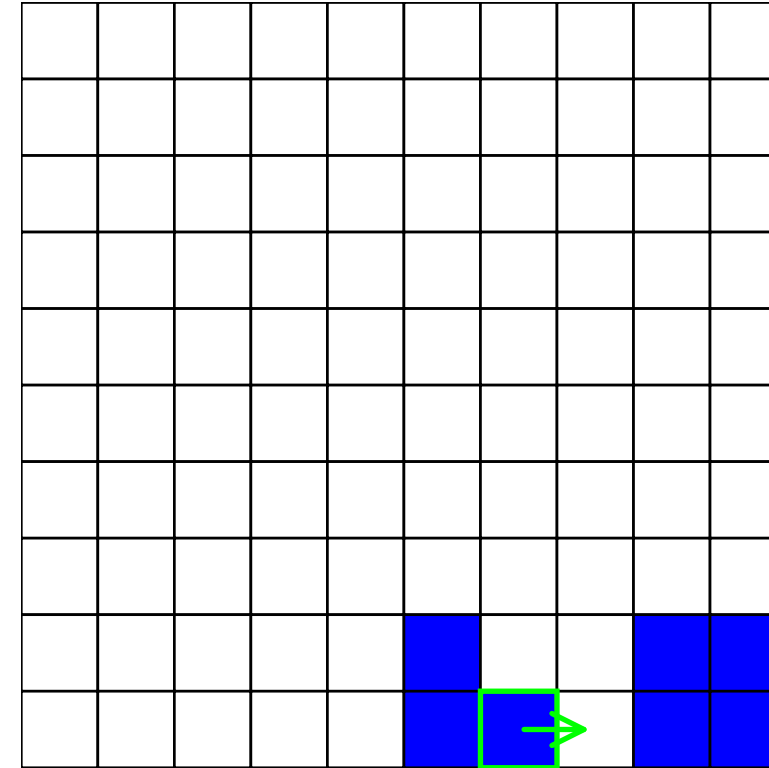
INITIAL STATE: (MOVE 1)

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



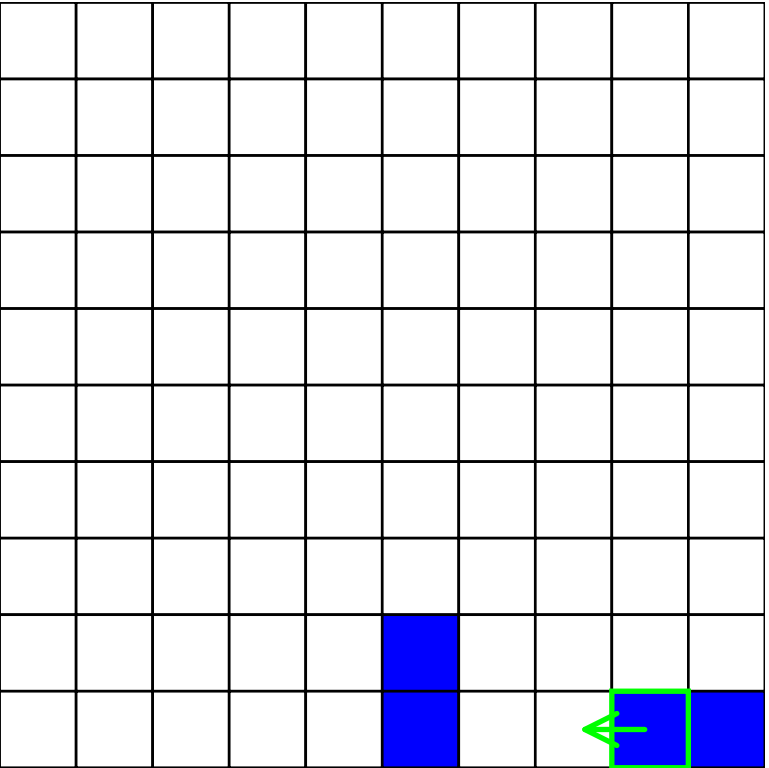
(MOVE 2)

Perform: move_right at position: (9, 6):



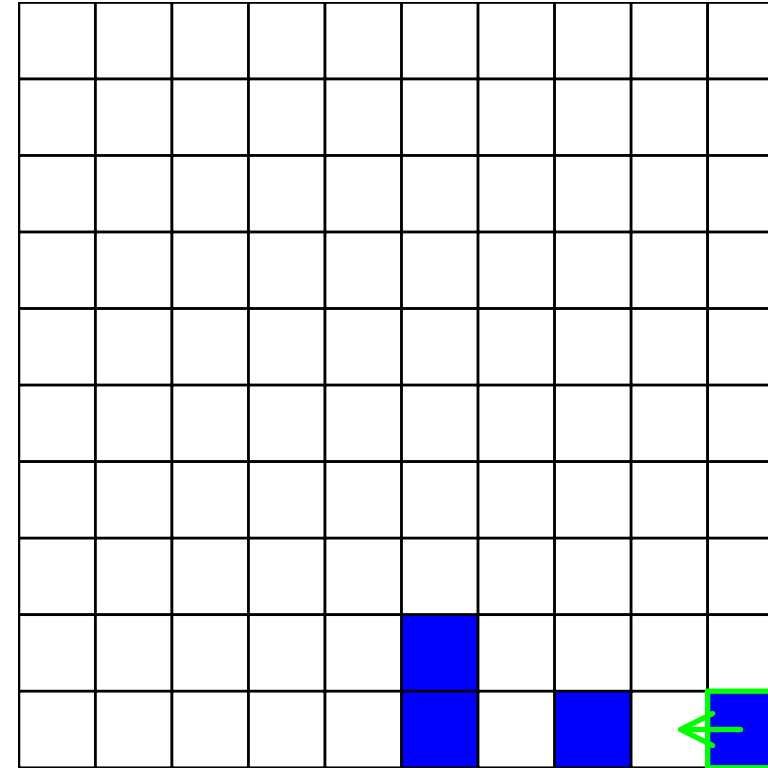
(MOVE 3)

Perform: move_left at position: (9, 8):



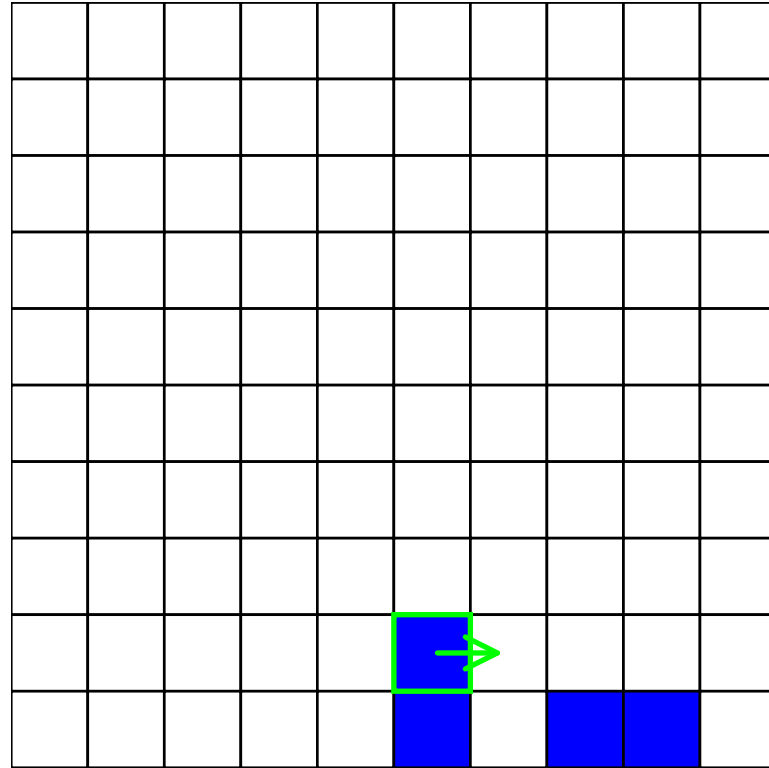
(MOVE 4)

Perform: move_left at position: (9, 9):

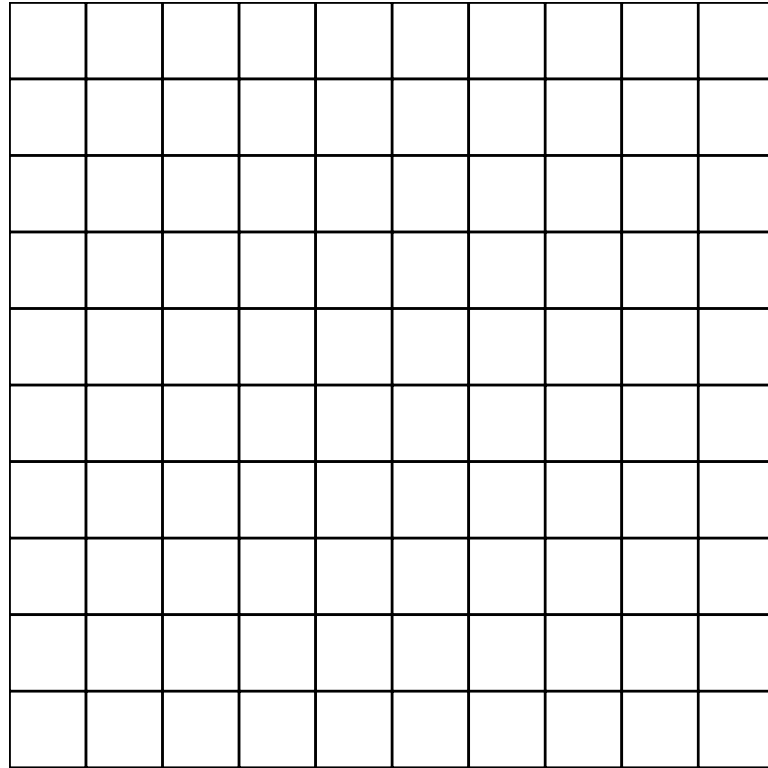


(MOVE 5)

Perform: move_right at position: (8, 5):



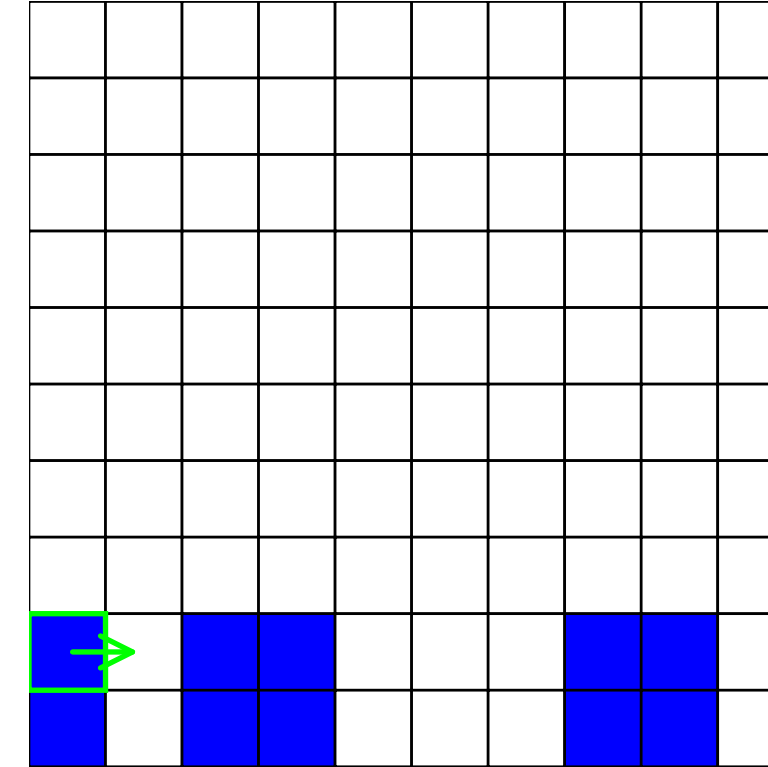
FINAL STATE



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

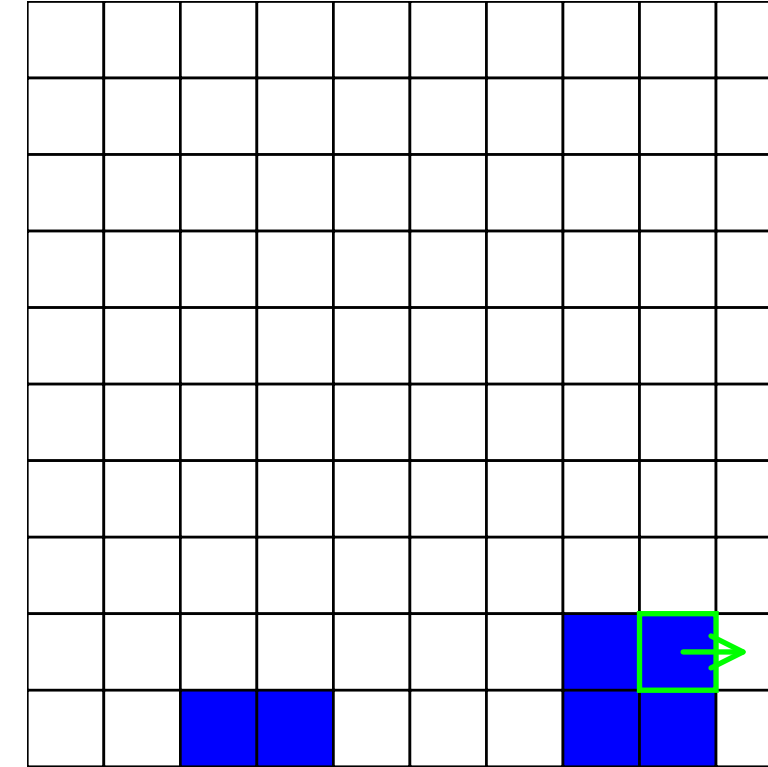
INITIAL STATE: (MOVE 1)

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



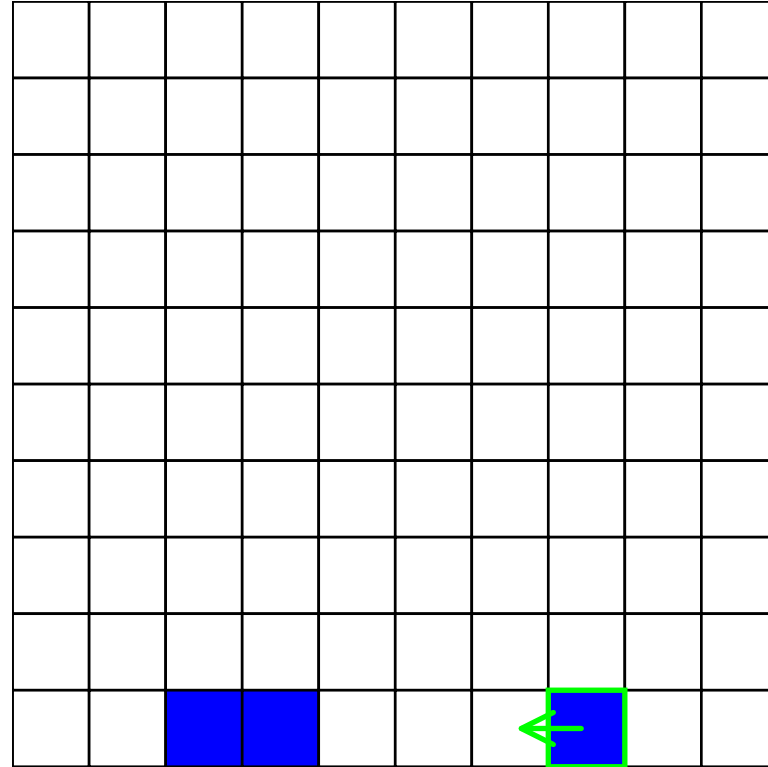
(MOVE 2)

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



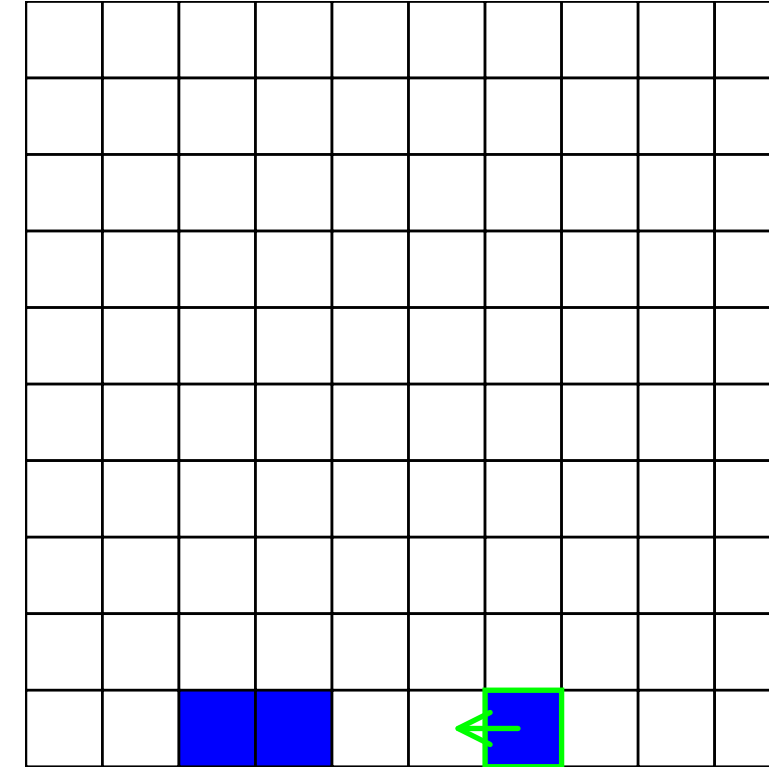
(MOVE 3)

Perform: move_left at position: (9, 7):



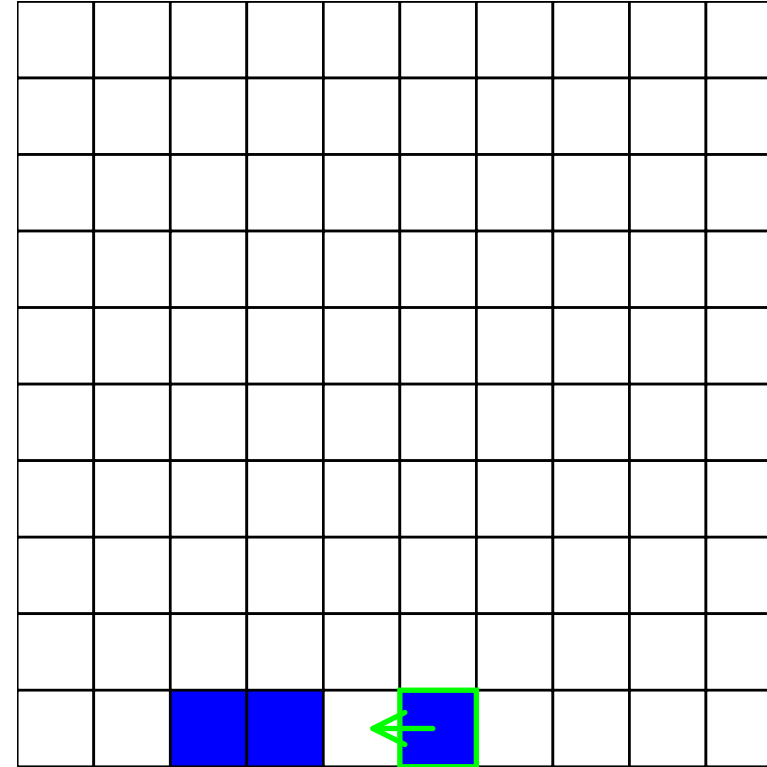
(MOVE 4)

Perform: move_left at position: (9, 6):

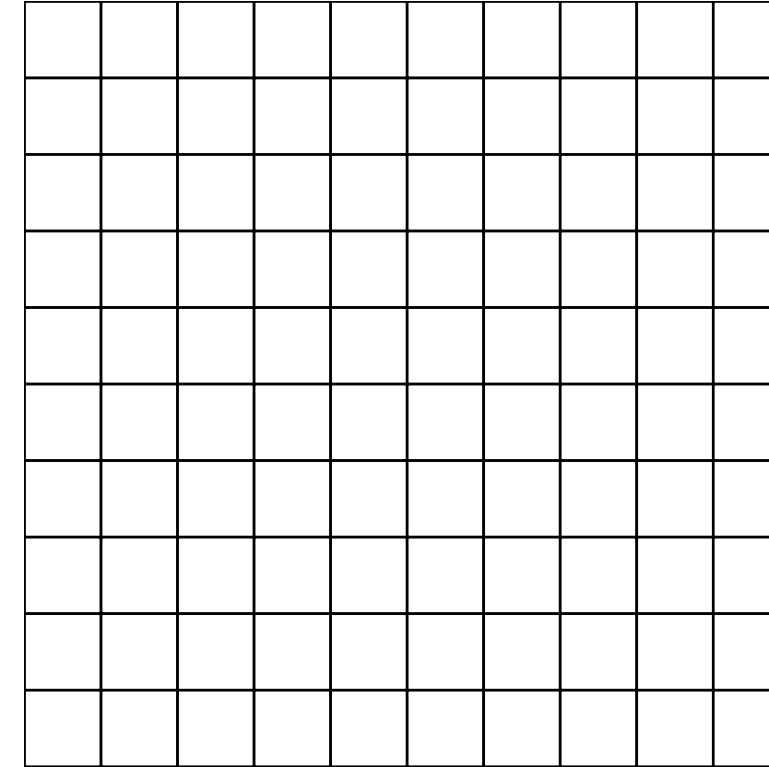


(MOVE 5)

Perform: move_left at position: (9, 5):



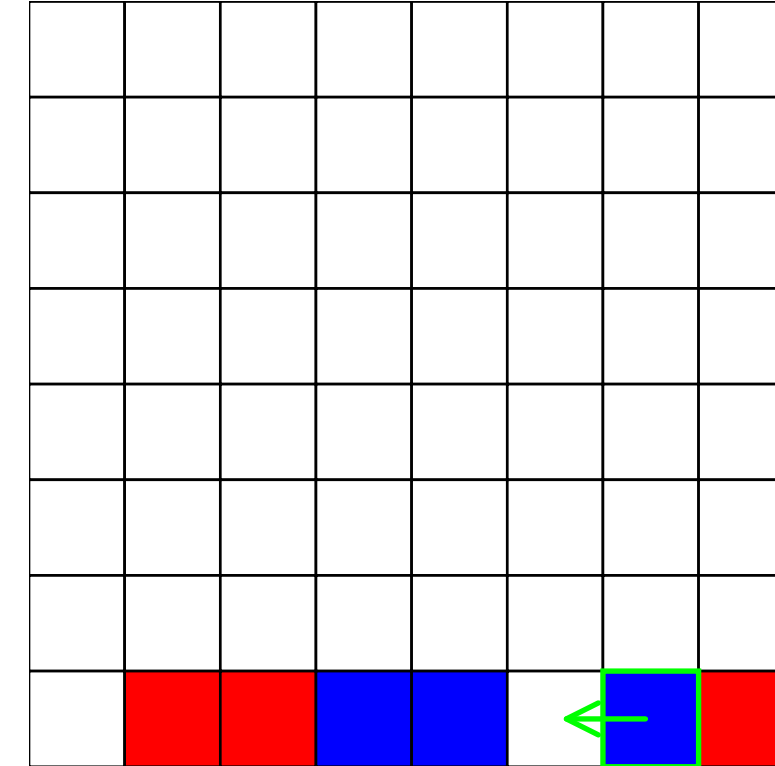
FINAL STATE



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

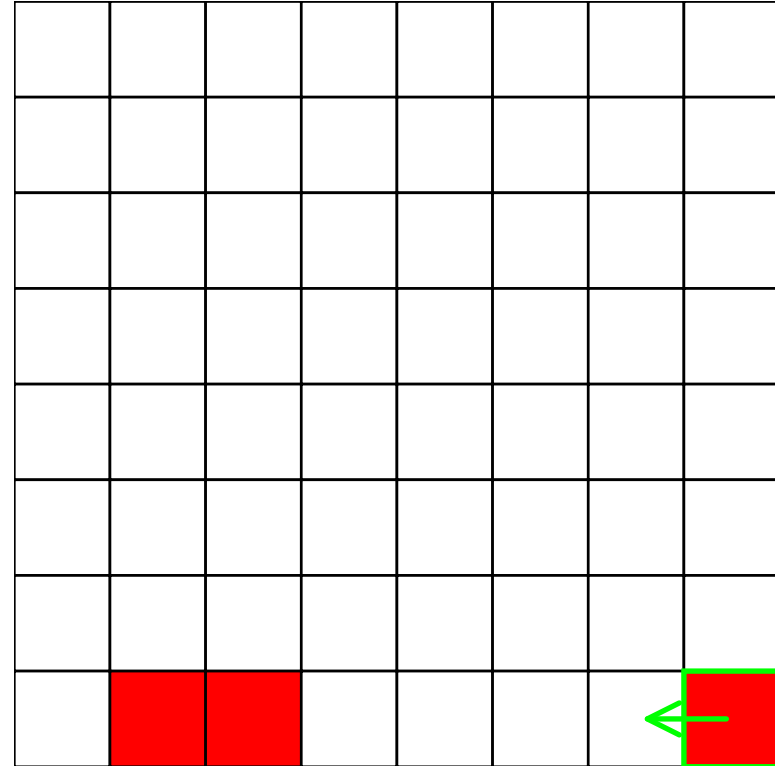
INITIAL STATE: (MOVE 1)

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



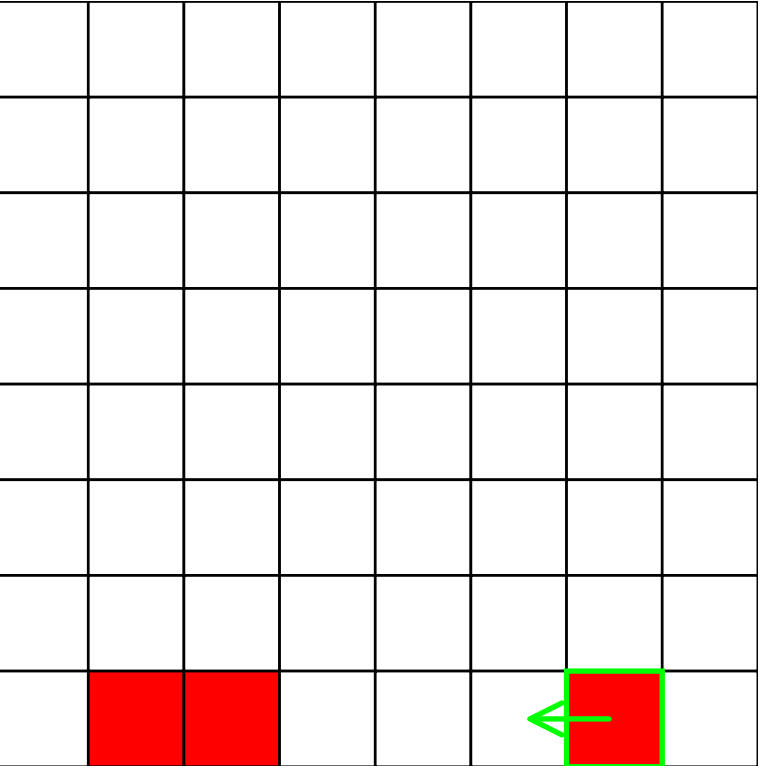
(MOVE 2)

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



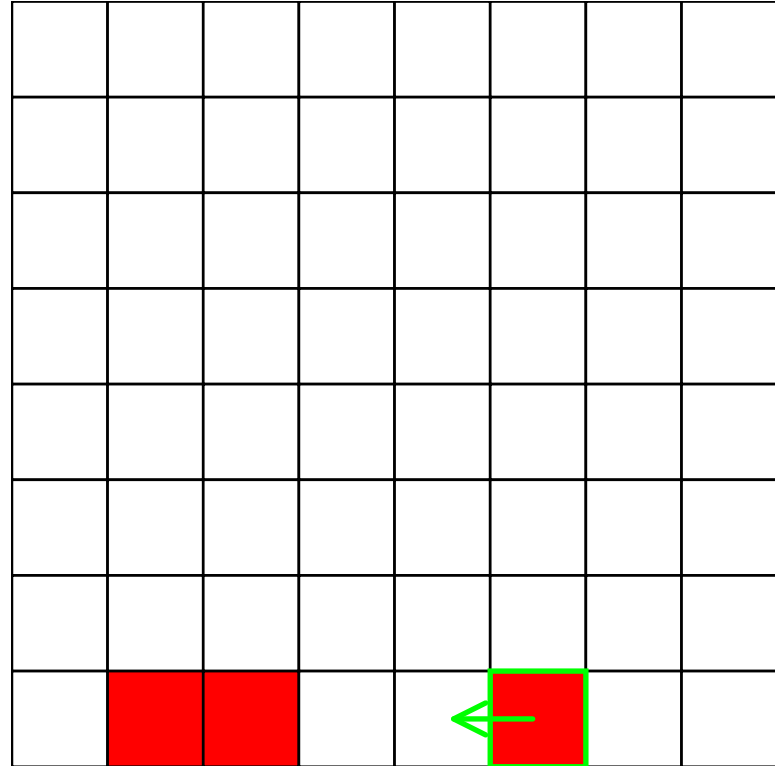
(MOVE 3)

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



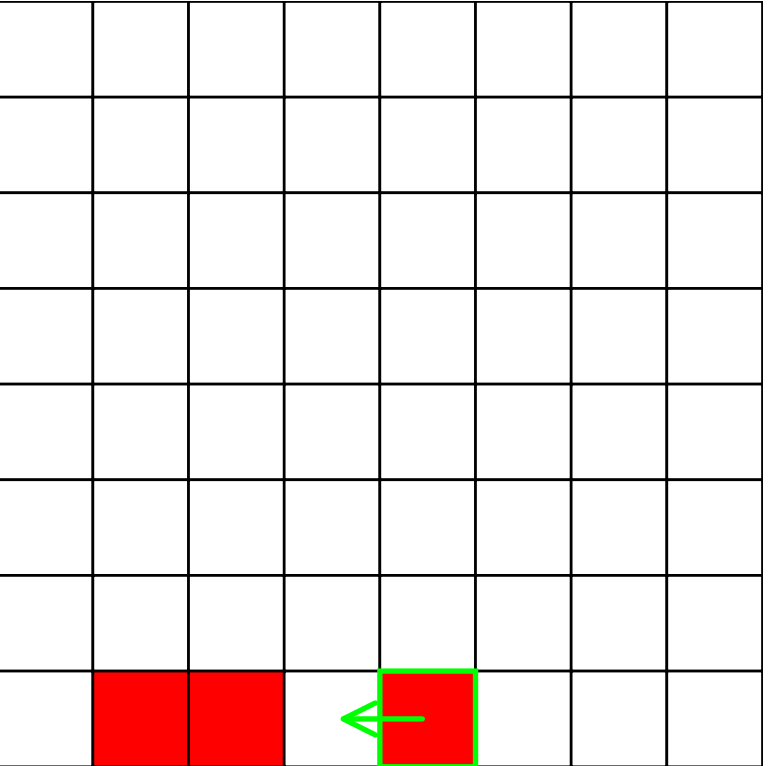
(MOVE 4)

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

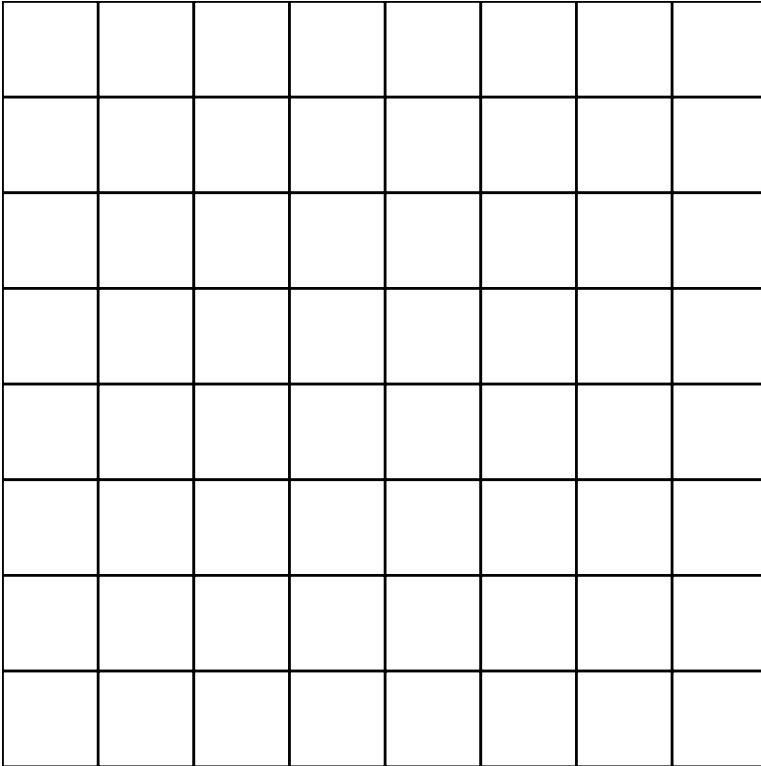


(MOVE 5)

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



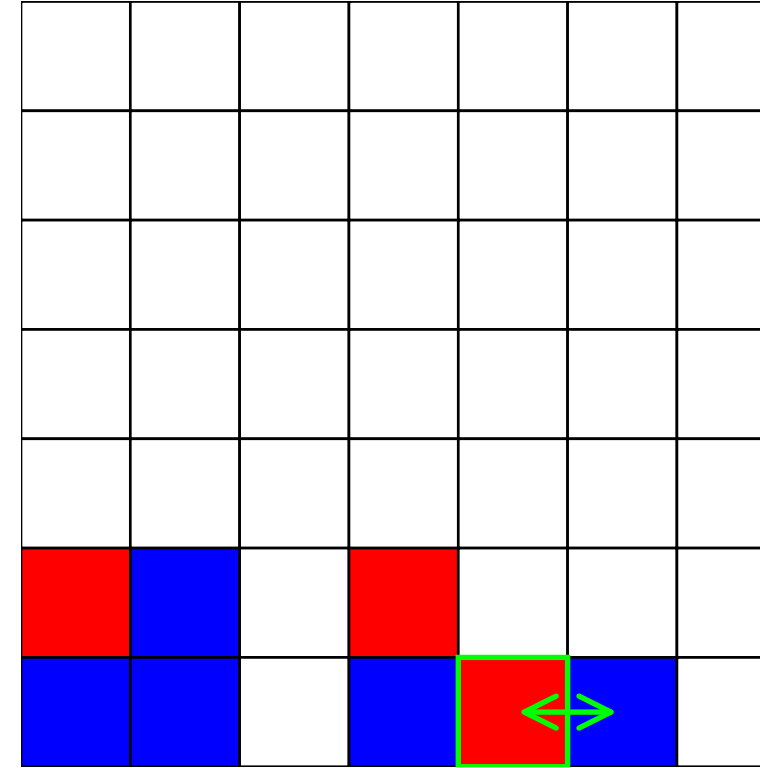
FINAL STATE



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

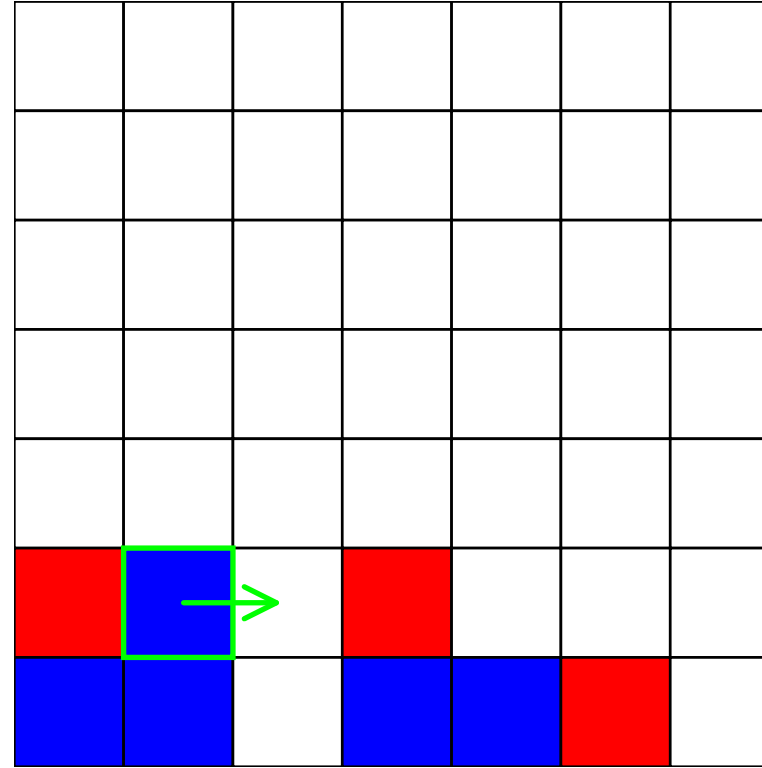
INITIAL STATE: (MOVE 1)

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



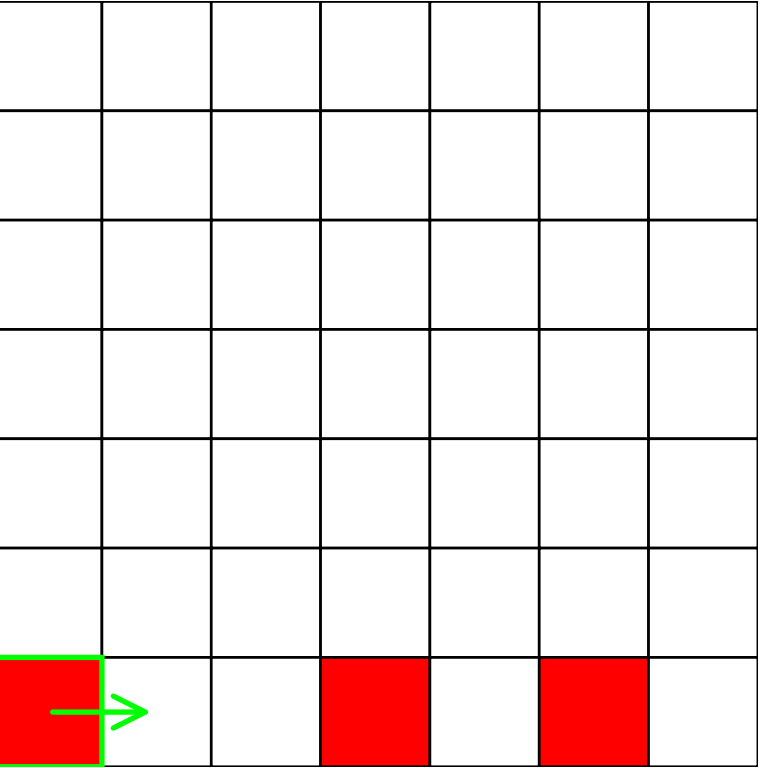
(MOVE 2)

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



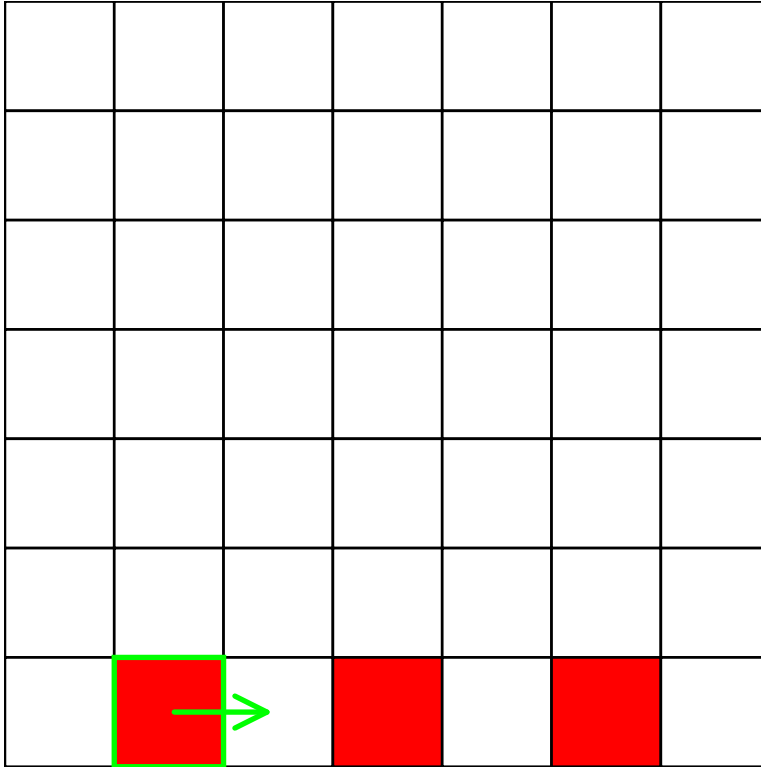
(MOVE 3)

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



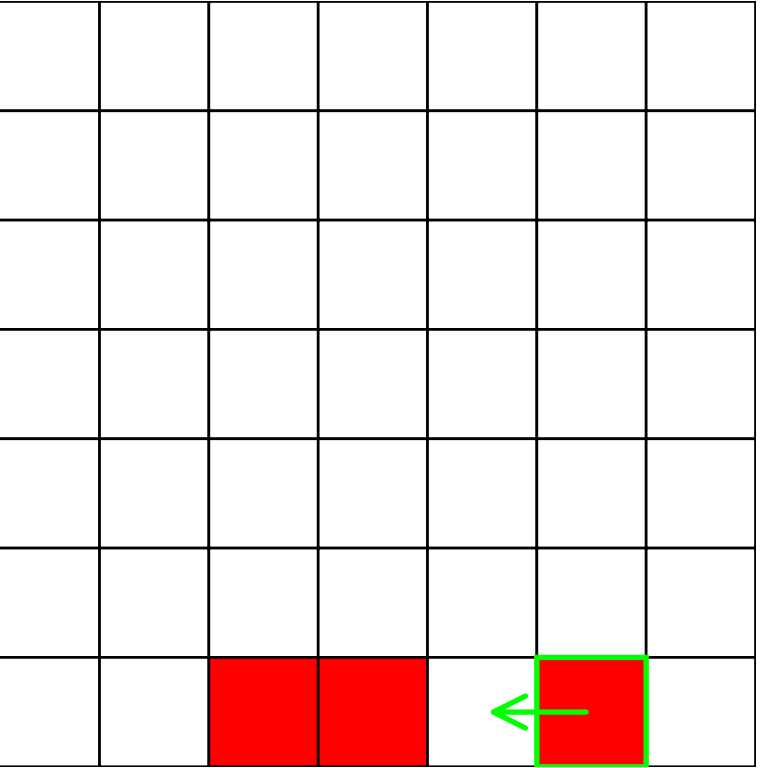
(MOVE 4)

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

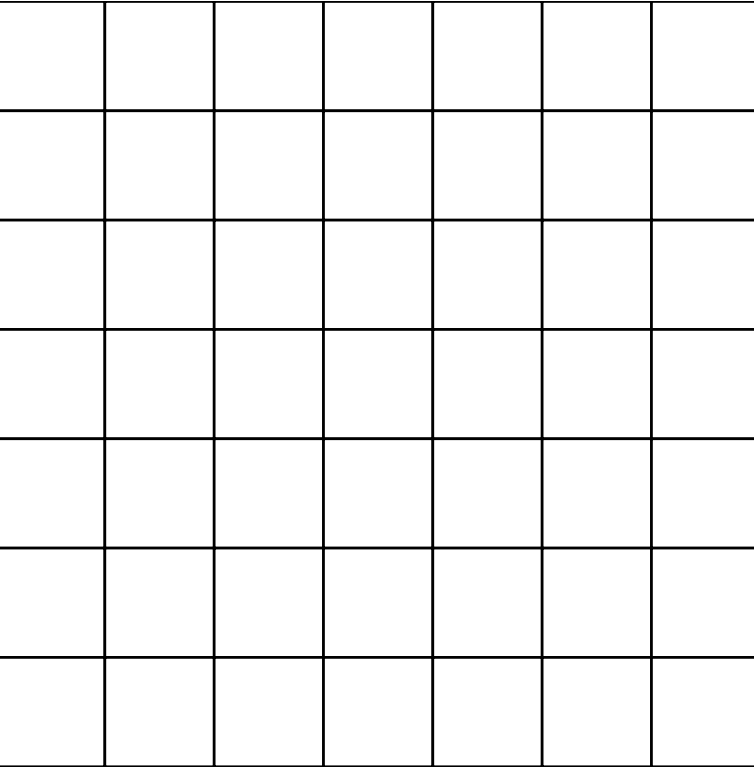


(MOVE 5)

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



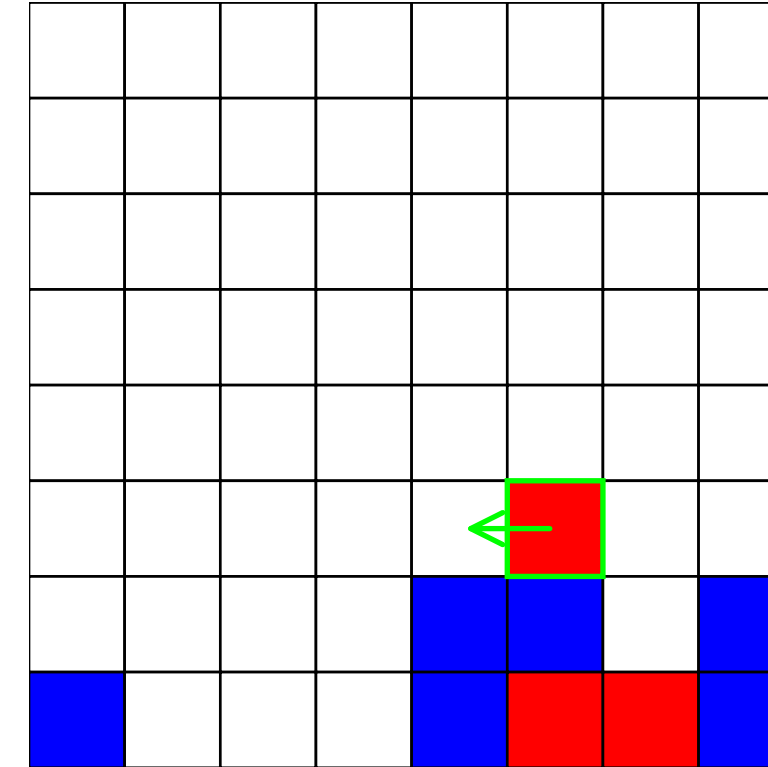
FINAL STATE



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

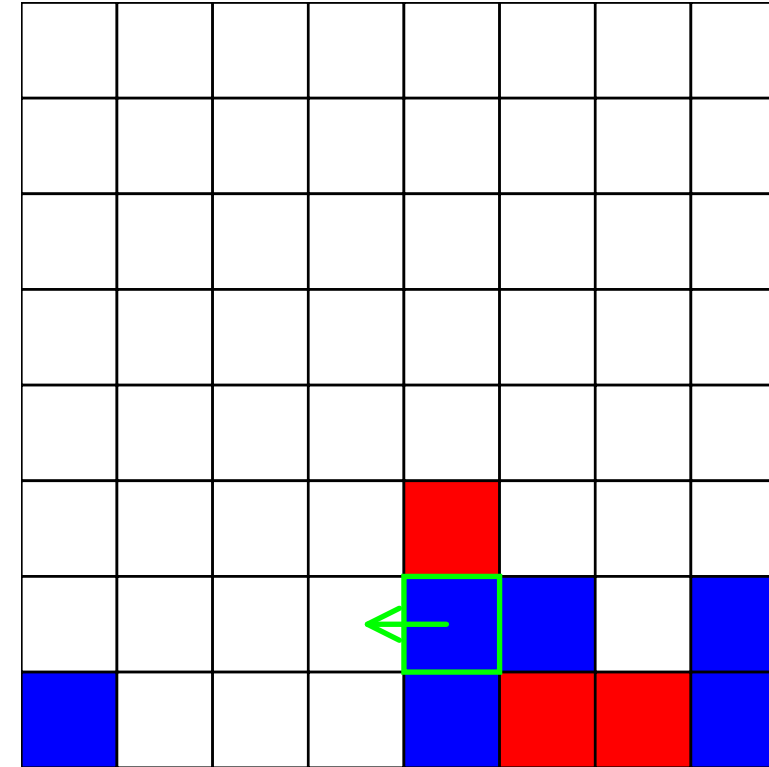
INITIAL STATE: (MOVE 1)

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



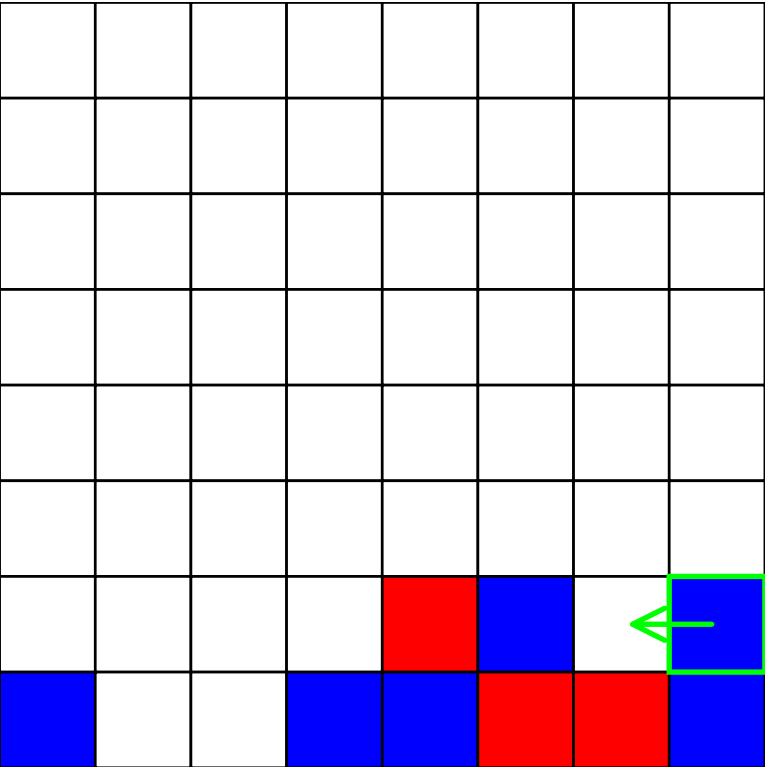
(MOVE 2)

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



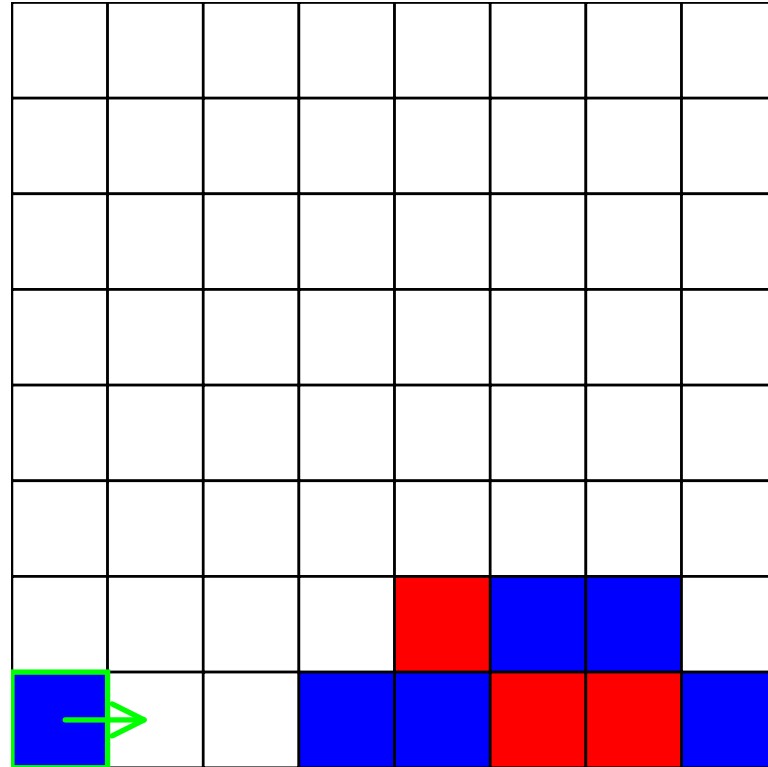
(MOVE 3)

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



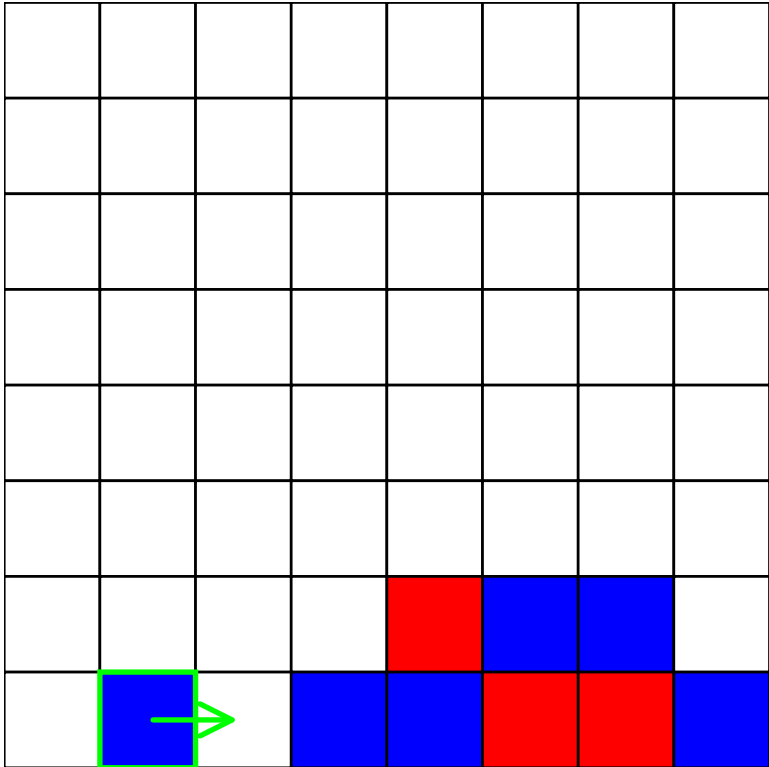
(MOVE 4)

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

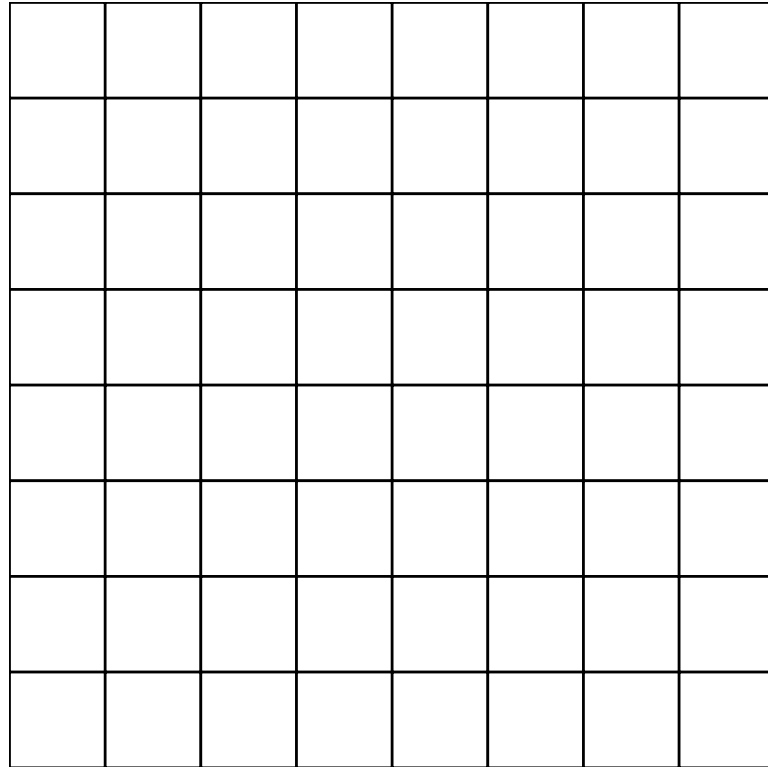


(MOVE 5)

Perform: move_right at position: (7, 1):



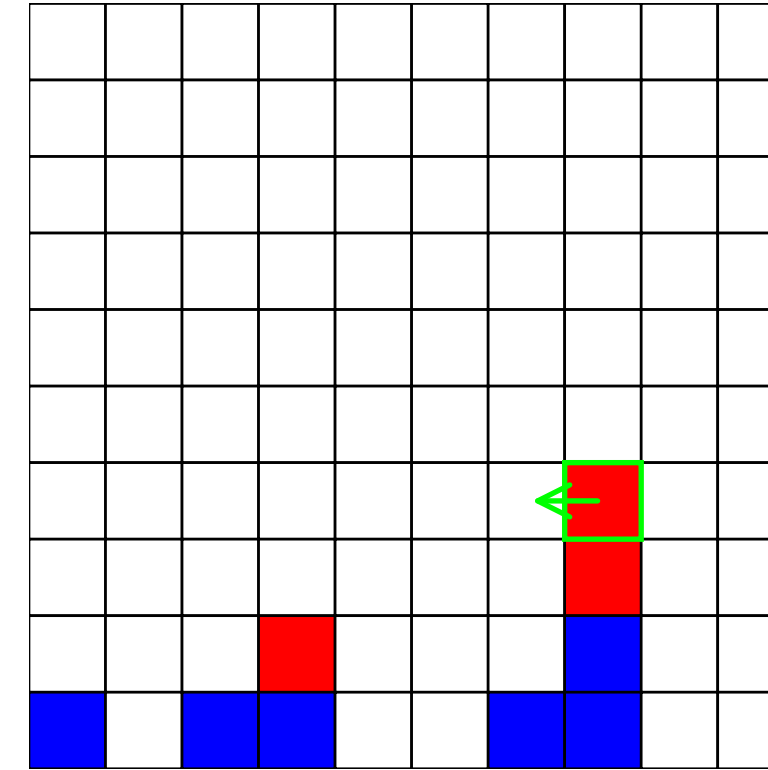
FINAL STATE



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

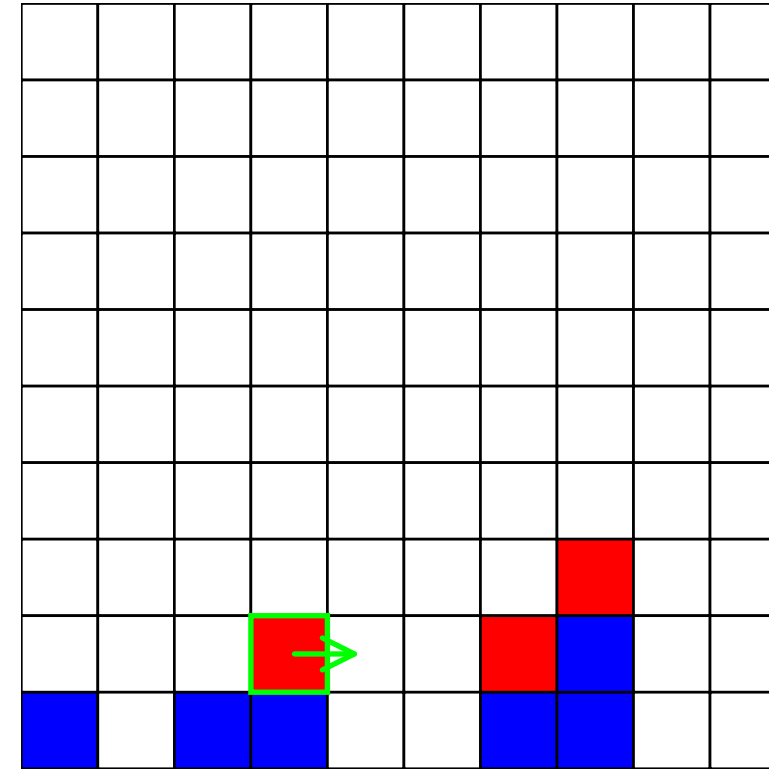
INITIAL STATE: (MOVE 1)

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



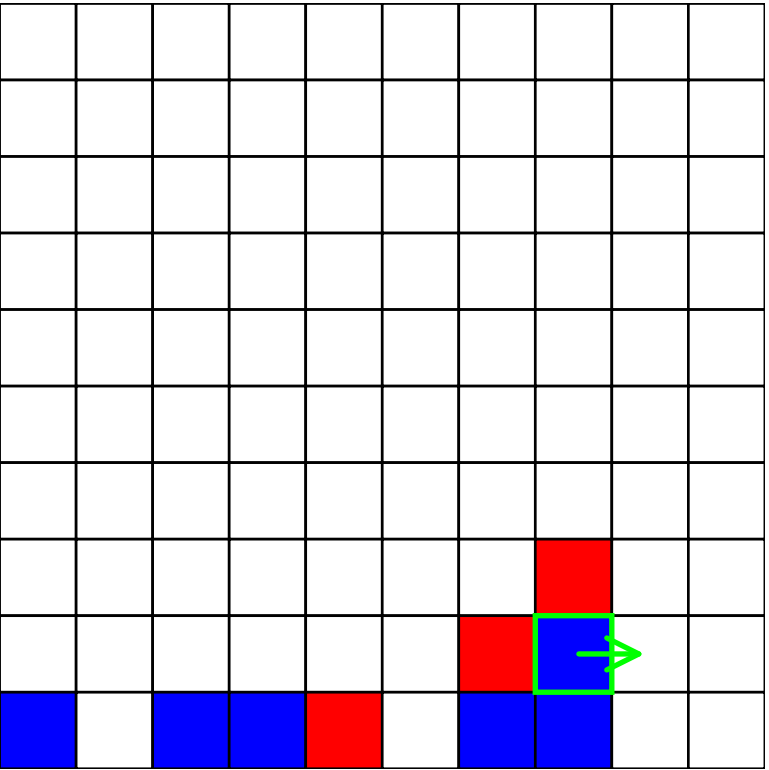
(MOVE 2)

Perform: move_right at position: (8, 3):



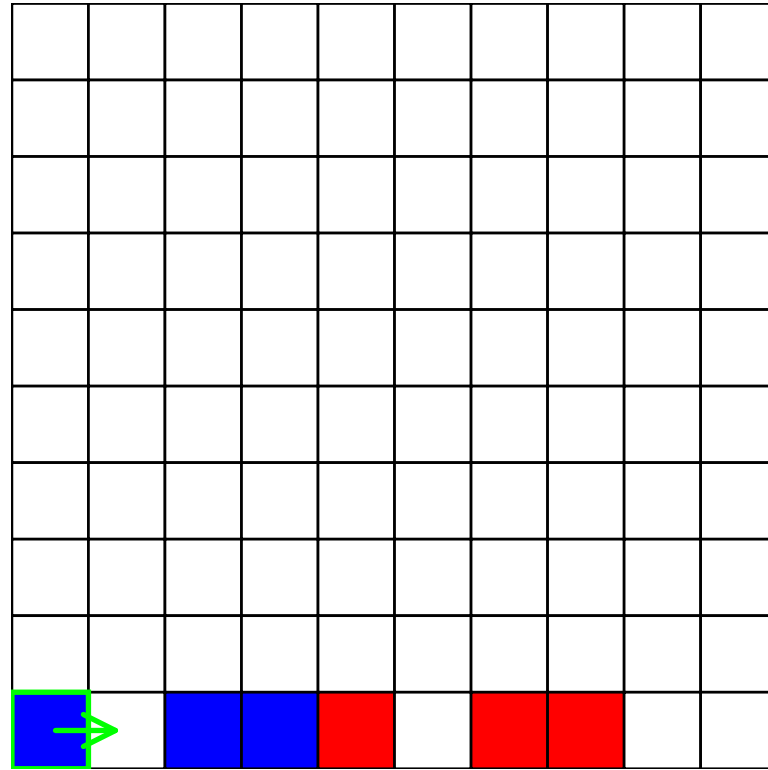
(MOVE 3)

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



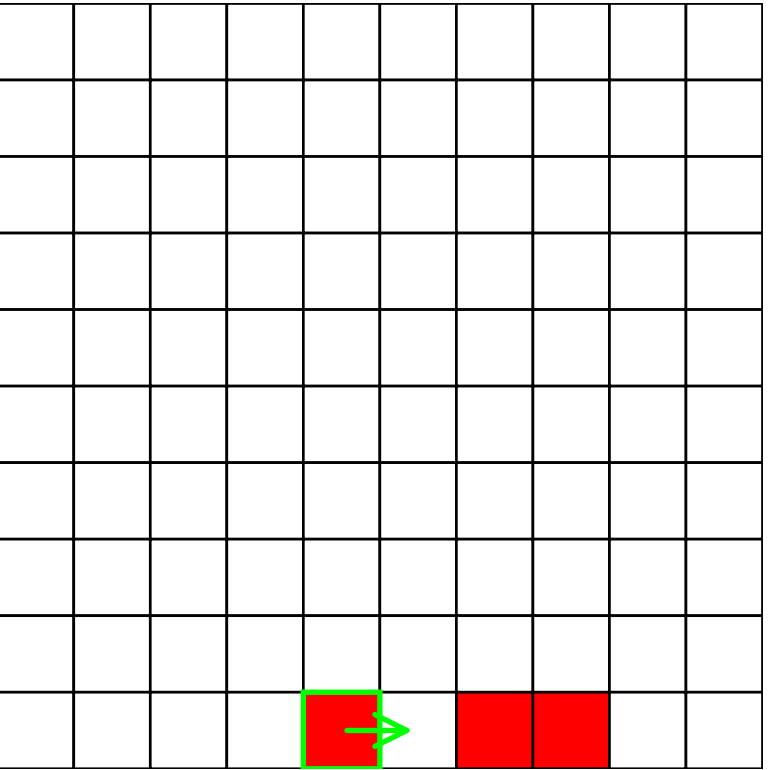
(MOVE 4)

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

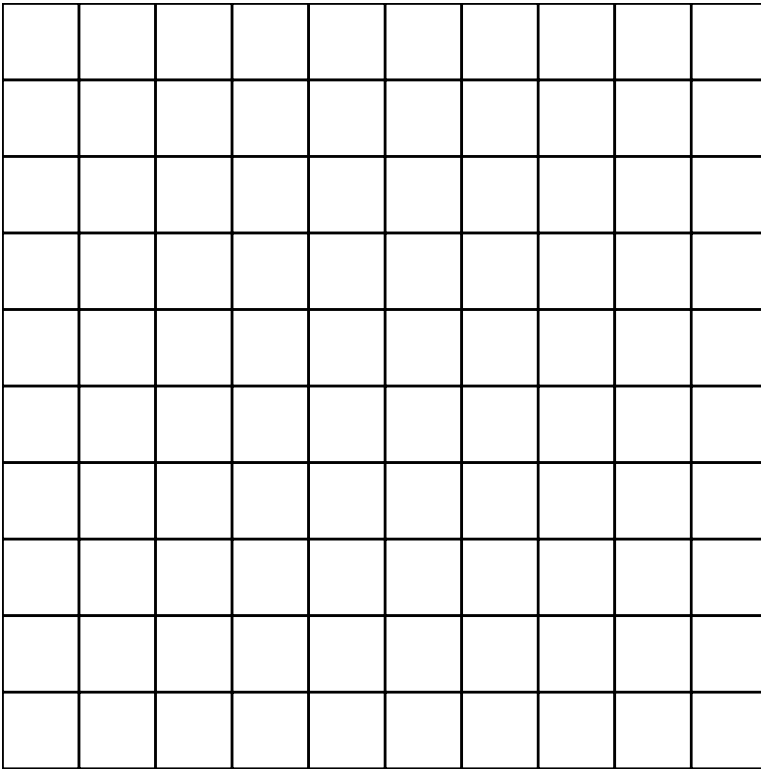


(MOVE 5)

Perform: move_right at position: (9, 4):



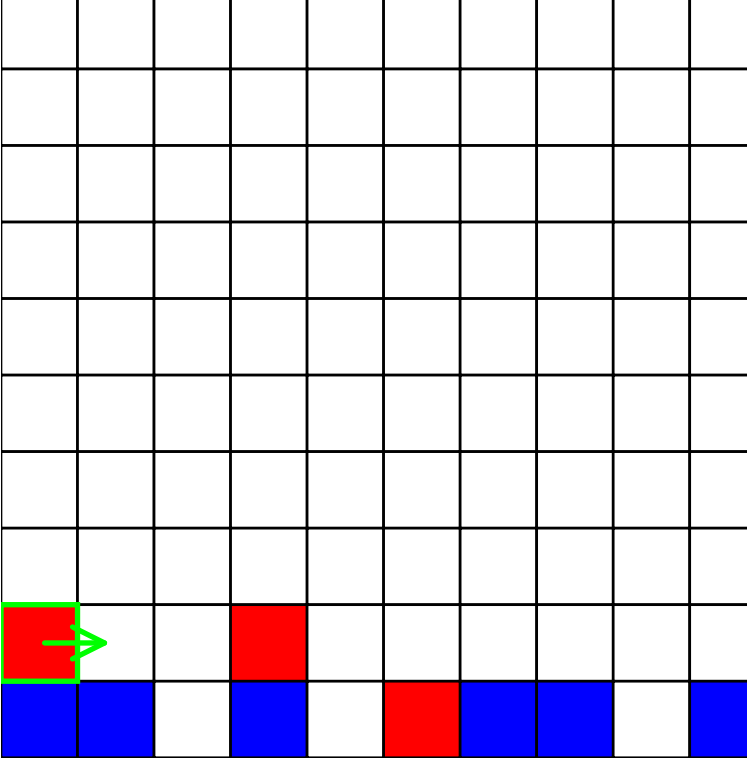
FINAL STATE



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

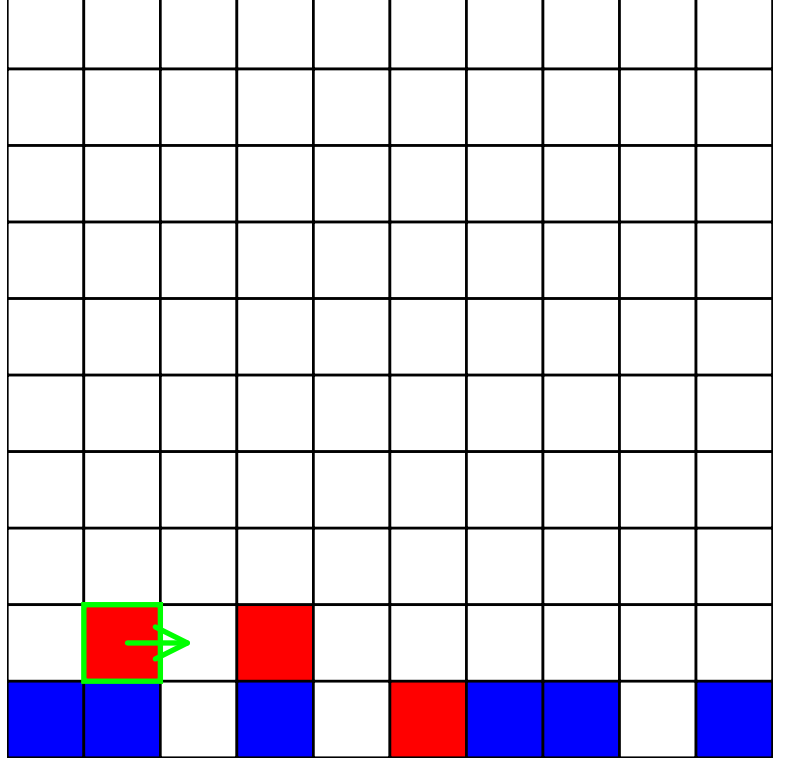
INITIAL STATE: (MOVE 1)

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



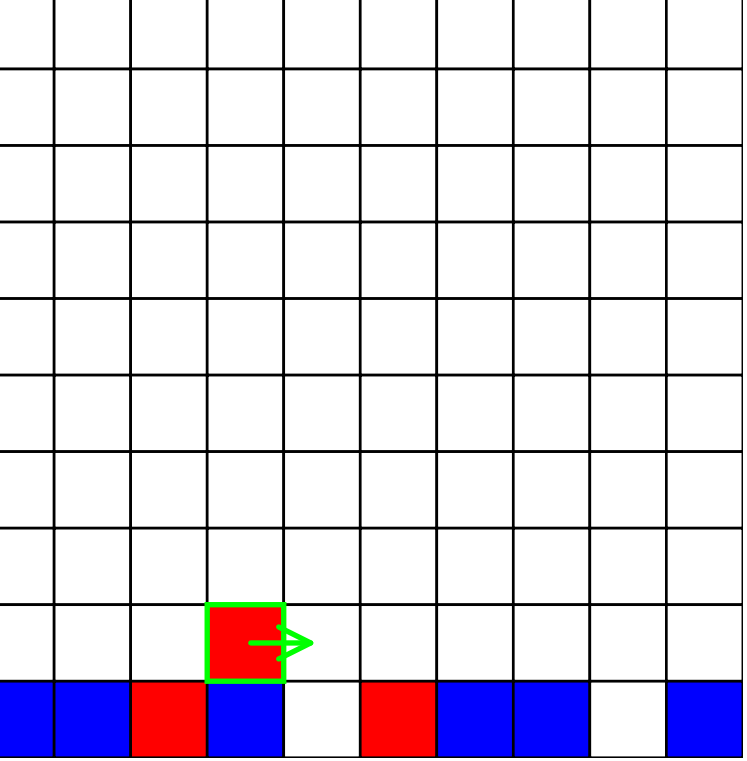
(MOVE 2)

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



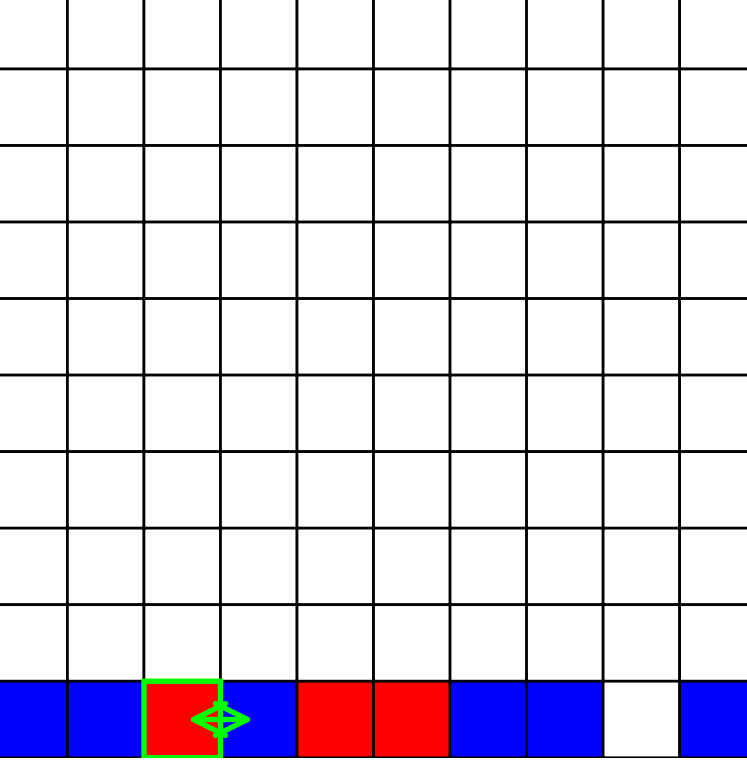
(MOVE 3)

Perform: move_right at position: (8, 3):



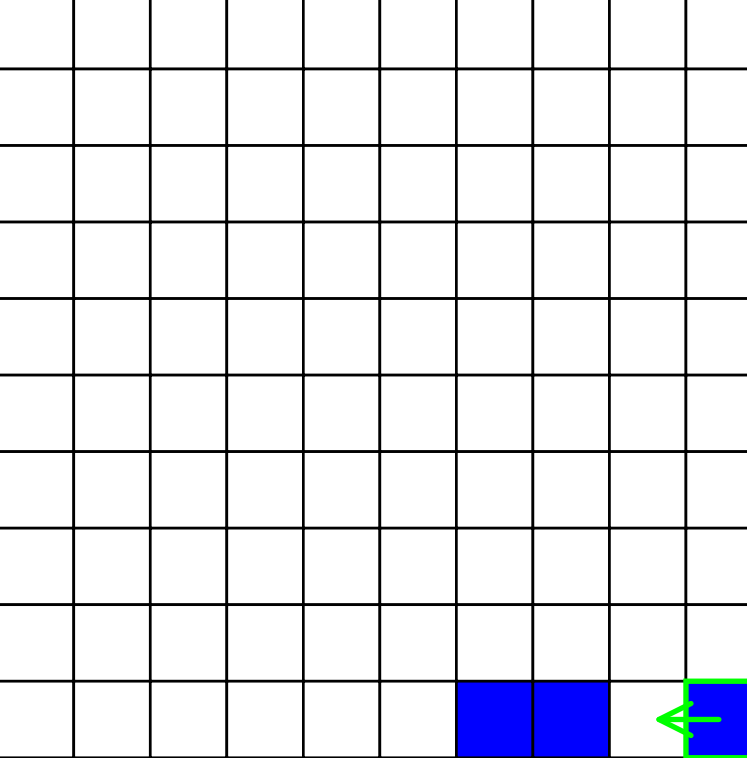
(MOVE 4)

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

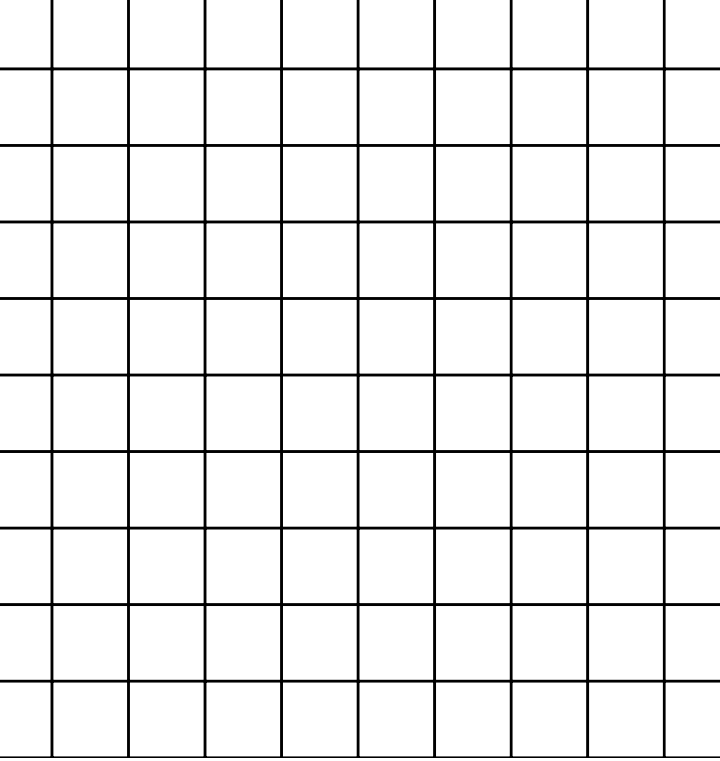


(MOVE 5)

Perform: move_left at position: (9, 9):



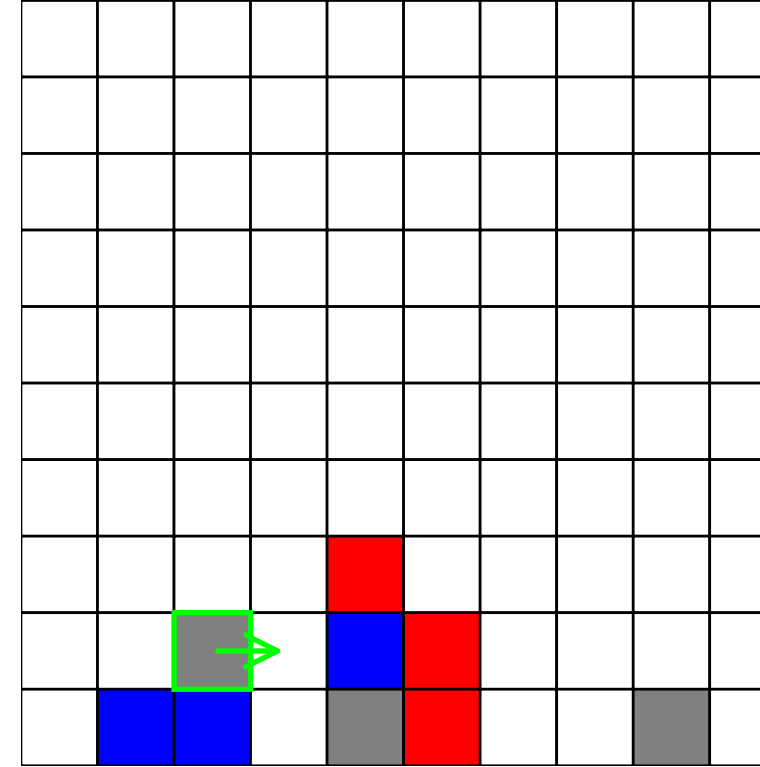
FINAL STATE



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

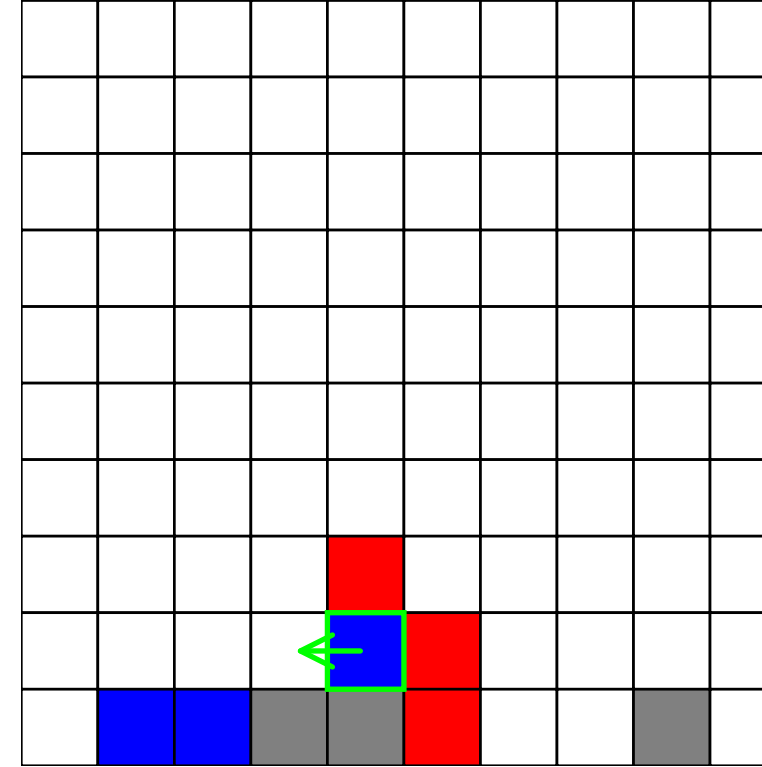
INITIAL STATE: (MOVE 1)

Perform: move_right at position: (8, 2):



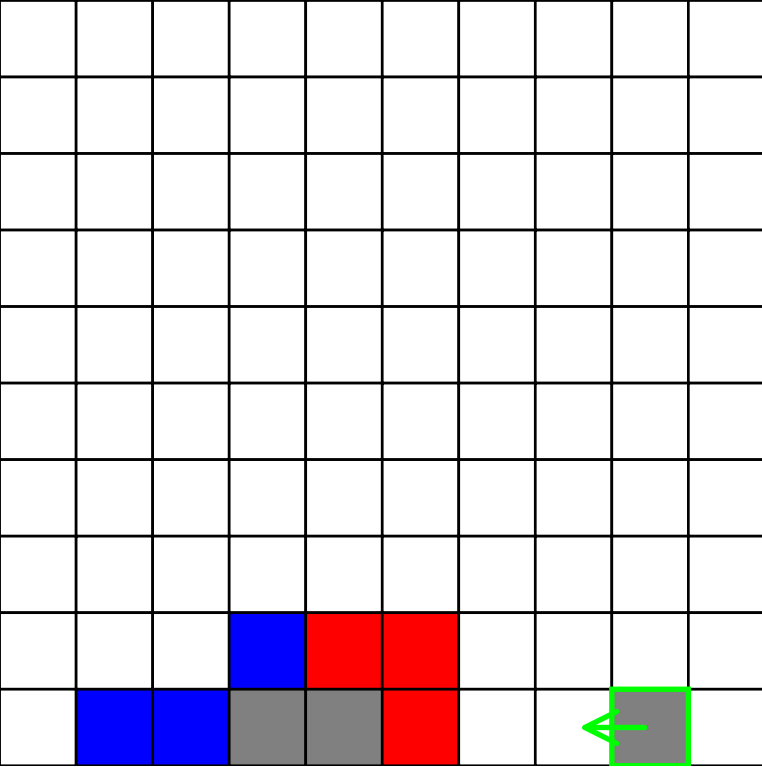
(MOVE 2)

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



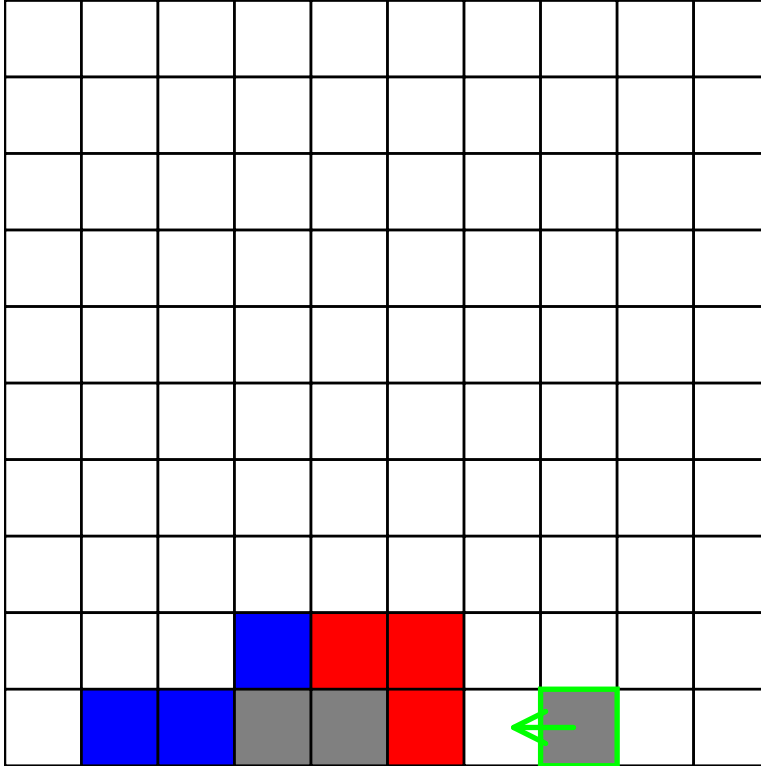
(MOVE 3)

Perform: move_left at position: (9, 8):



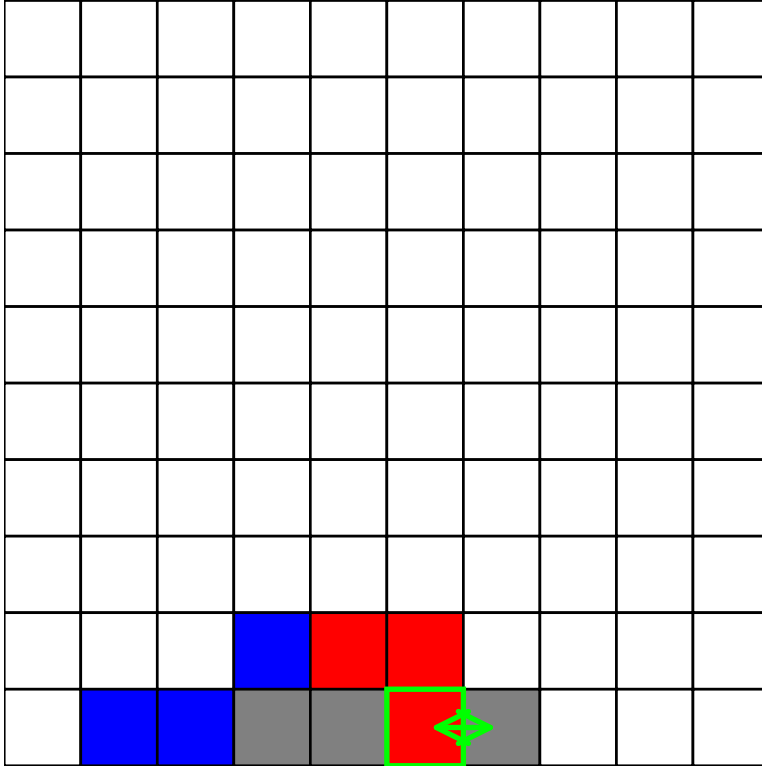
(MOVE 4)

Perform: move_left at position: (9, 7):

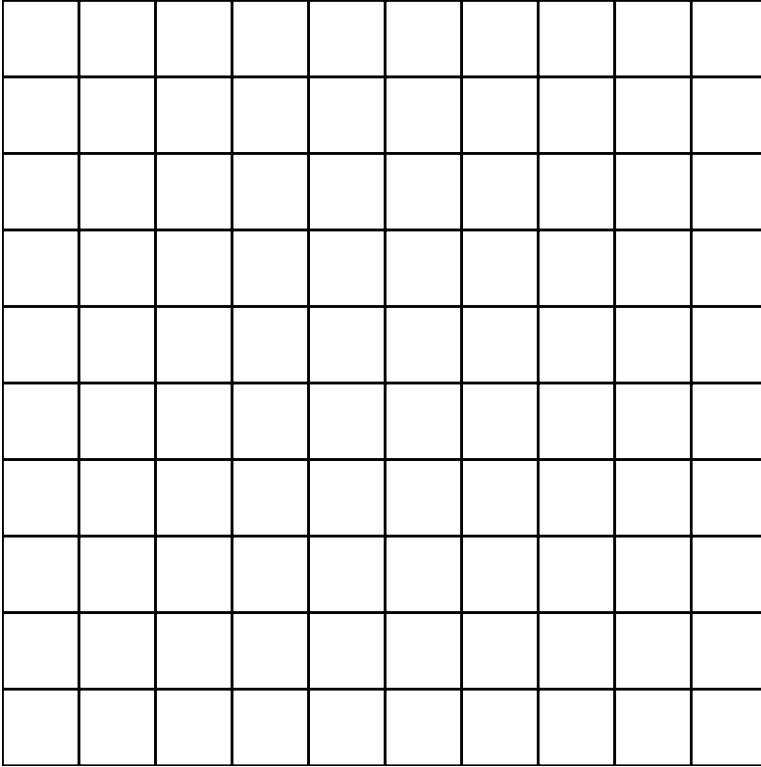


(MOVE 5)

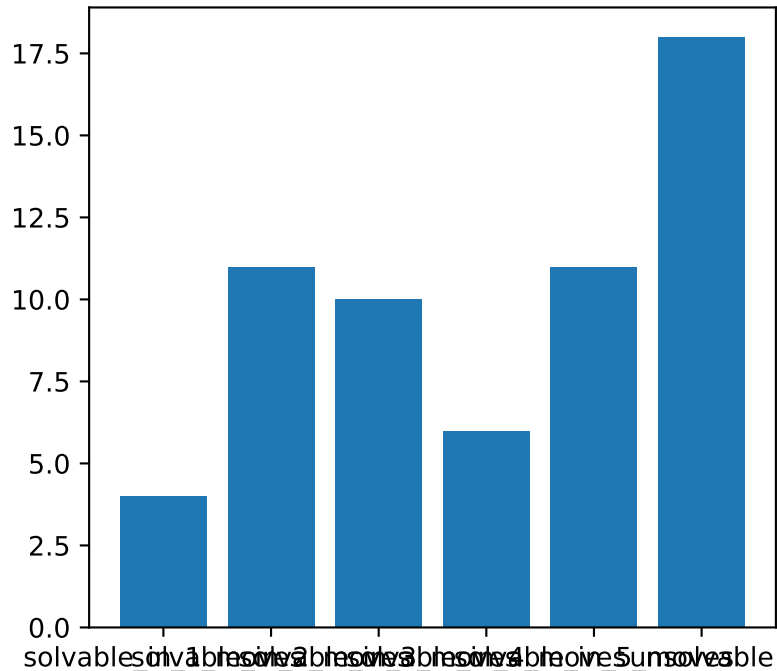
Perform: exchange_right at position: (9, 5):



FINAL STATE



Number of Puzzles Generated (Bar Chart)



Number of Puzzles Generated (Pie Chart)

