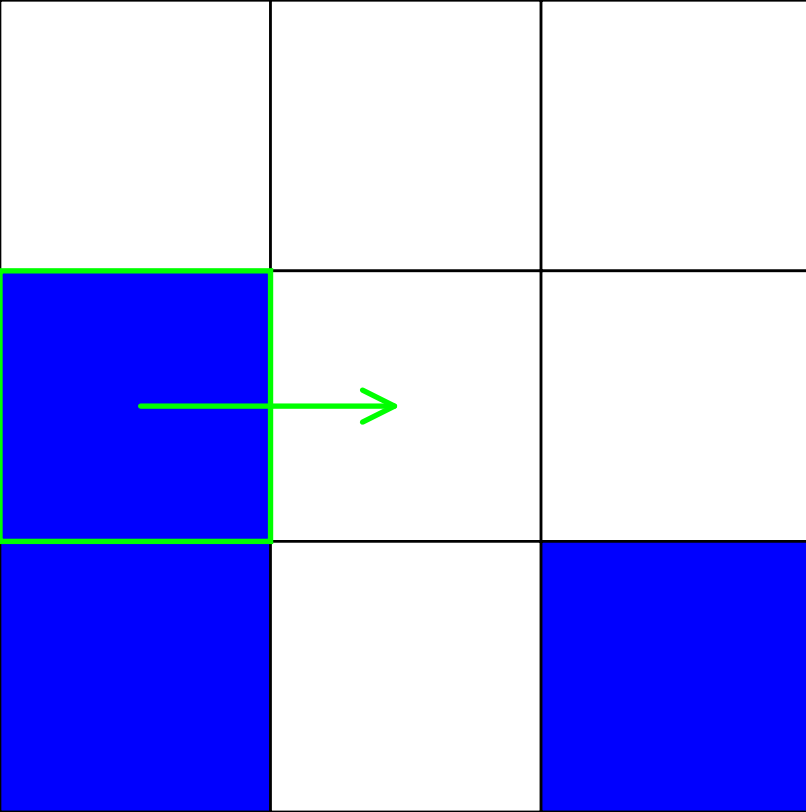


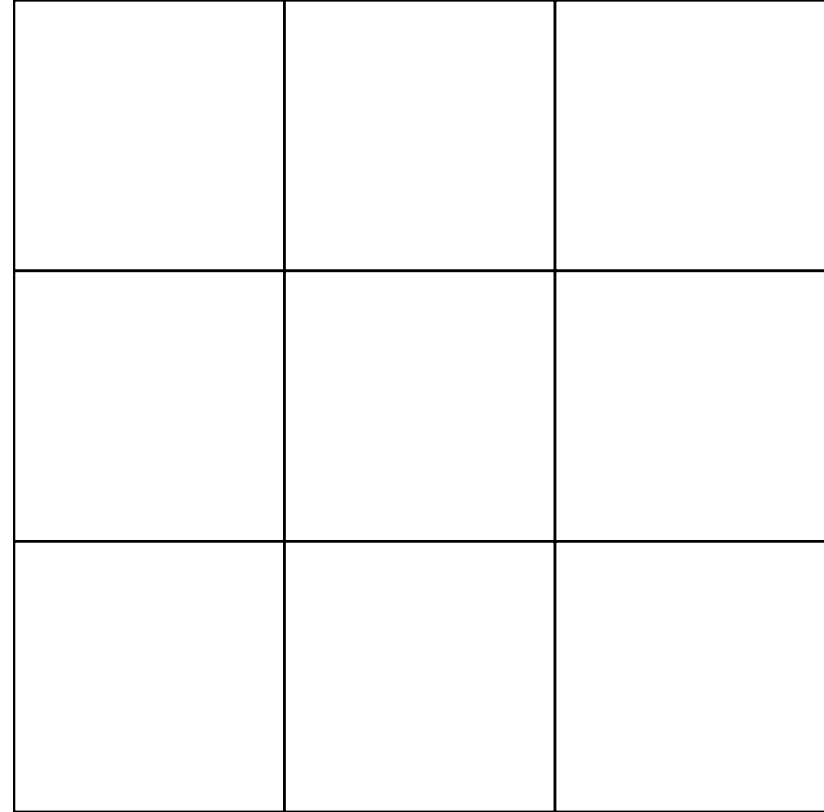
...:SOLUTION:...: Solvable in 1 moves (blocks positions: {(1, 0): <Color: blue>, (2, 0): <Color: blue>, (2, 2): <Color: blue>})

INITIAL STATE: (MOVE 1)

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



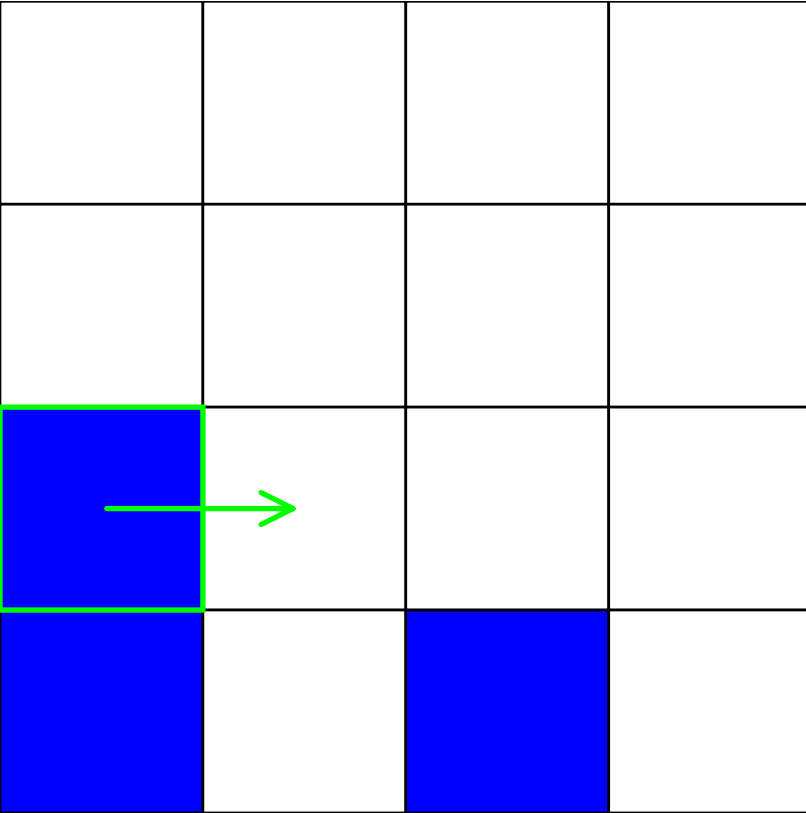
FINAL STATE



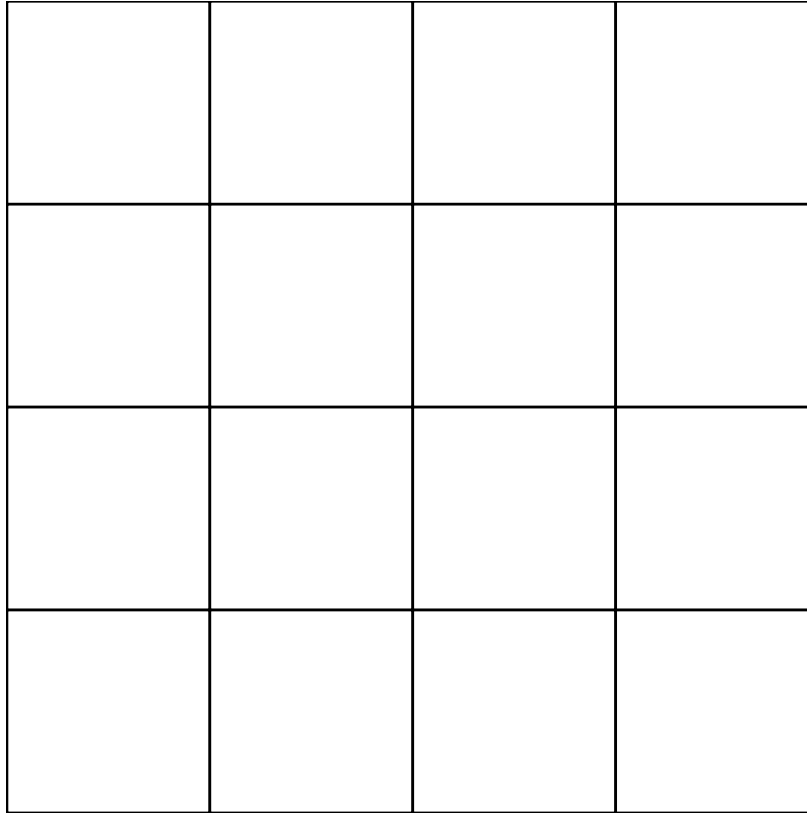
...:SOLUTION:...: Solvable in 1 moves (blocks positions: {(2, 0): <Color: blue>, (3, 0): <Color: blue>, (3, 2): <Color: blue>})

INITIAL STATE: (MOVE 1)

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



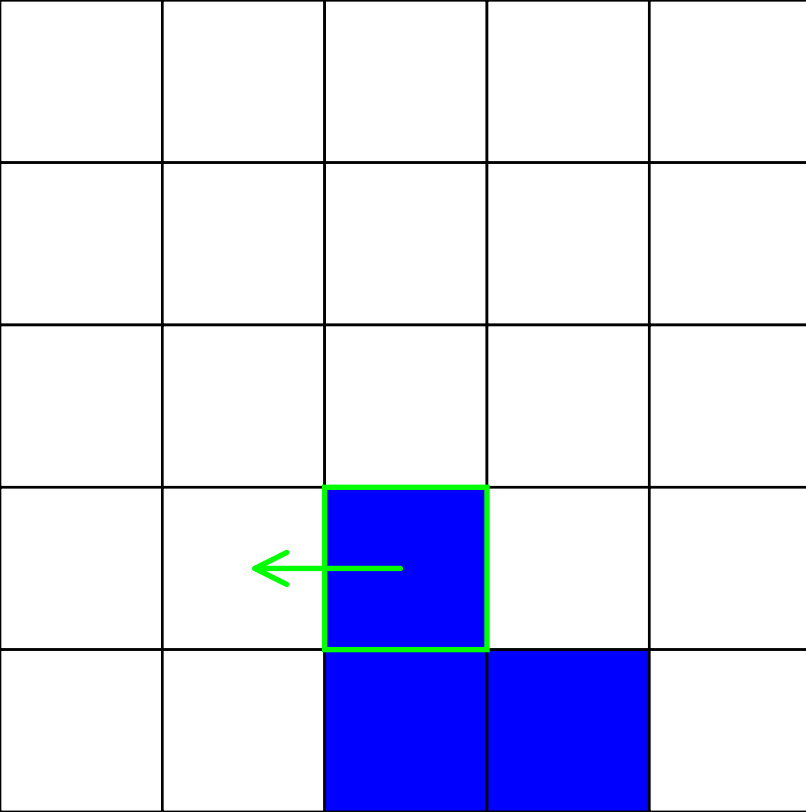
FINAL STATE



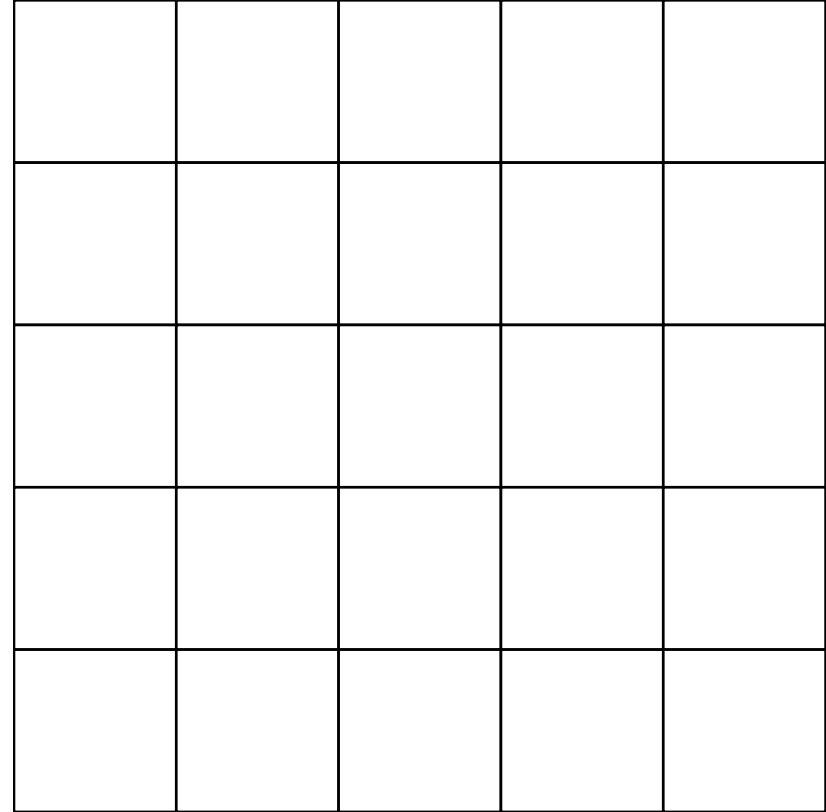
...:SOLUTION::...: Solvable in 1 moves (blocks positions: {(3, 2): <Color: blue>, (4, 2): <Color: blue>, (4, 3): <Color: blue>})

INITIAL STATE: (MOVE 1)

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



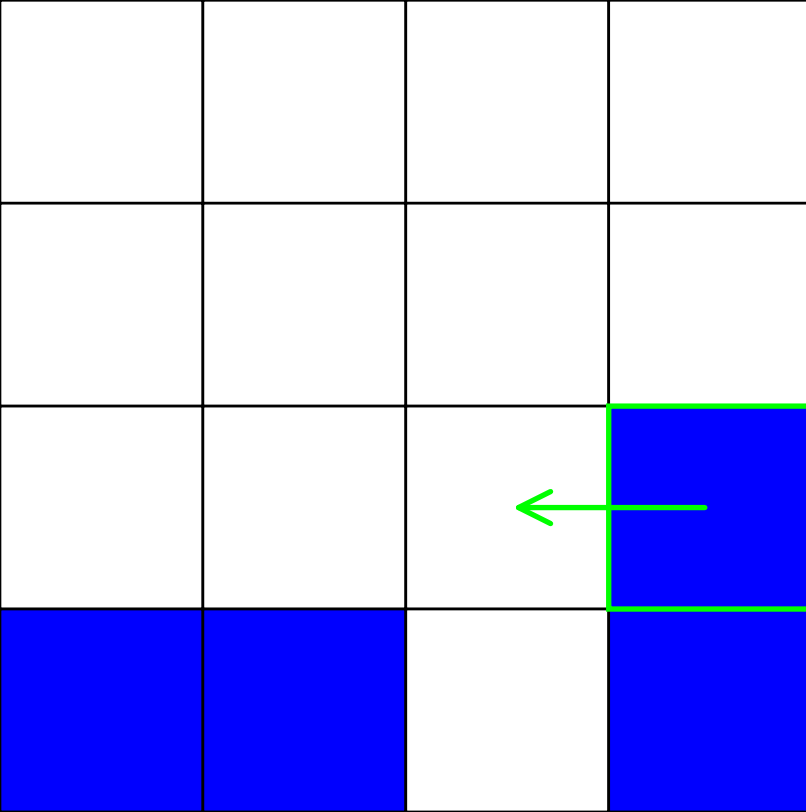
FINAL STATE



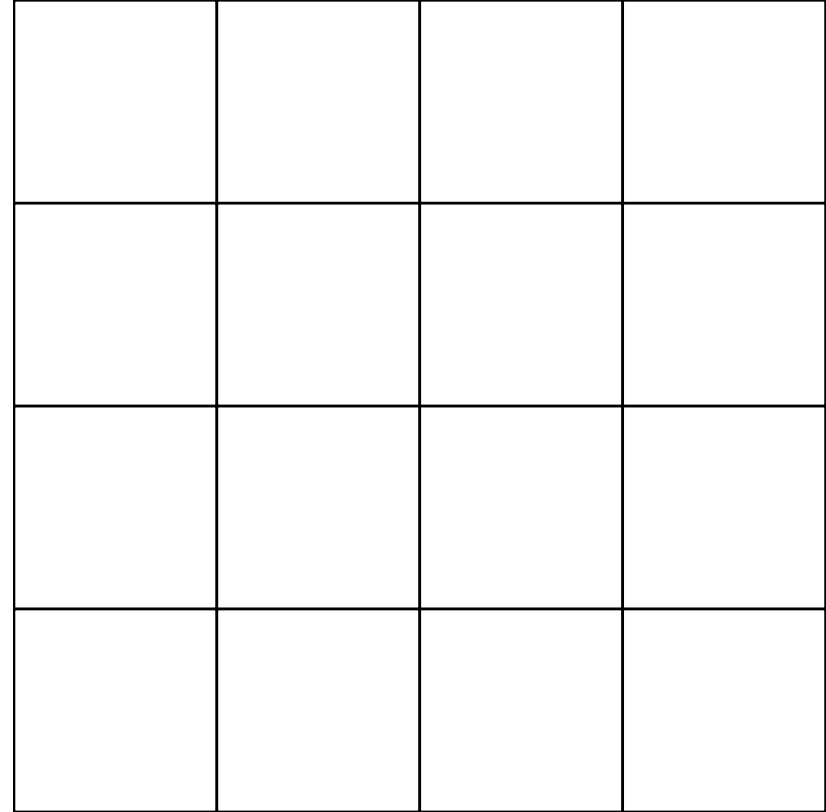
...:SOLUTION::...: Solvable in 1 moves (blocks positions: {(2, 3): <Color: blue>, (3, 0): <Color: blue>, (3, 1): <Color: blue>, (3,

INITIAL STATE: (MOVE 1)

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



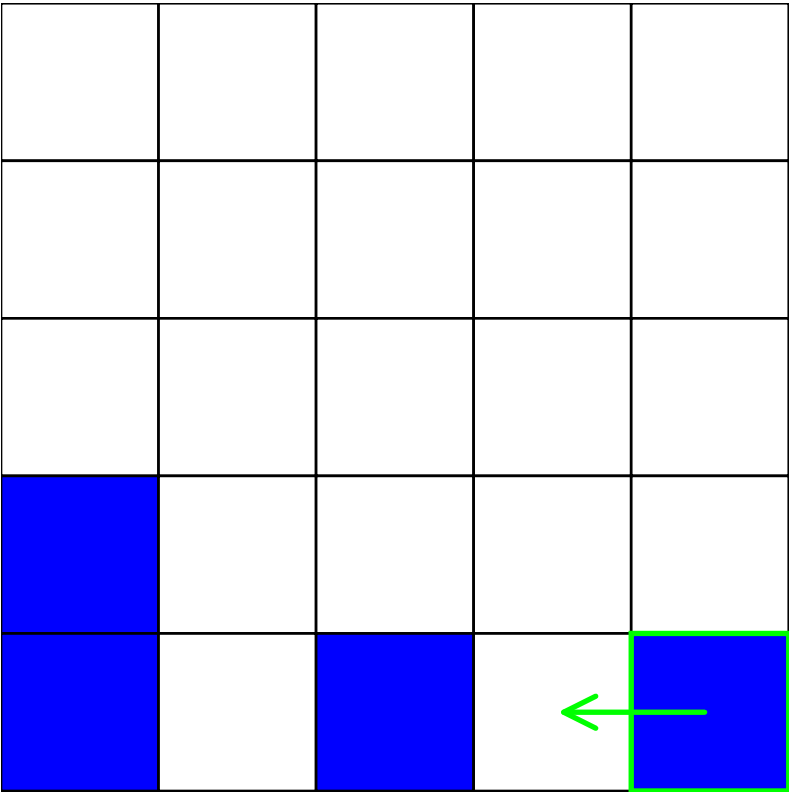
FINAL STATE



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

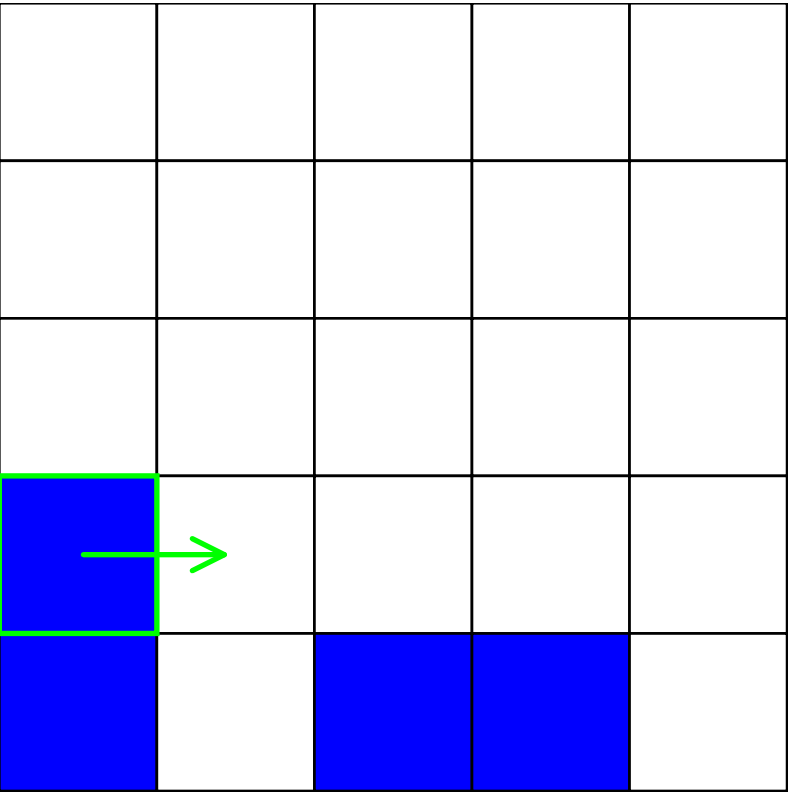
INITIAL STATE: (MOVE 1)

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

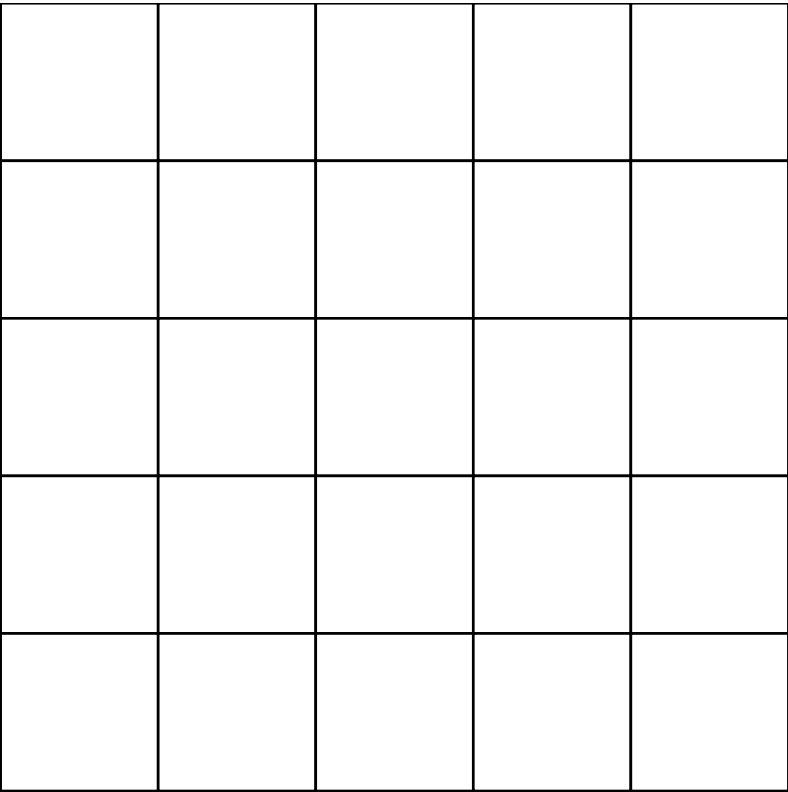


(MOVE 2)

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



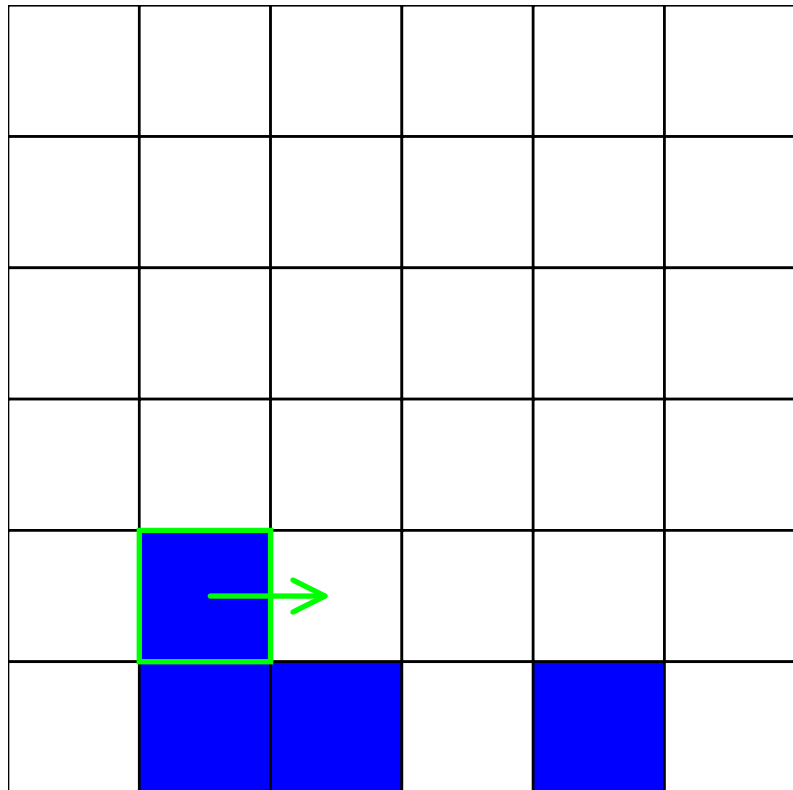
FINAL STATE



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

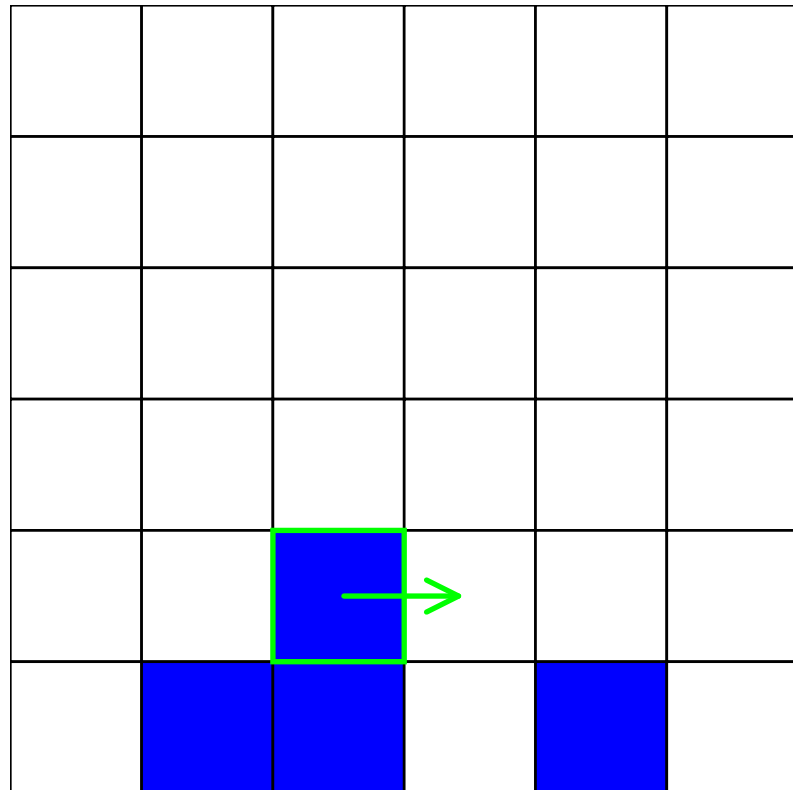
INITIAL STATE: (MOVE 1)

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

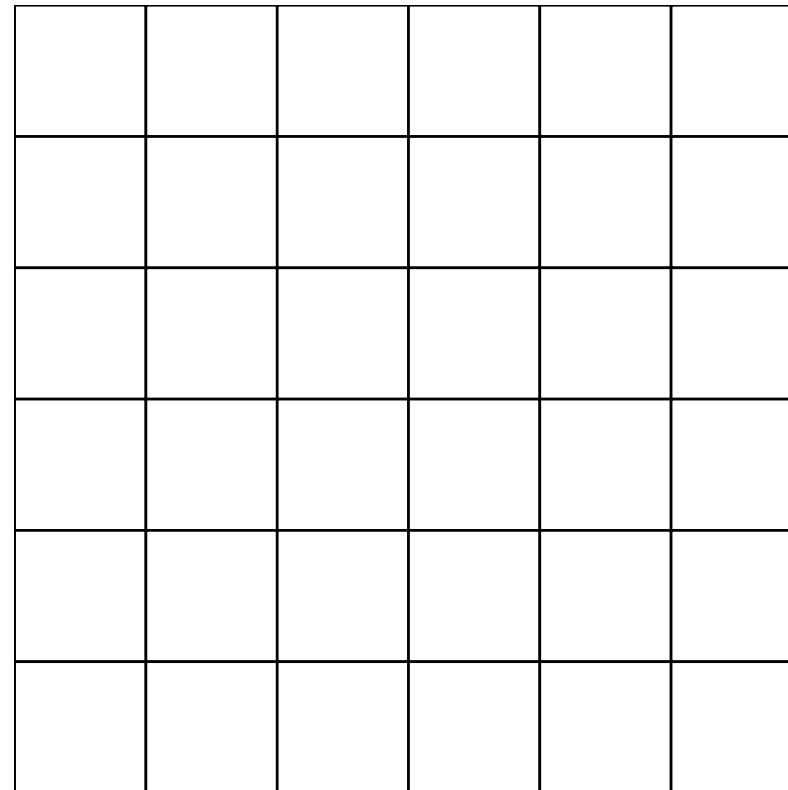


(MOVE 2)

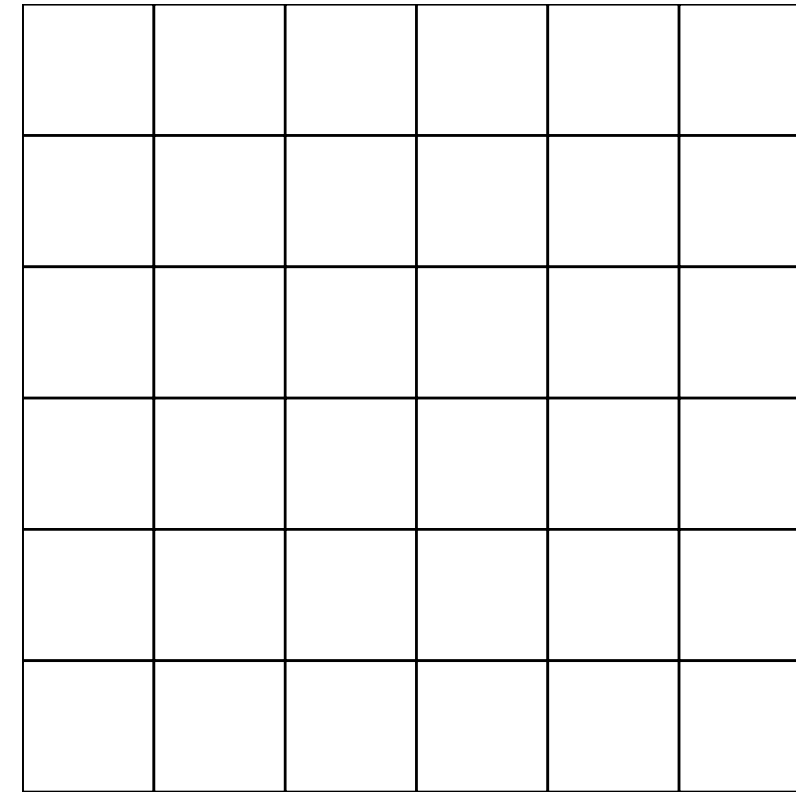
Perform: move_right at position: (4, 2):



FINAL STATE



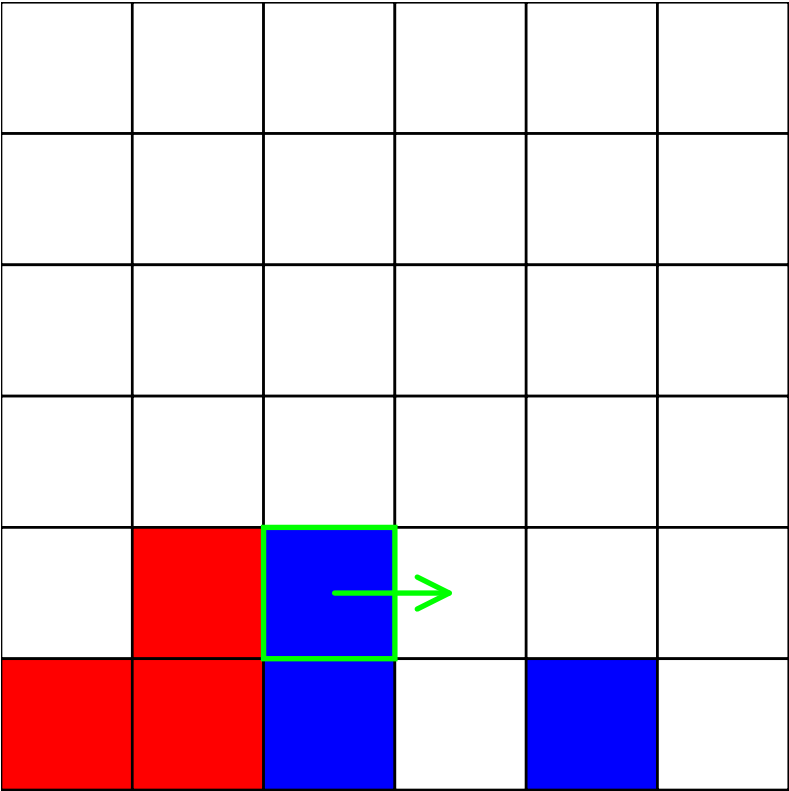
FINAL STATE



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

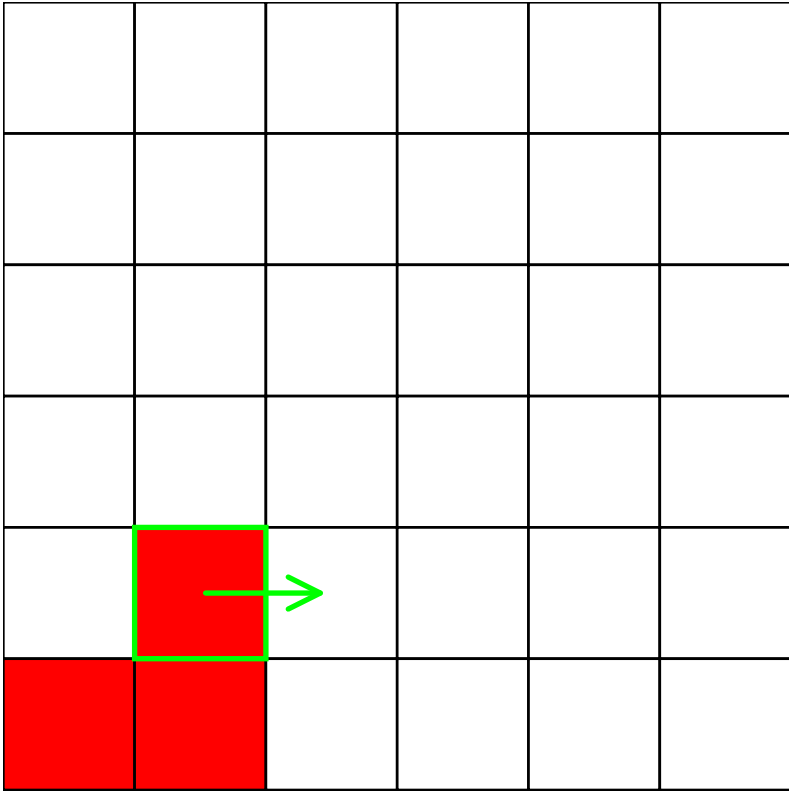
INITIAL STATE: (MOVE 1)

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

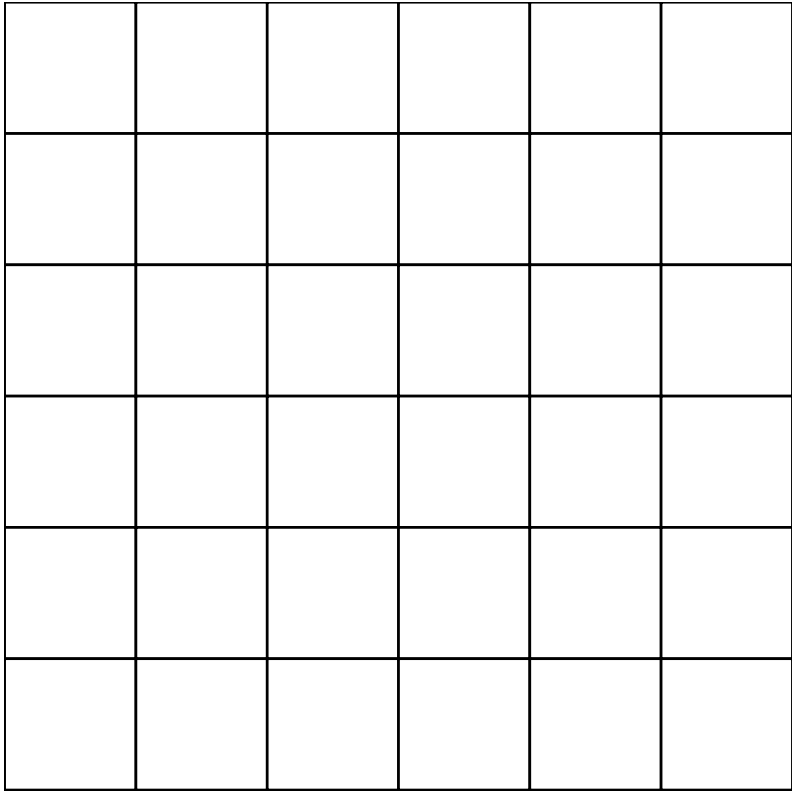


(MOVE 2)

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



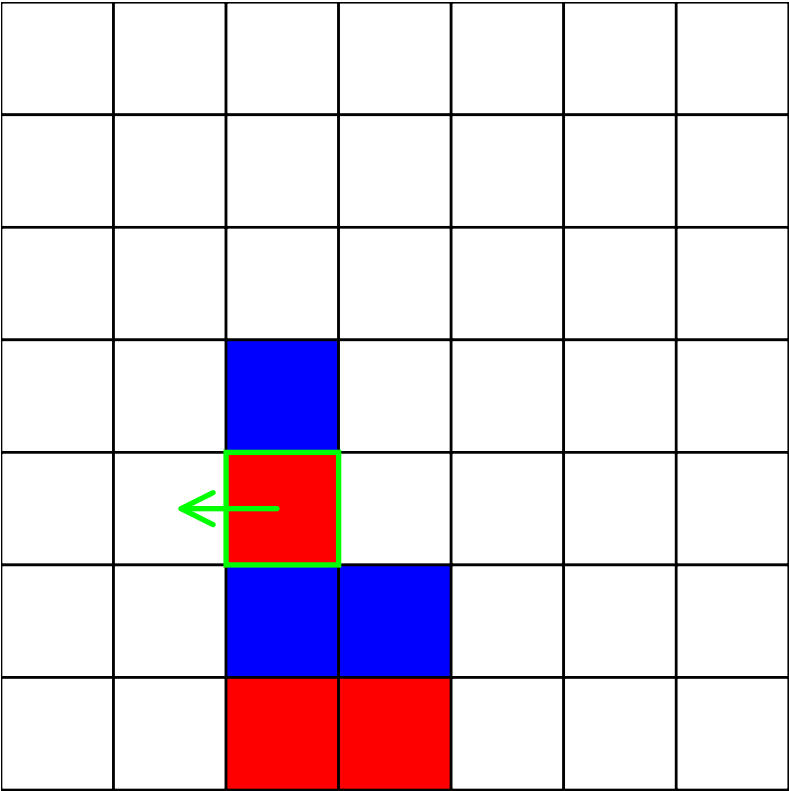
FINAL STATE



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

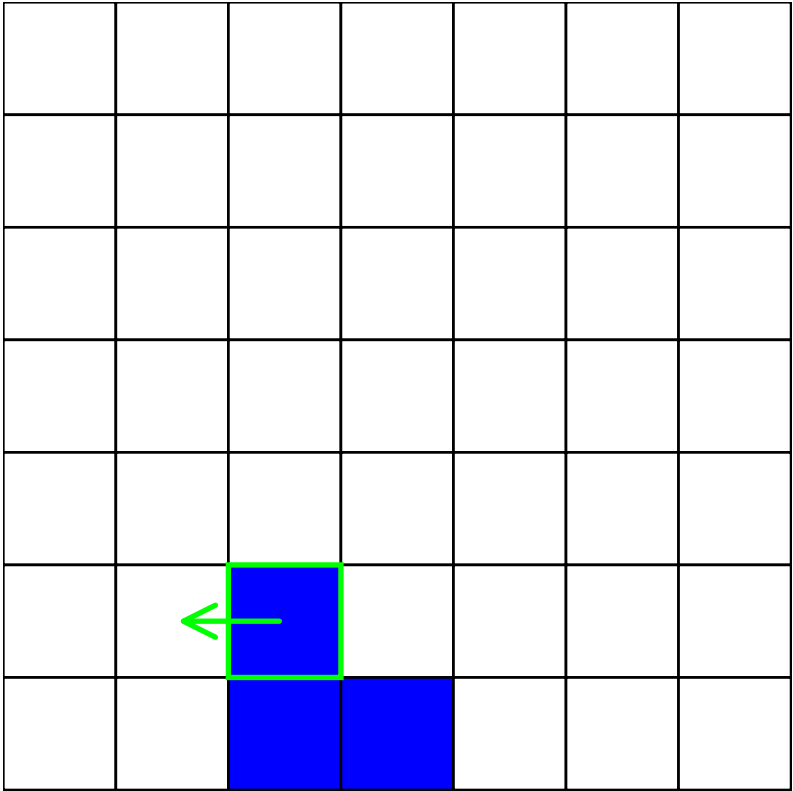
INITIAL STATE: (MOVE 1)

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

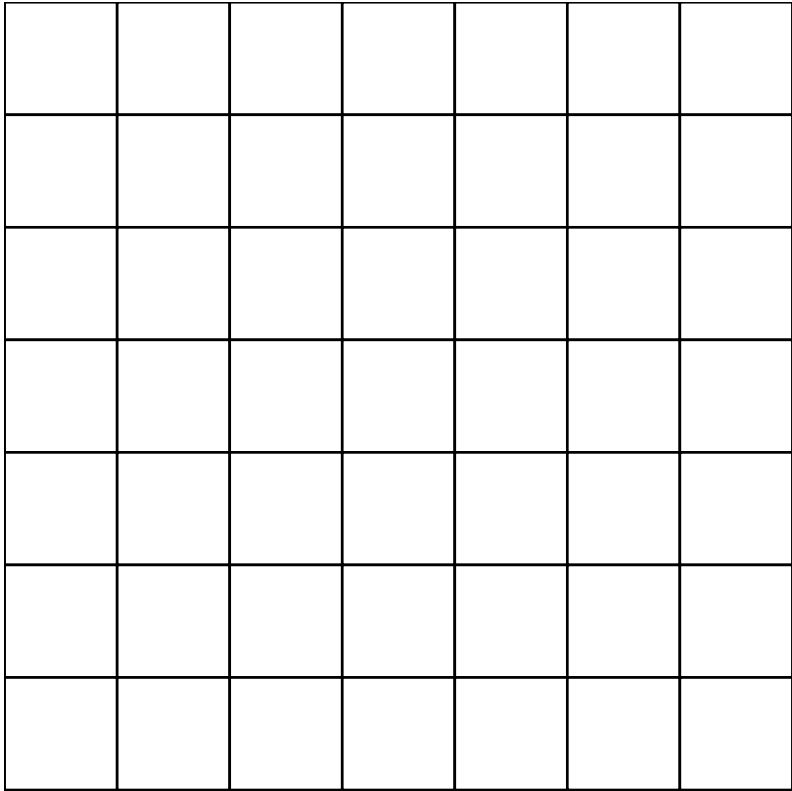


(MOVE 2)

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



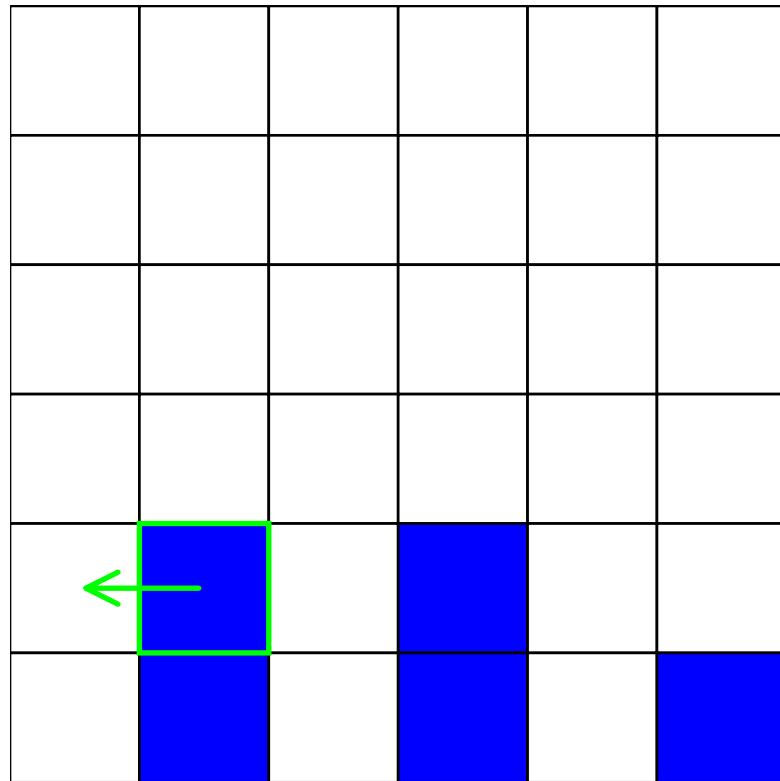
FINAL STATE



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

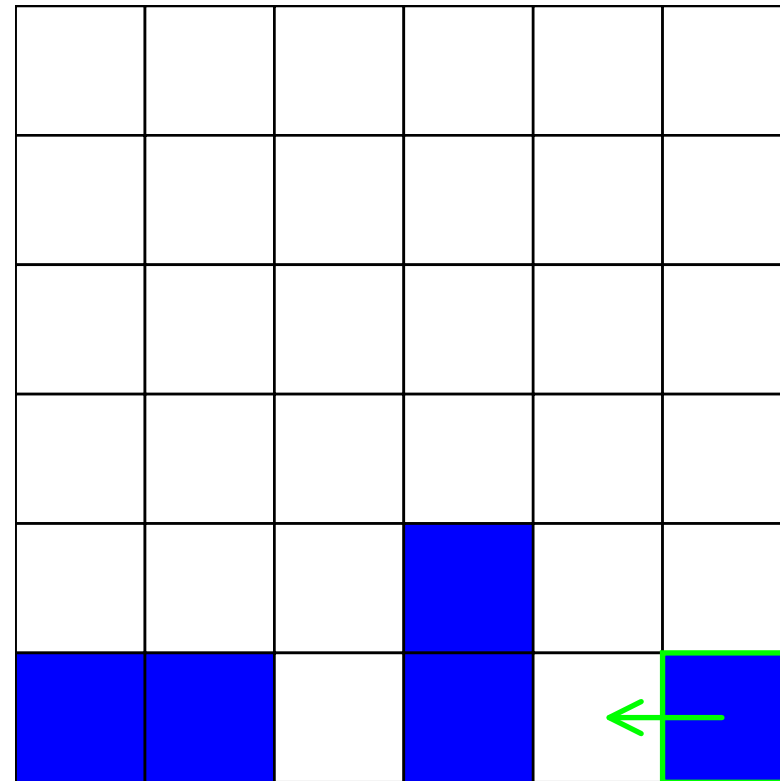
INITIAL STATE: (MOVE 1)

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



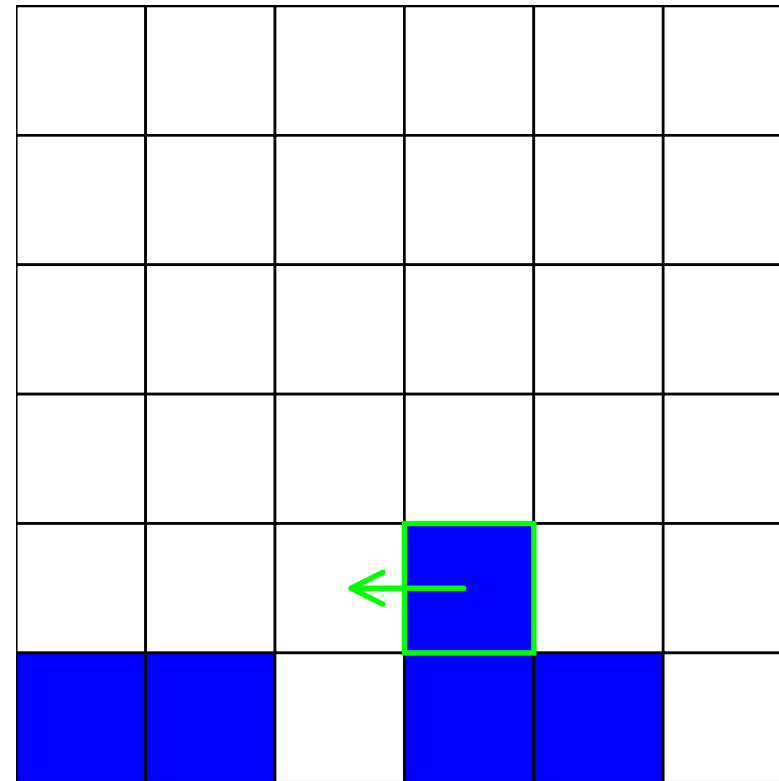
(MOVE 2)

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

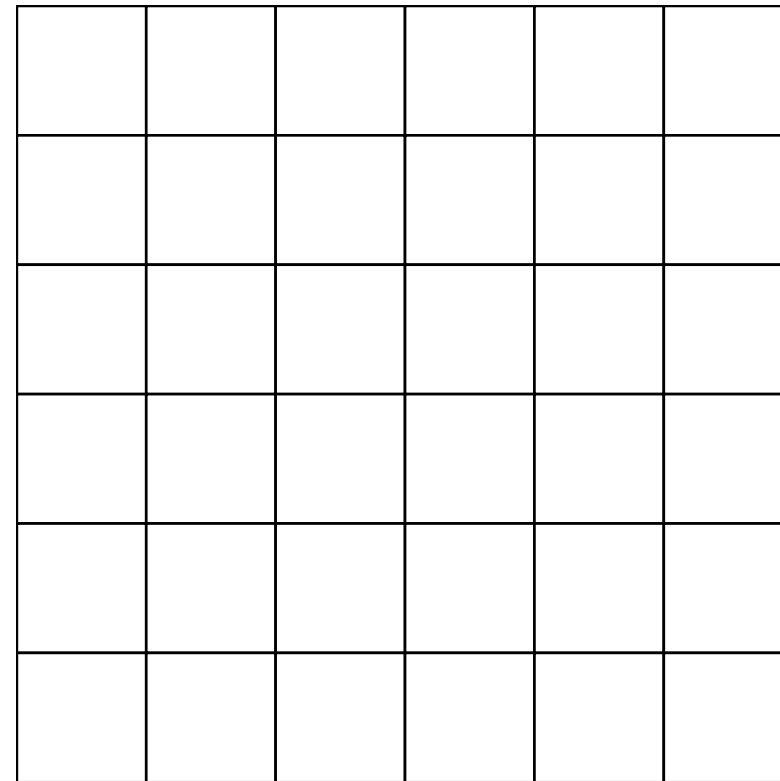


(MOVE 3)

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



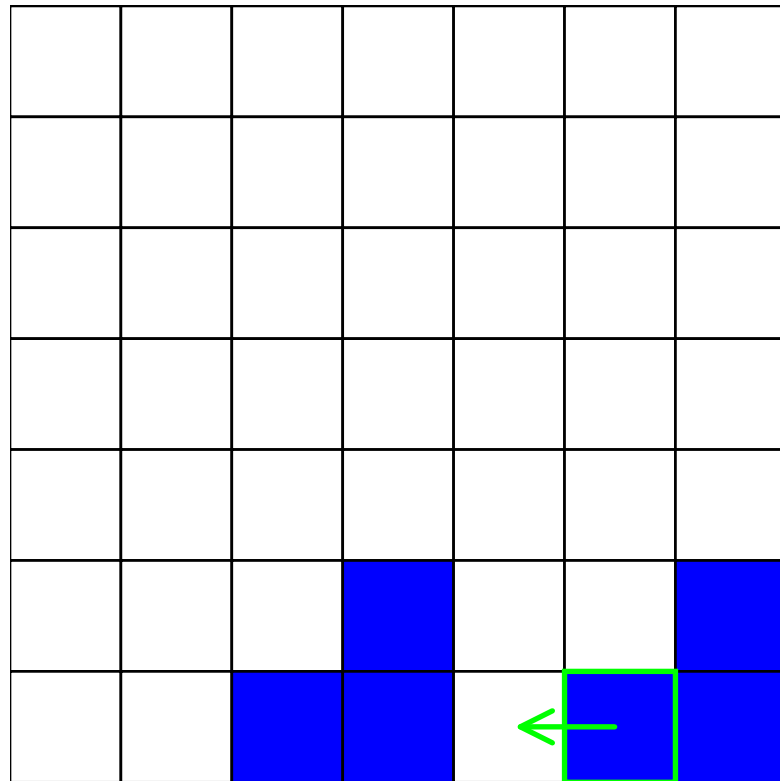
FINAL STATE



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

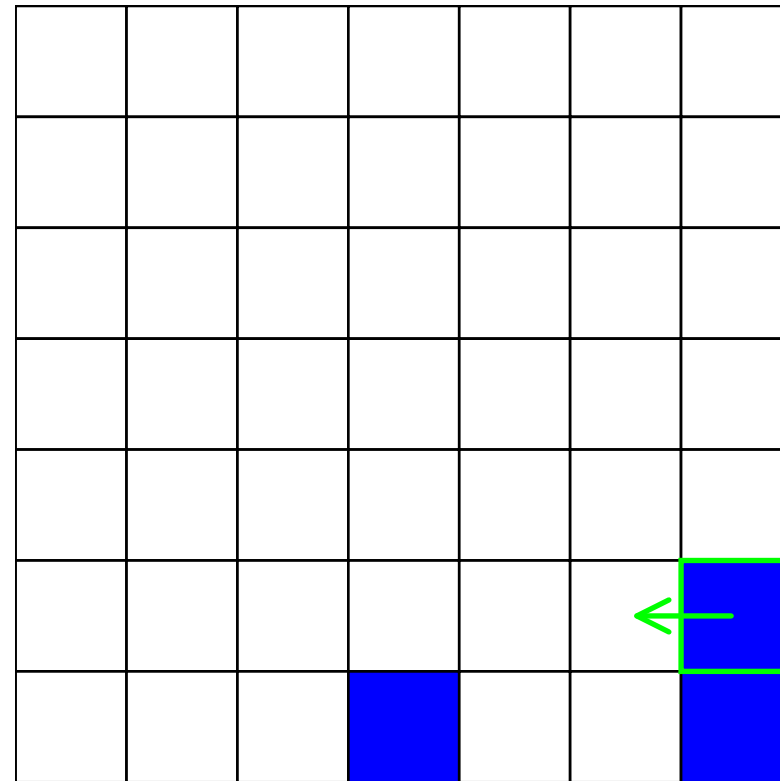
INITIAL STATE: (MOVE 1)

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



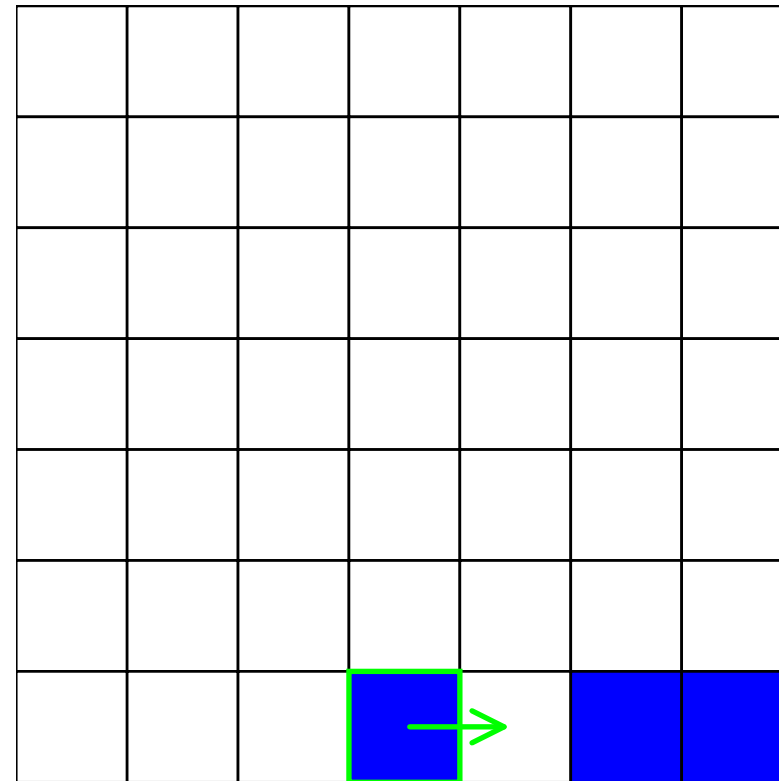
(MOVE 2)

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

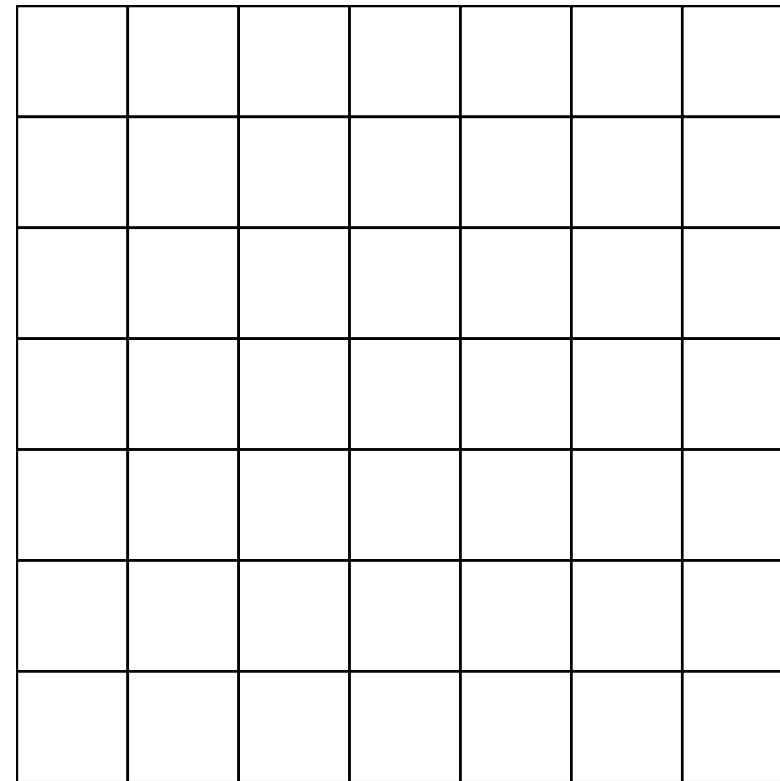


(MOVE 3)

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



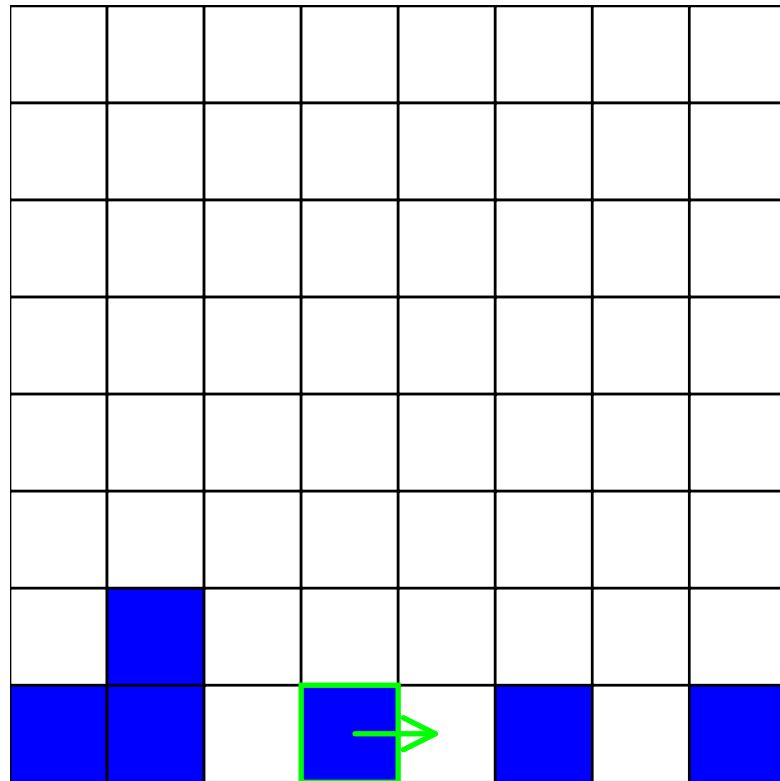
FINAL STATE



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

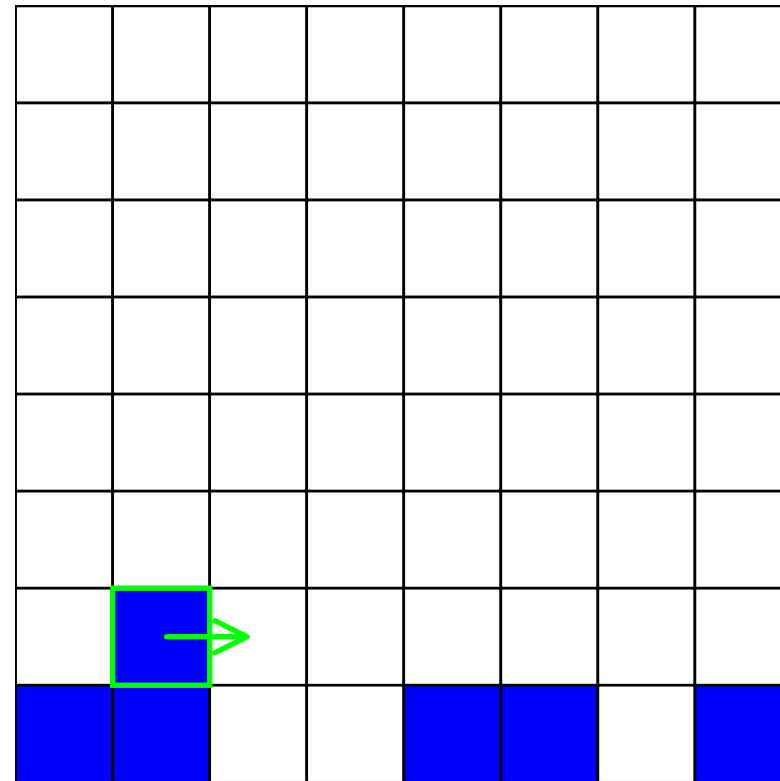
INITIAL STATE: (MOVE 1)

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



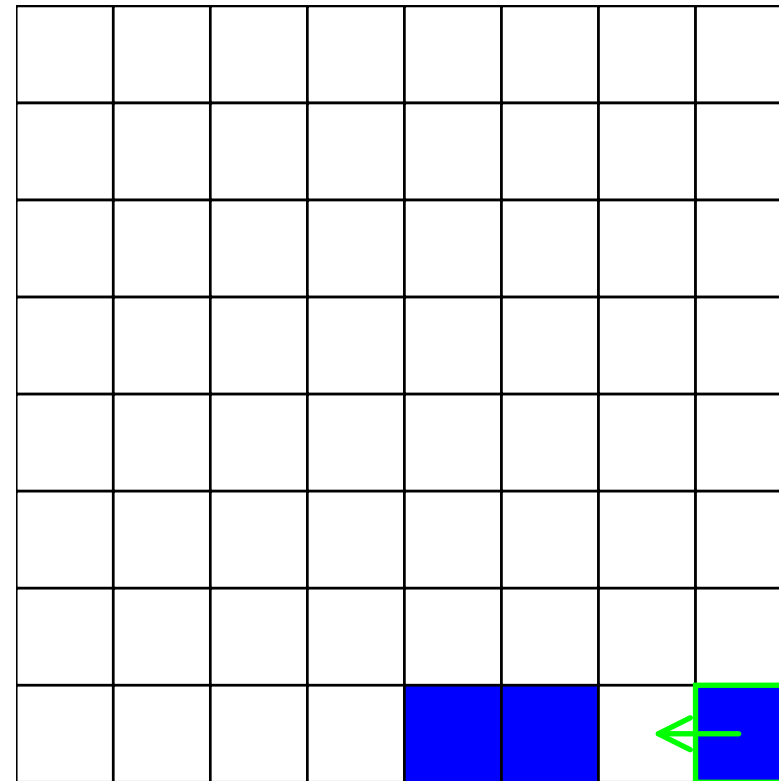
(MOVE 2)

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

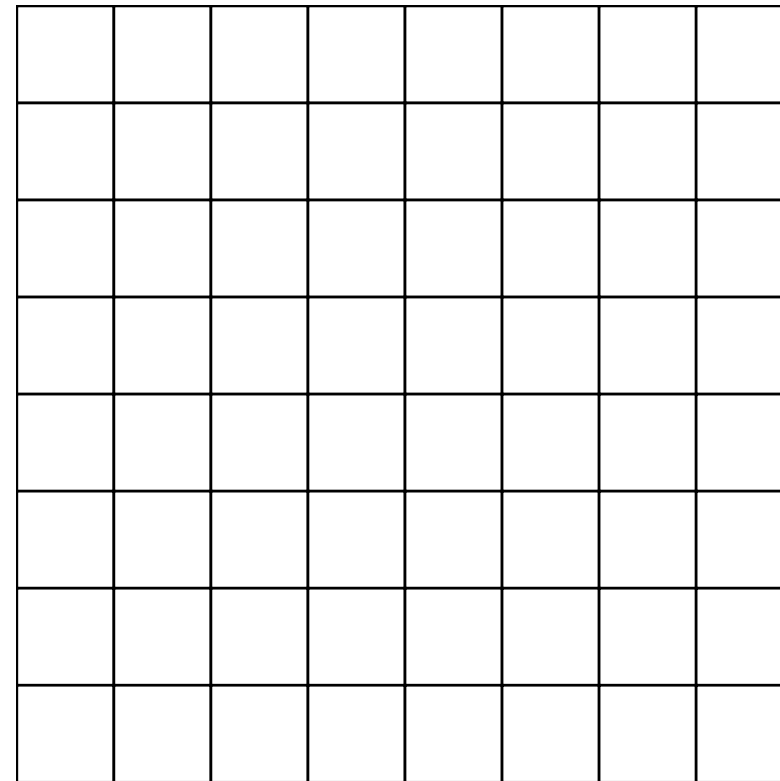


(MOVE 3)

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



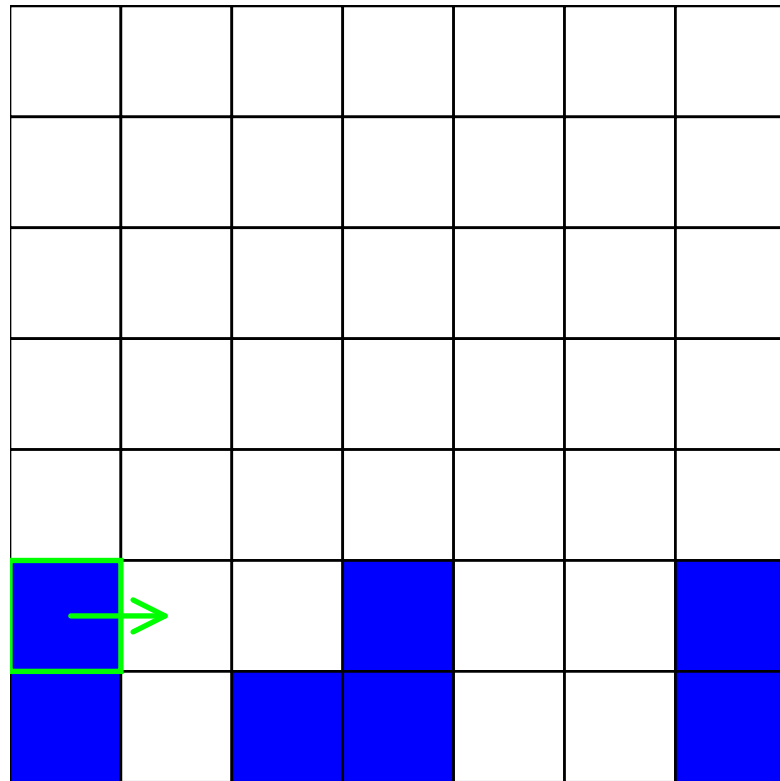
FINAL STATE



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

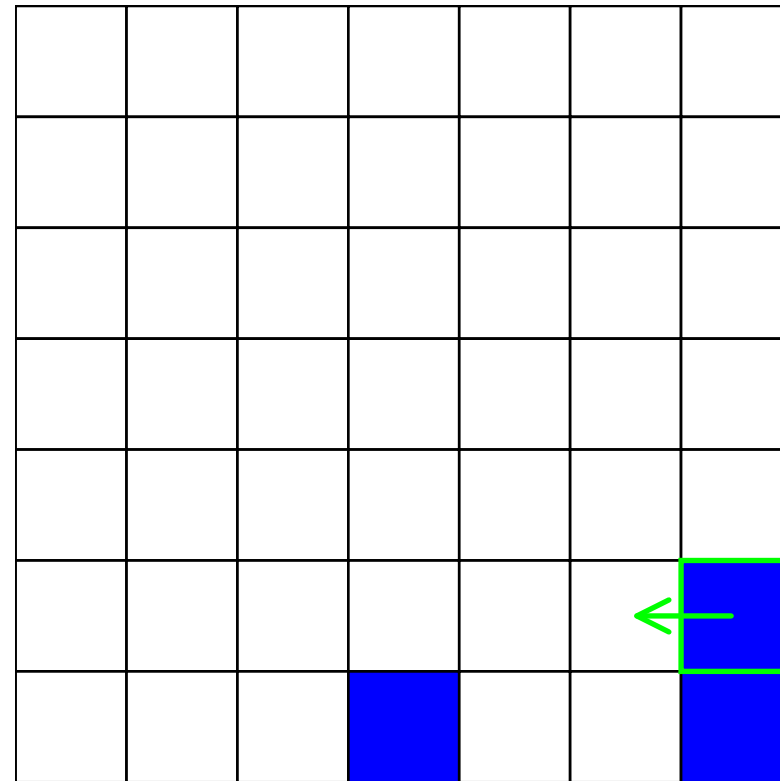
INITIAL STATE: (MOVE 1)

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



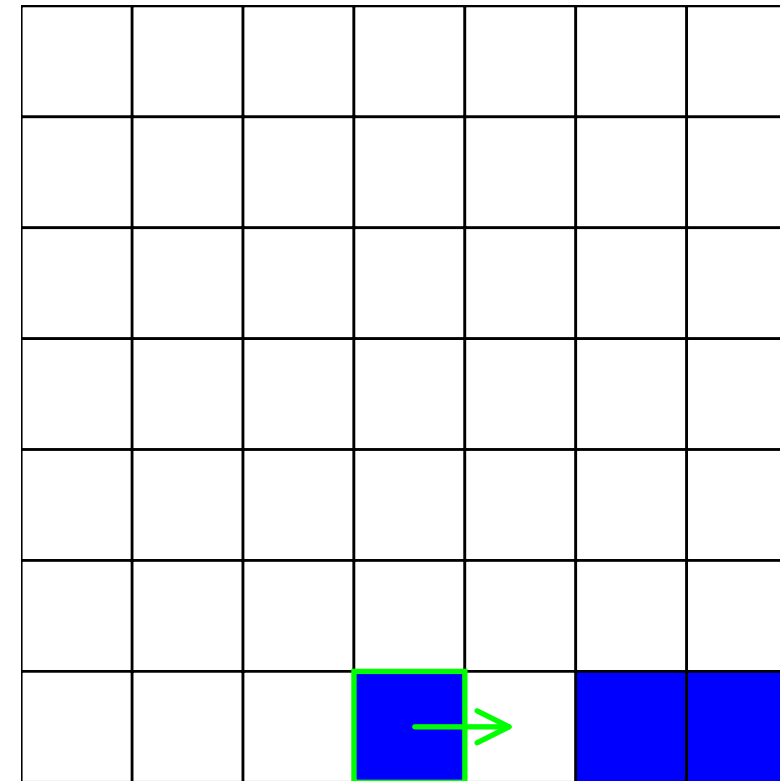
(MOVE 2)

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

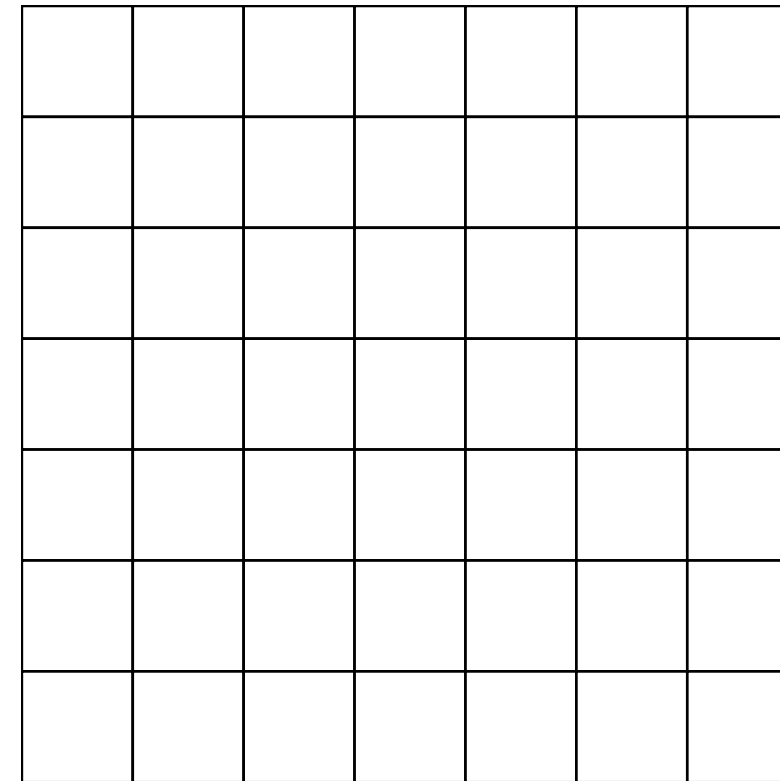


(MOVE 3)

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



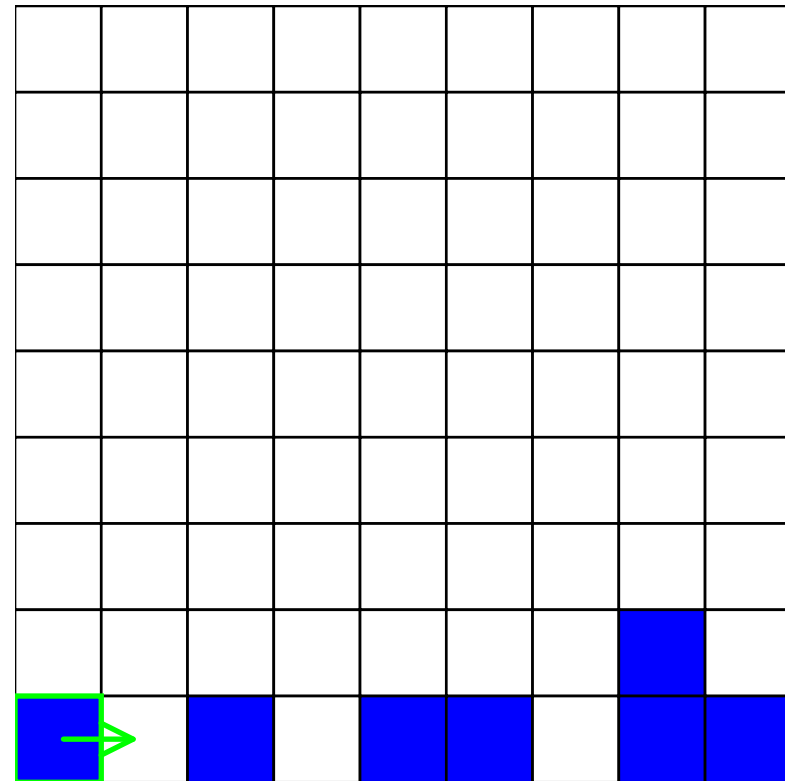
FINAL STATE



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

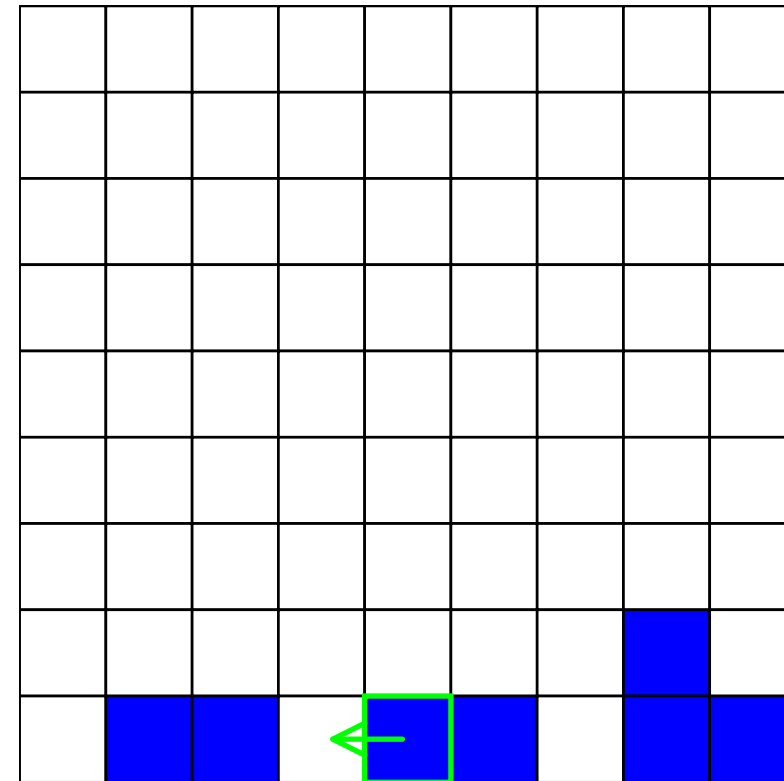
INITIAL STATE: (MOVE 1)

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



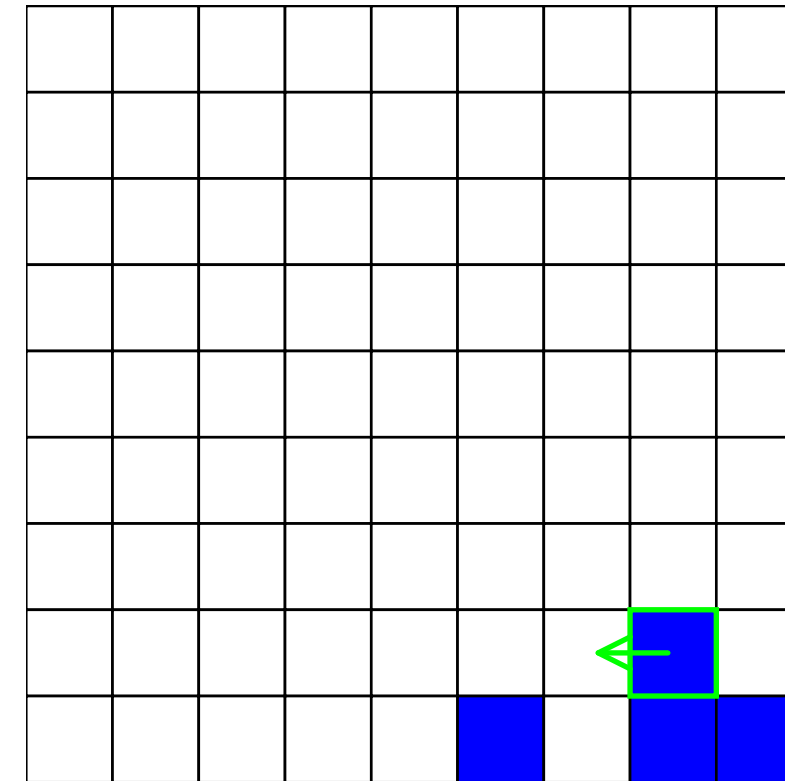
(MOVE 2)

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

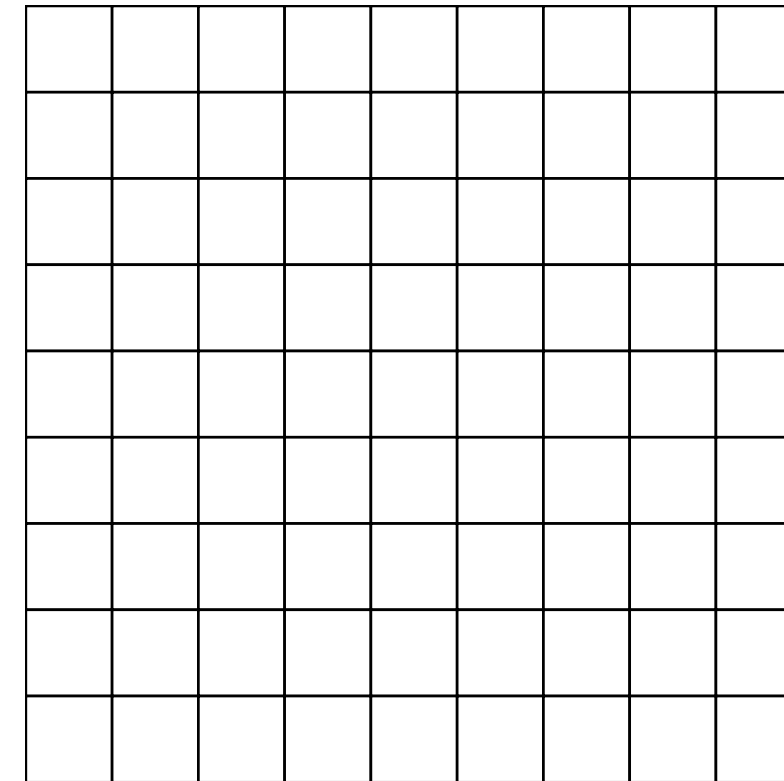


(MOVE 3)

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

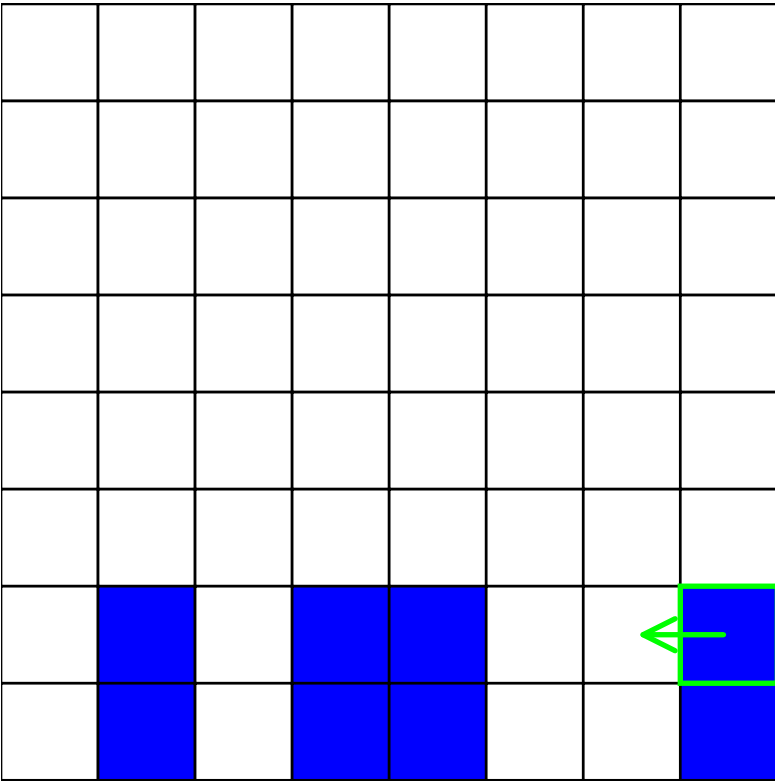


FINAL STATE

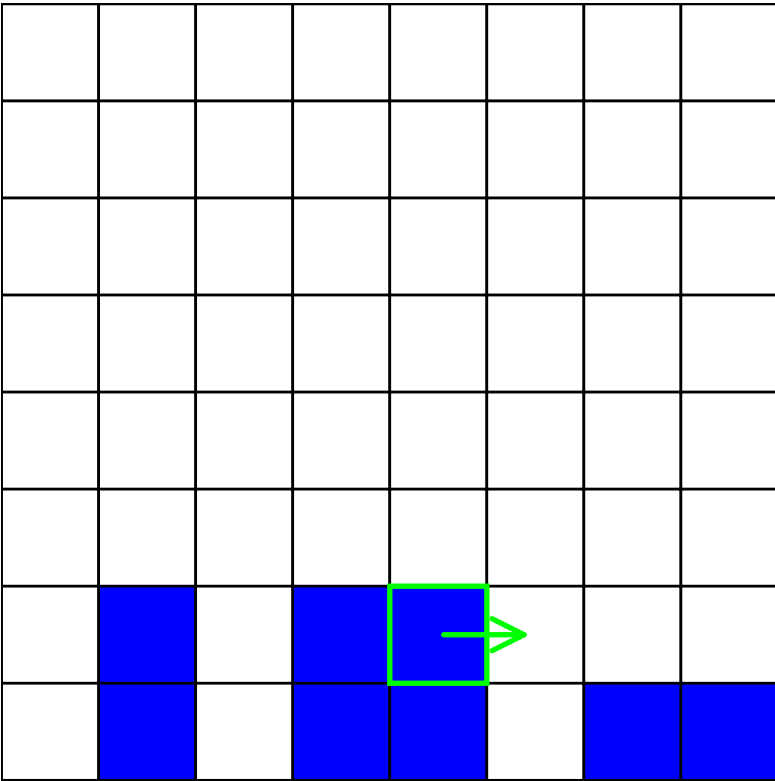


...:SOLUTION::...: Solvable in 3 moves (blocks positions: {(6, 1): <Color: blue>, (6, 3): <Color: blue>, (6, 4): <Color: blue>, (6, 7): <Color: blue>, (7, 1): <Color: blue>, (7, 3): <Color: blue>, (7, 4): <Color: blue>, (7, 7): <Color: blue>})

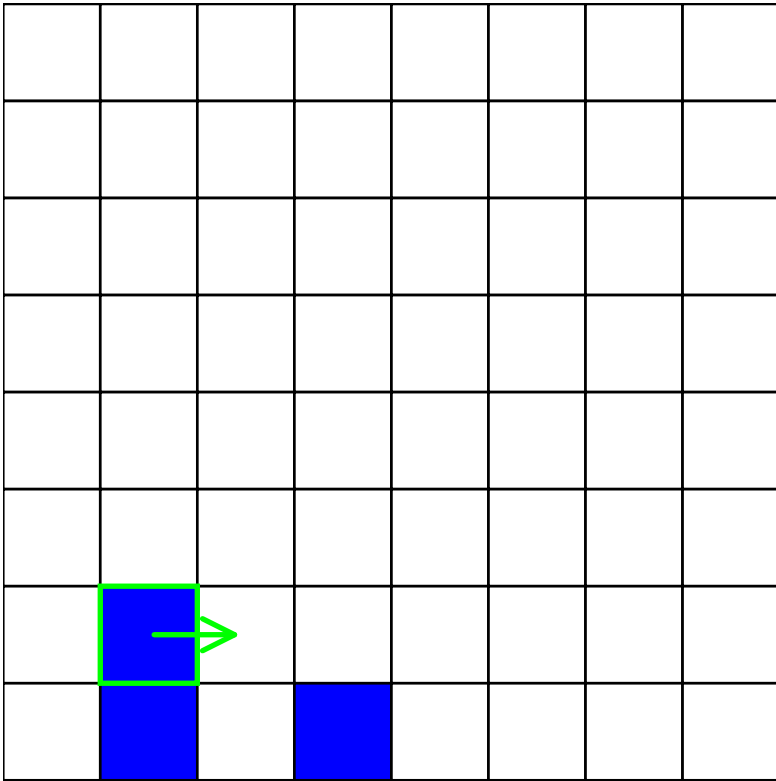
INITIAL STATE: (MOVE 1)
Perform: move_left at position: (6, 7):



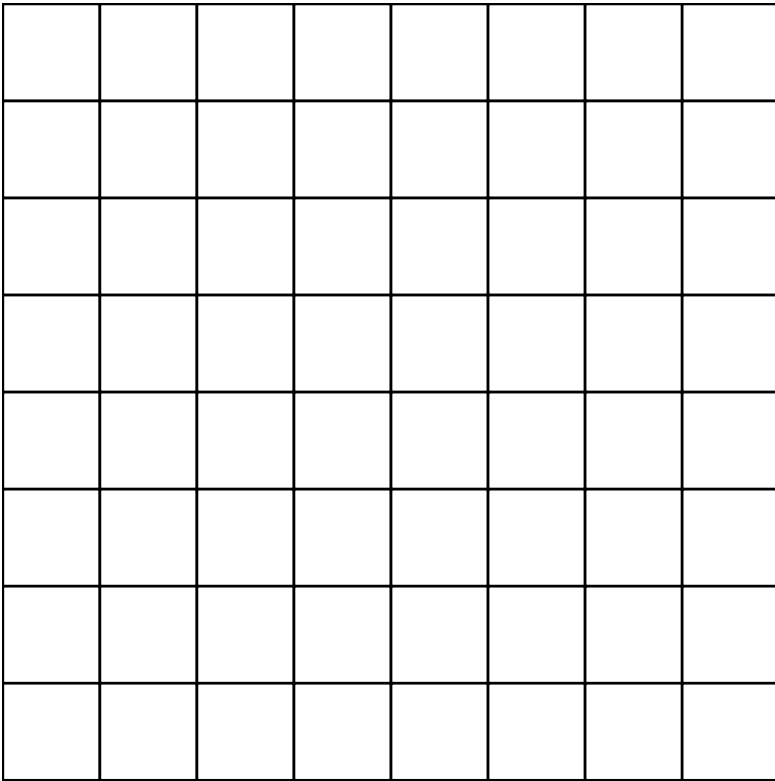
(MOVE 2)
Perform: move_right at position: (6, 4):



(MOVE 3)
Perform: move_right at position: (6, 1):



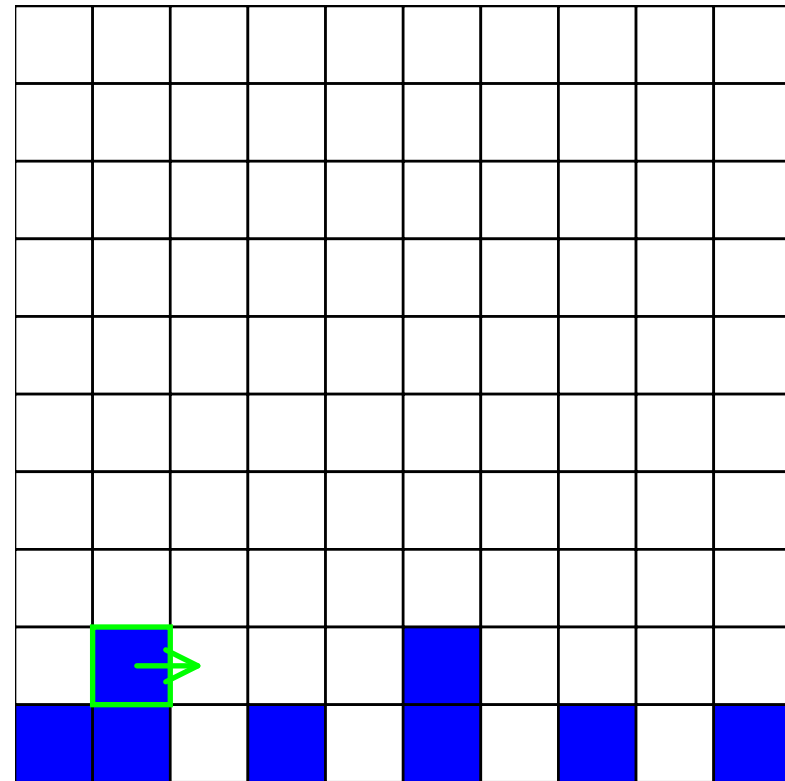
FINAL STATE



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

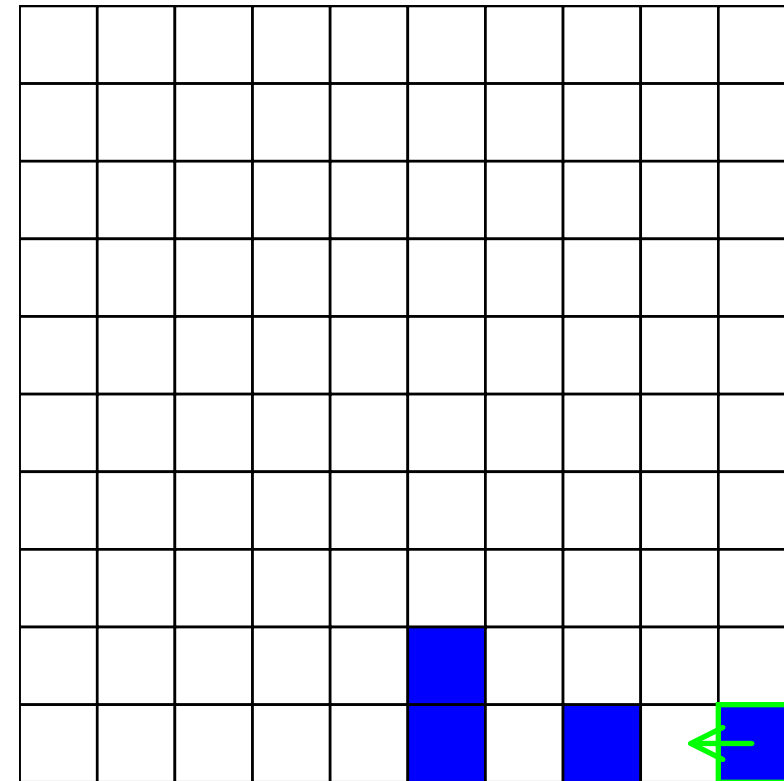
INITIAL STATE: (MOVE 1)

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



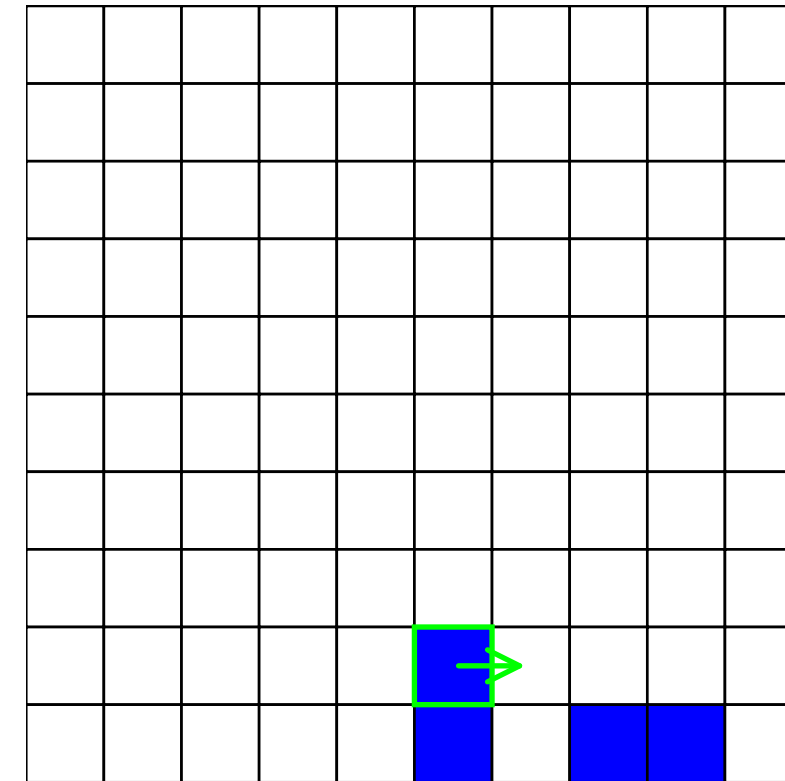
(MOVE 2)

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

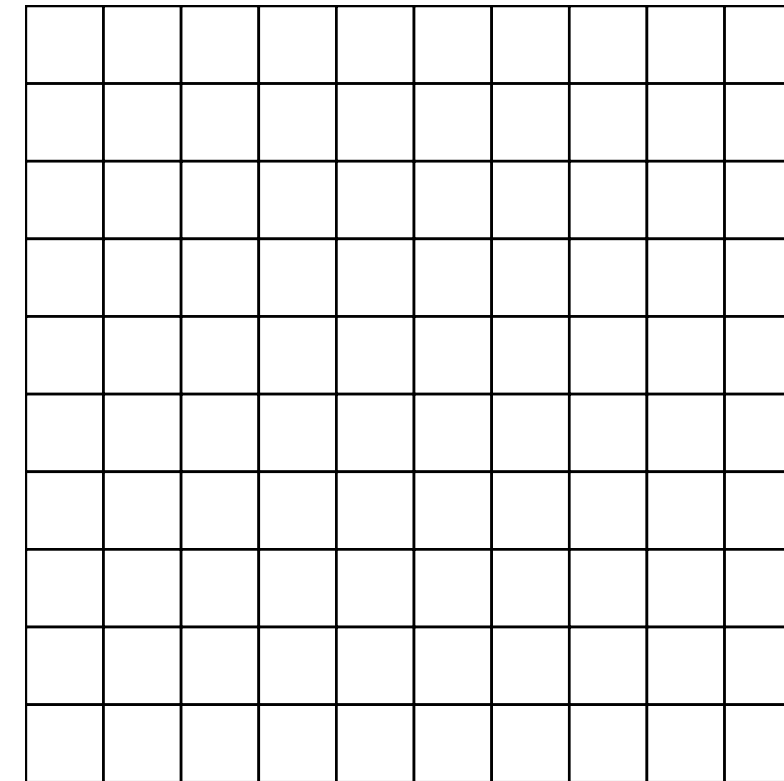


(MOVE 3)

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



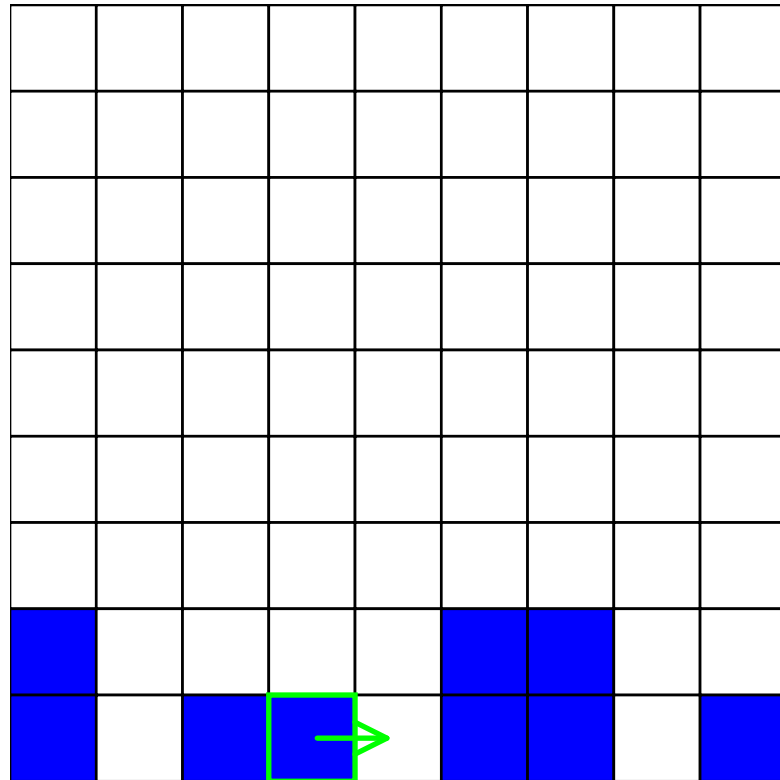
FINAL STATE



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

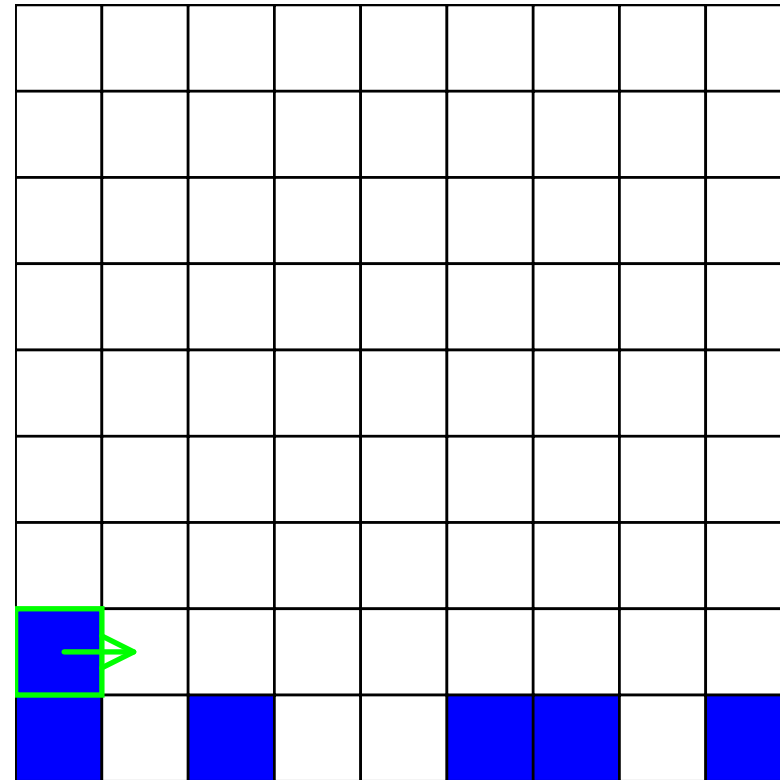
INITIAL STATE: (MOVE 1)

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



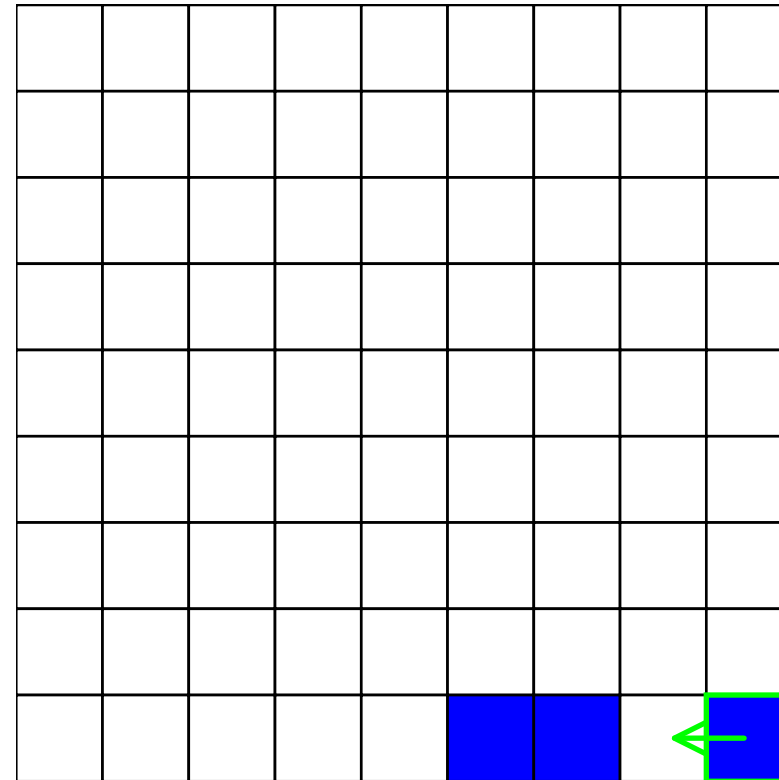
(MOVE 2)

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

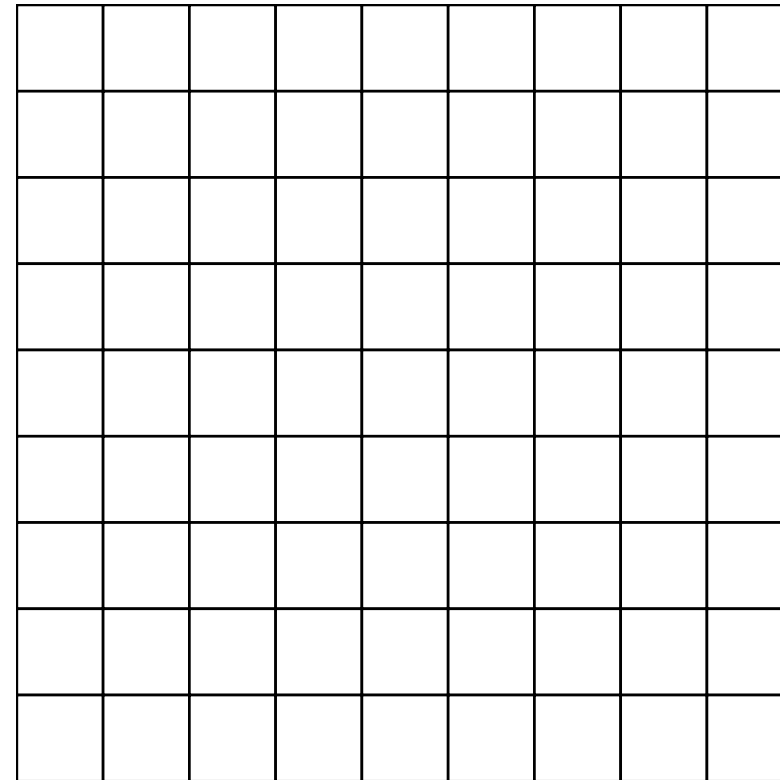


(MOVE 3)

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

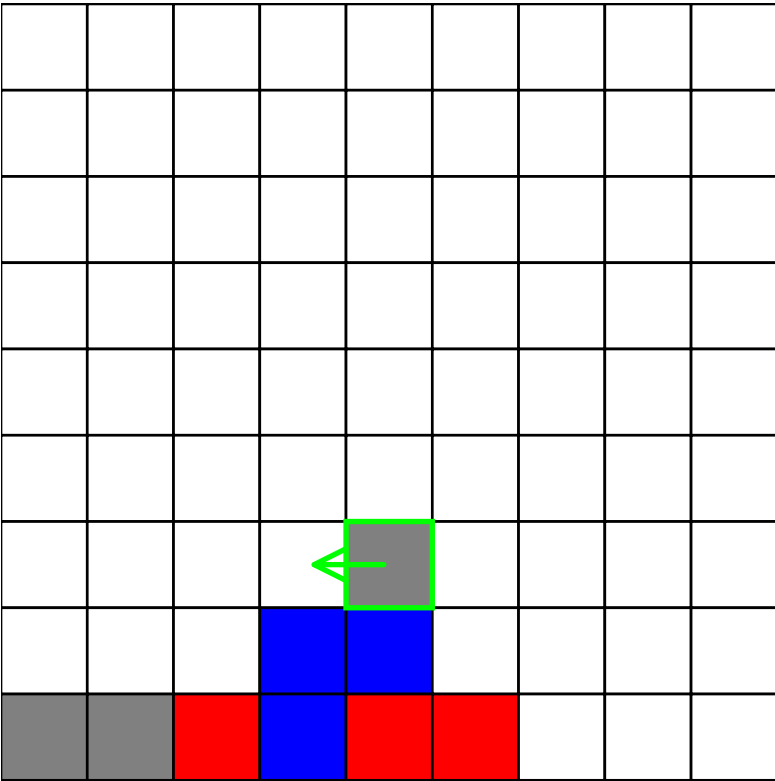


FINAL STATE

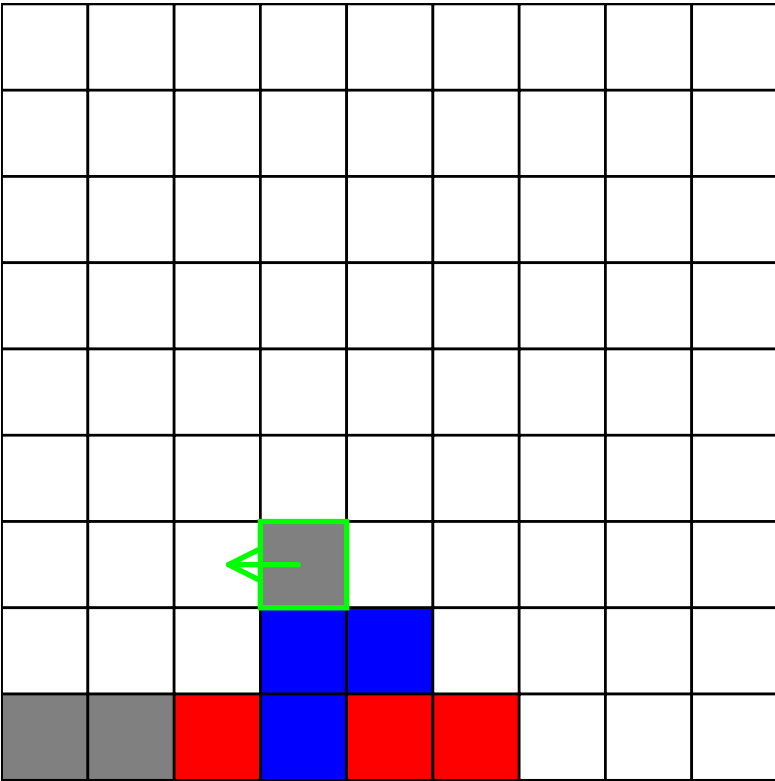


...:SOLUTION::...: Solvable in 3 moves (blocks positions: {(6, 4): <Color: gray>, (7, 3): <Color: blue>, (7, 4): <Color: blue>, (8, 0): <Color: gray>, (8, 1): <Color: gray>, (8, 2): <Color: red>, (8, 3): <Color: blue>, (8, 4): <Color: red>, (8, 5): <Color: red>}

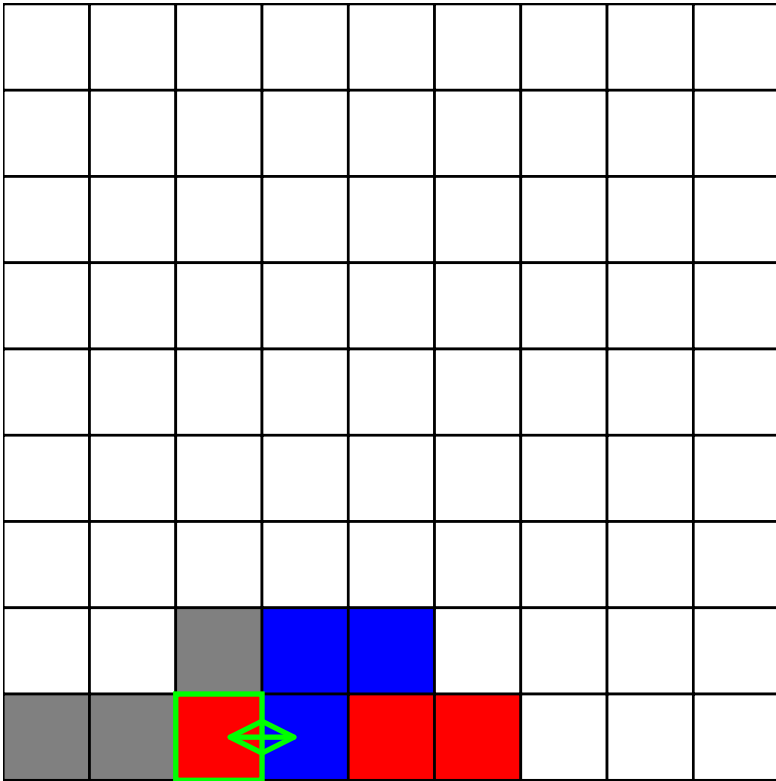
INITIAL STATE: (MOVE 1)
Perform: move_left at position: (6, 4):



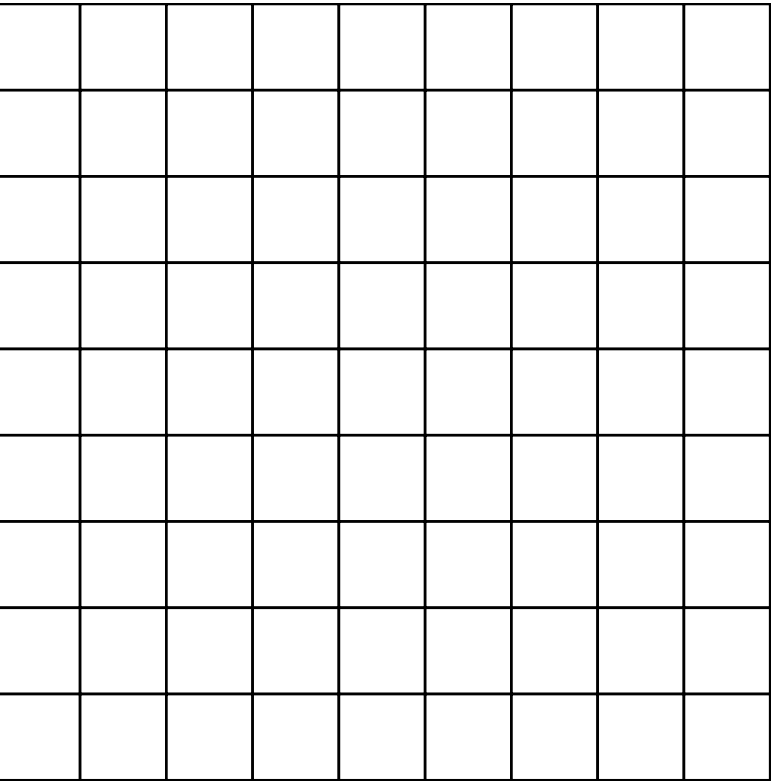
(MOVE 2)
Perform: move_left at position: (6, 3):



(MOVE 3)
Perform: exchange_right at position: (8, 2):



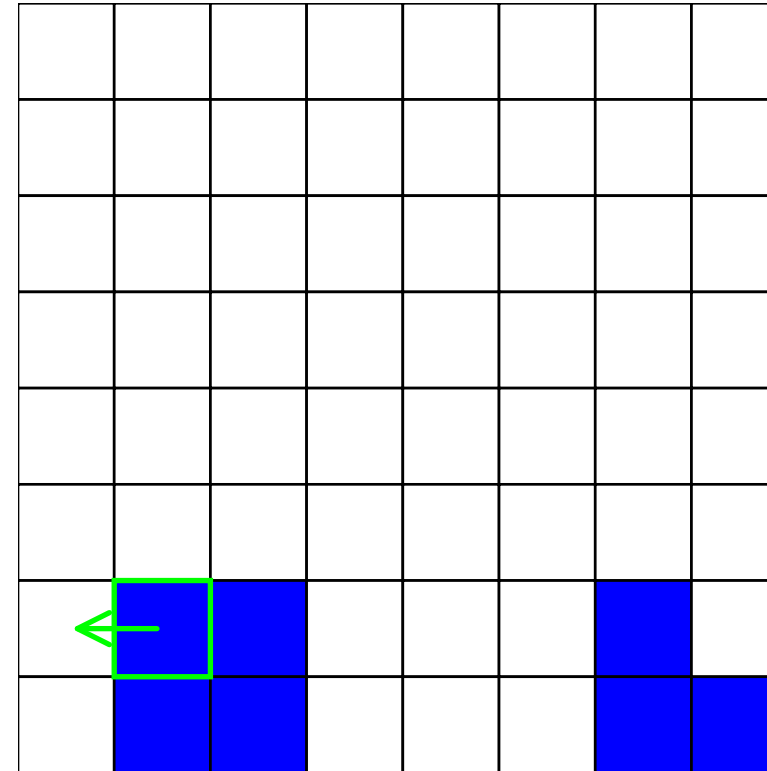
FINAL STATE



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

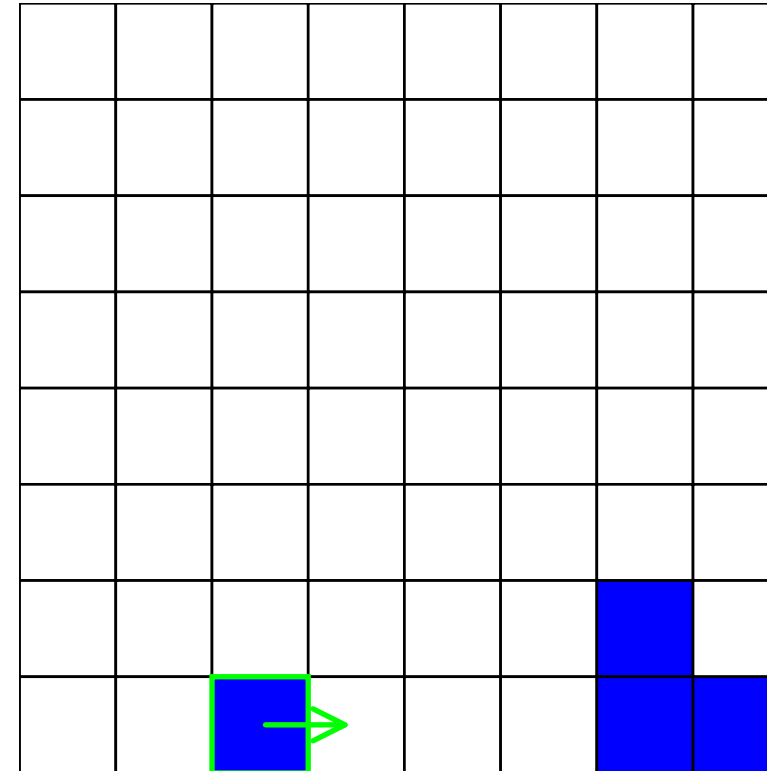
INITIAL STATE: (MOVE 1)

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



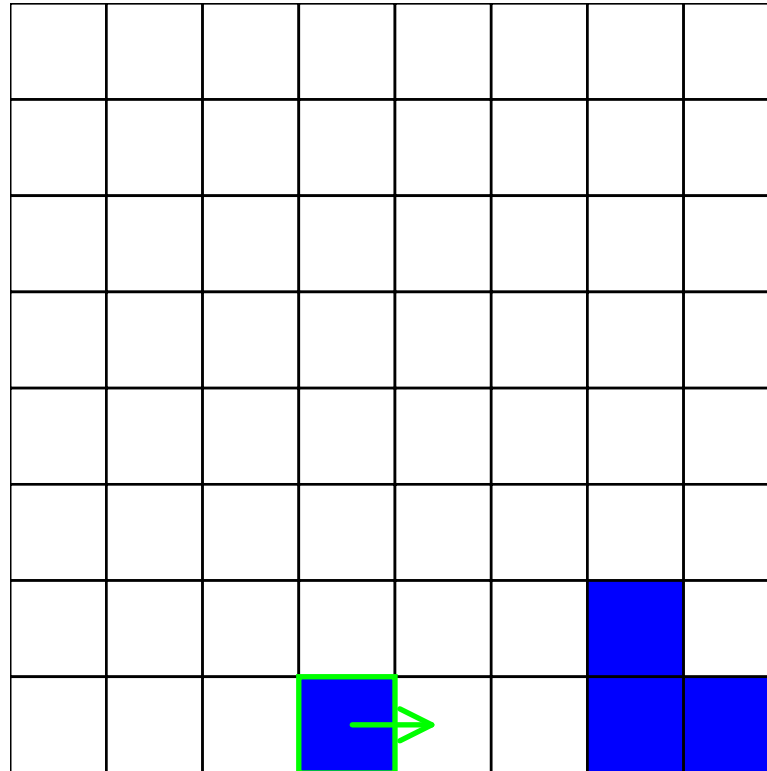
(MOVE 2)

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



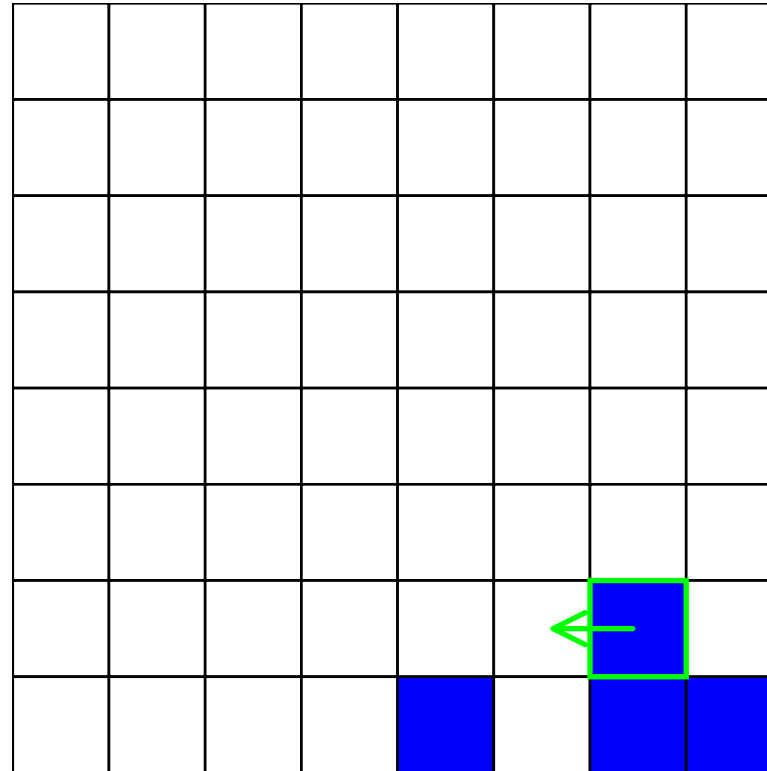
(MOVE 3)

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

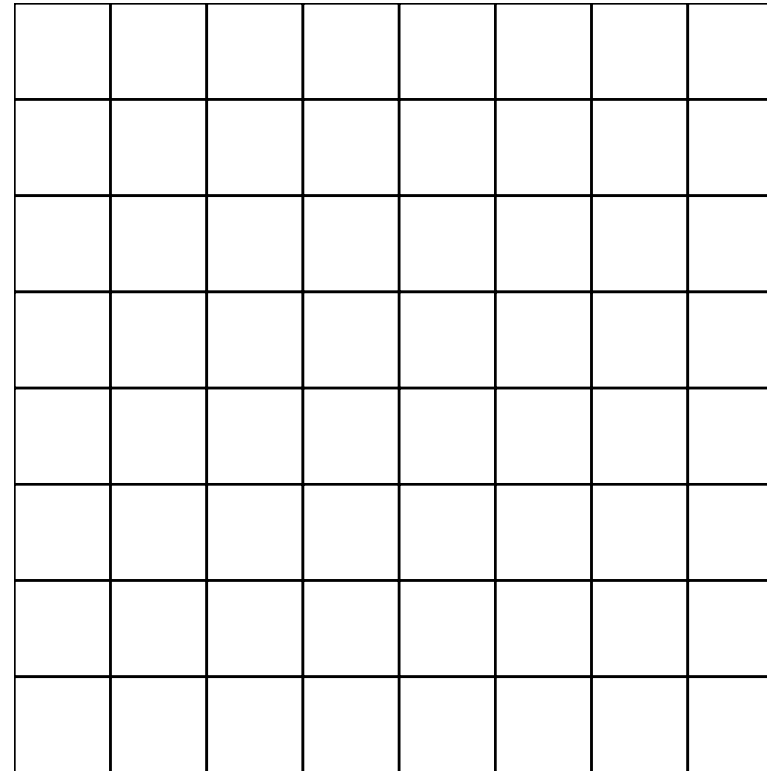


(MOVE 4)

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



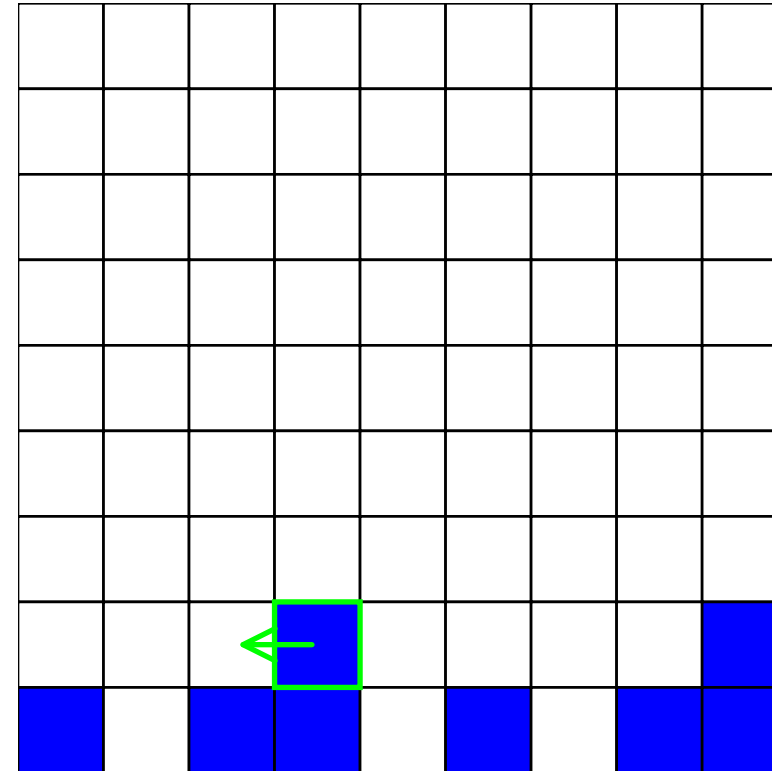
FINAL STATE



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

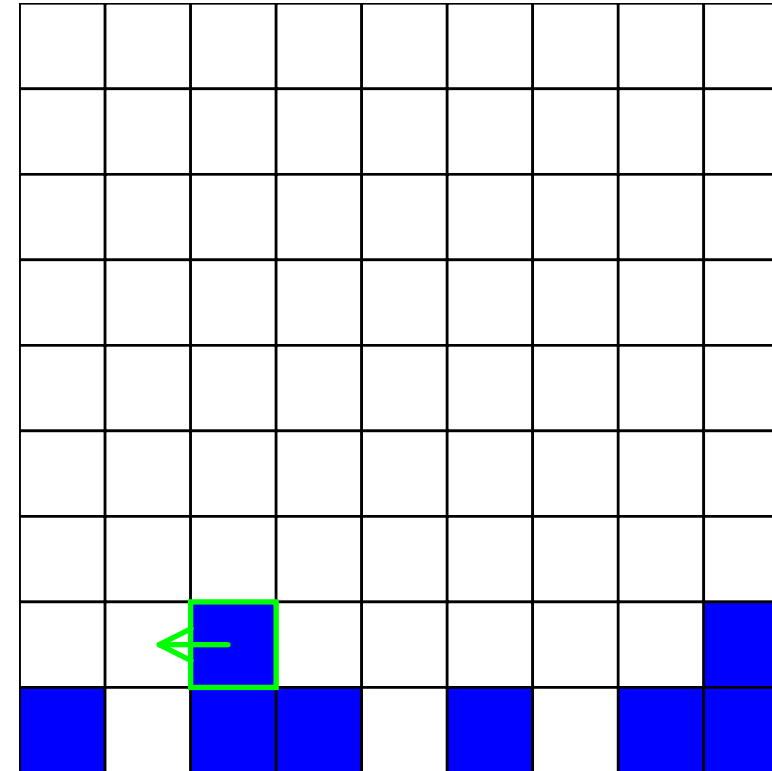
INITIAL STATE: (MOVE 1)

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



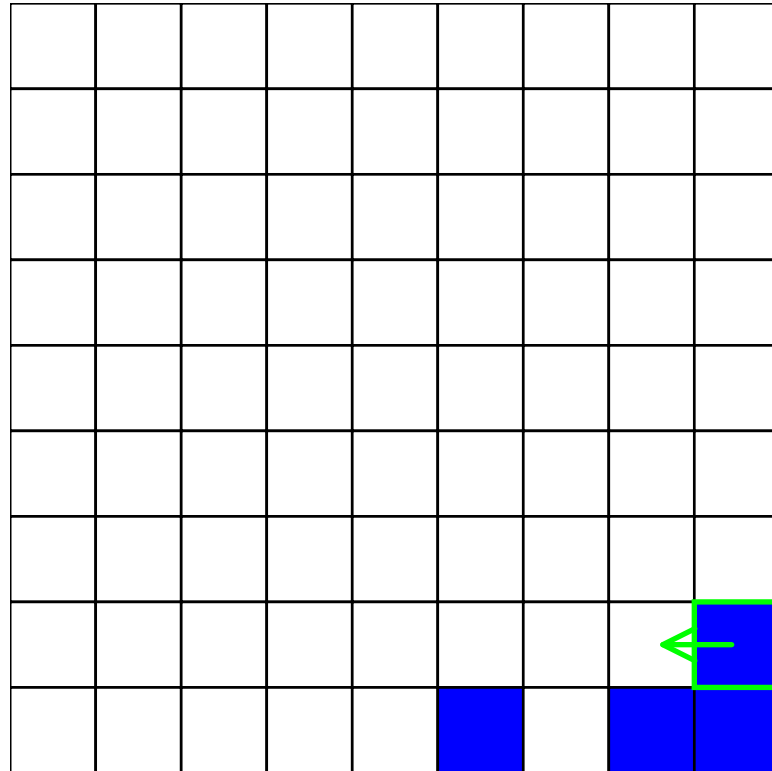
(MOVE 2)

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



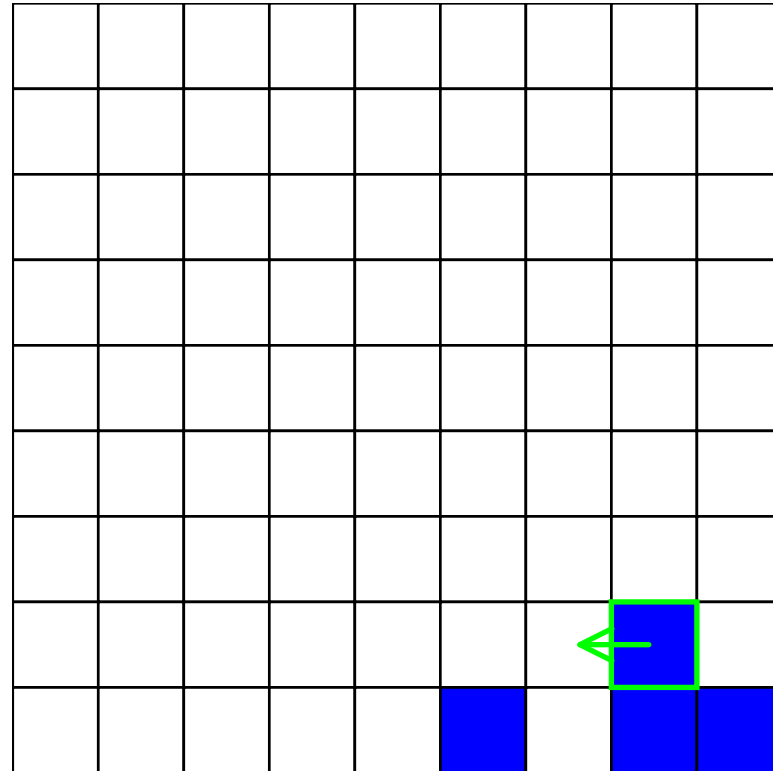
(MOVE 3)

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

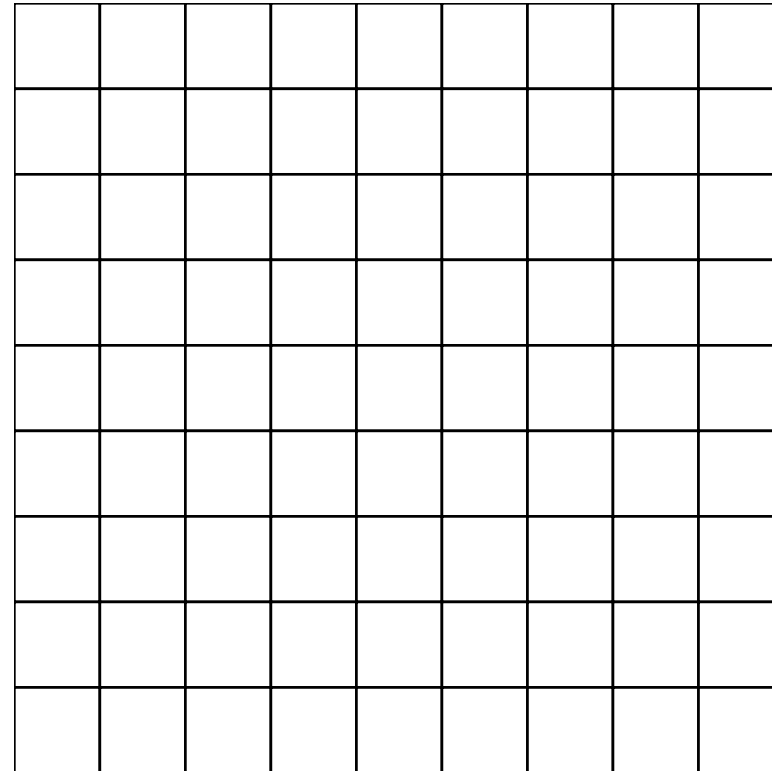


(MOVE 4)

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



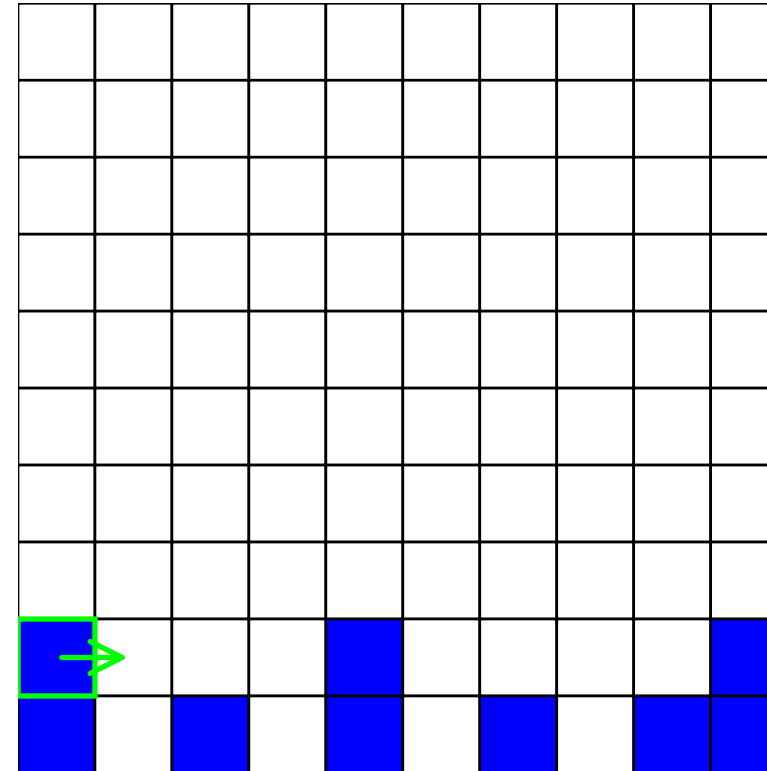
FINAL STATE



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

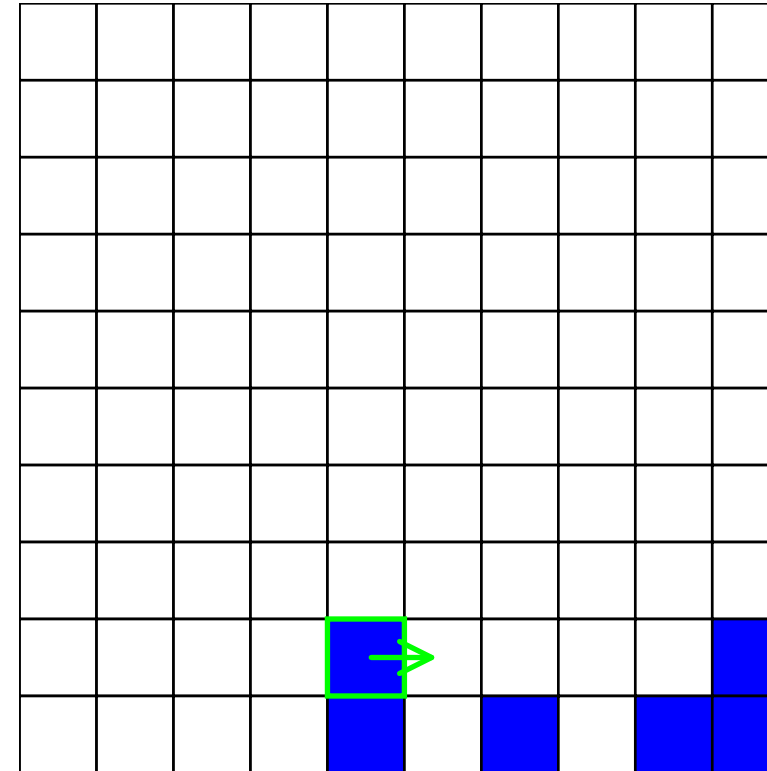
INITIAL STATE: (MOVE 1)

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



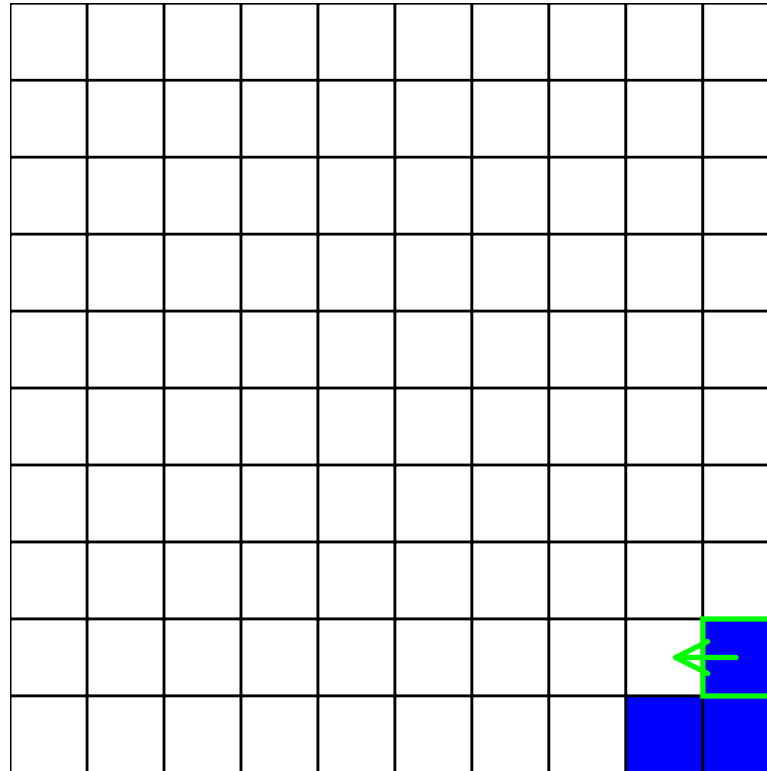
(MOVE 2)

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



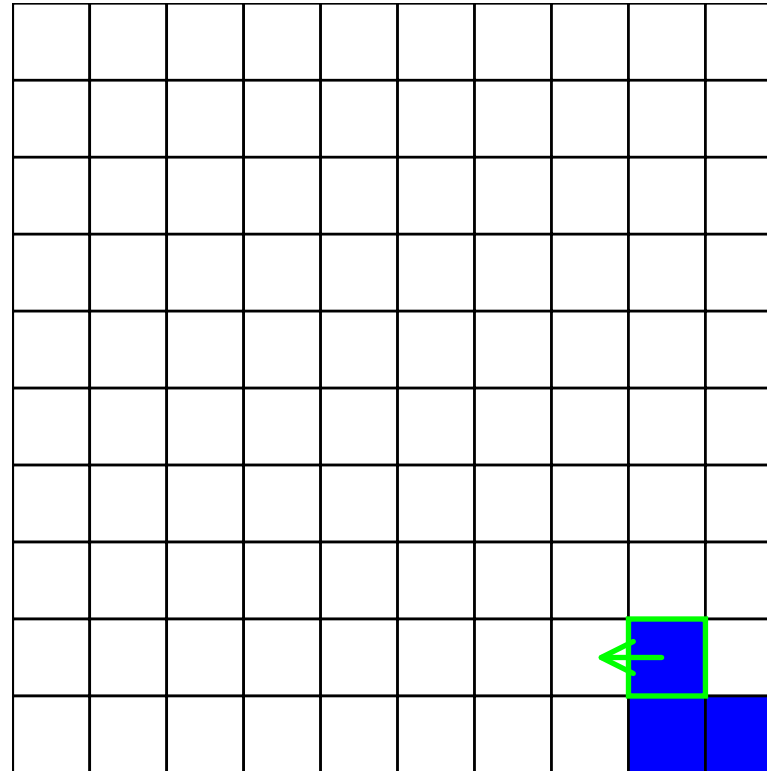
(MOVE 3)

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

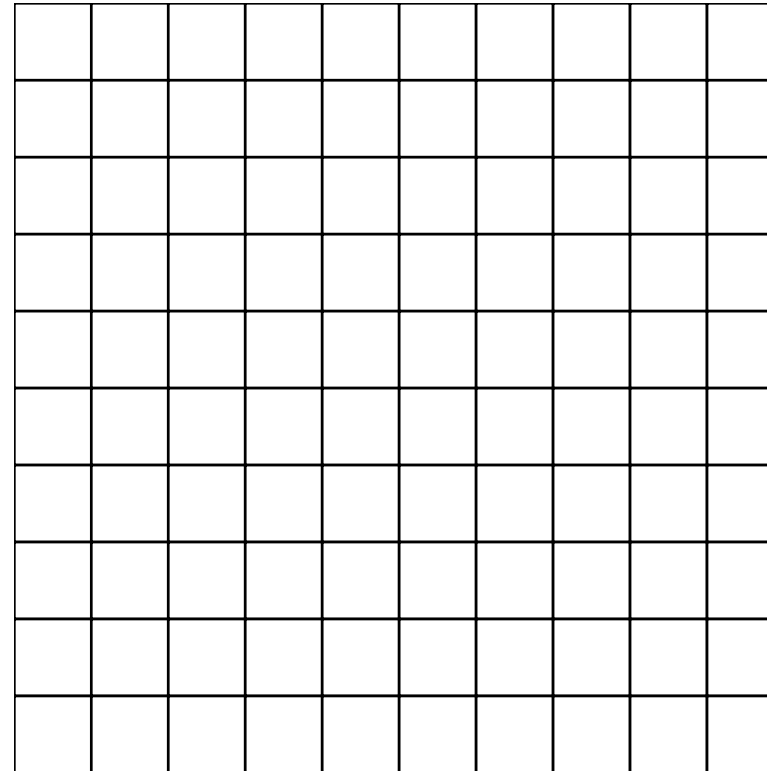


(MOVE 4)

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



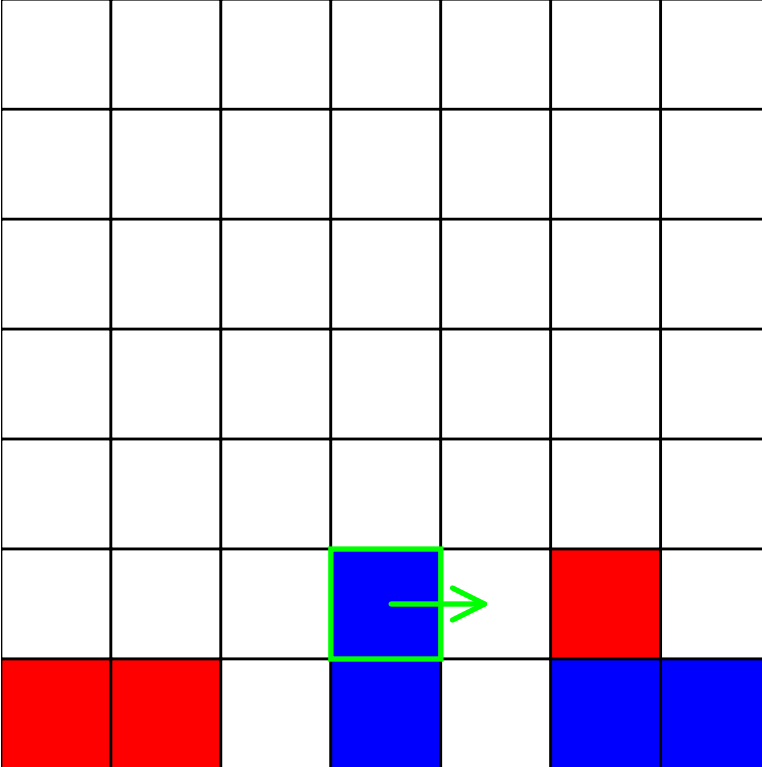
FINAL STATE



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

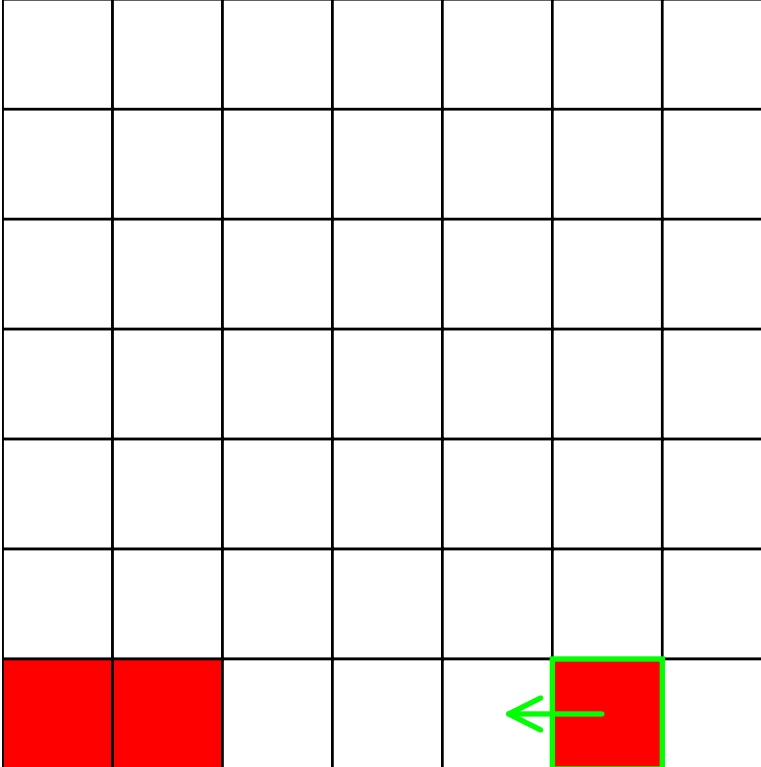
INITIAL STATE: (MOVE 1)

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



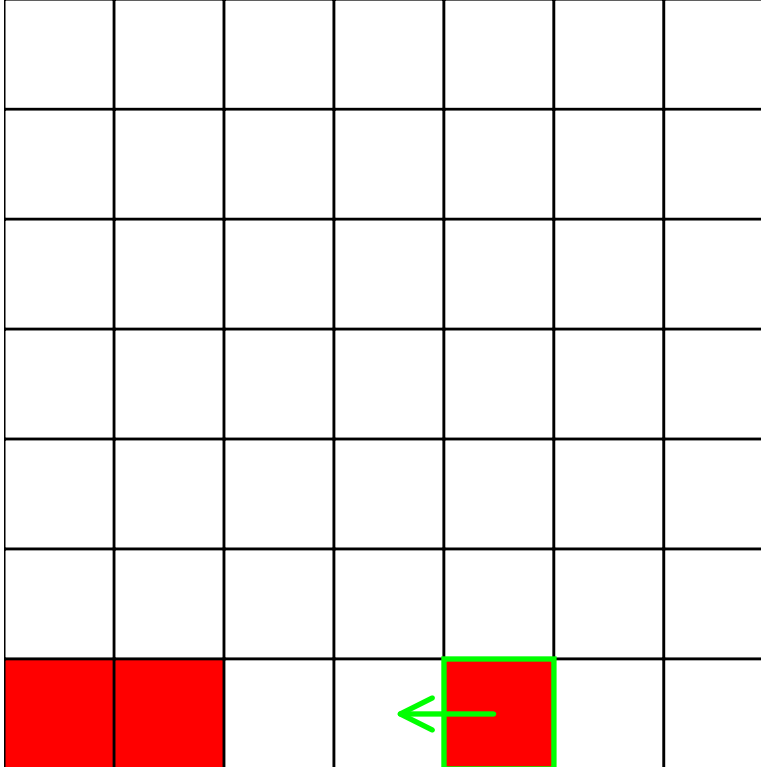
(MOVE 2)

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



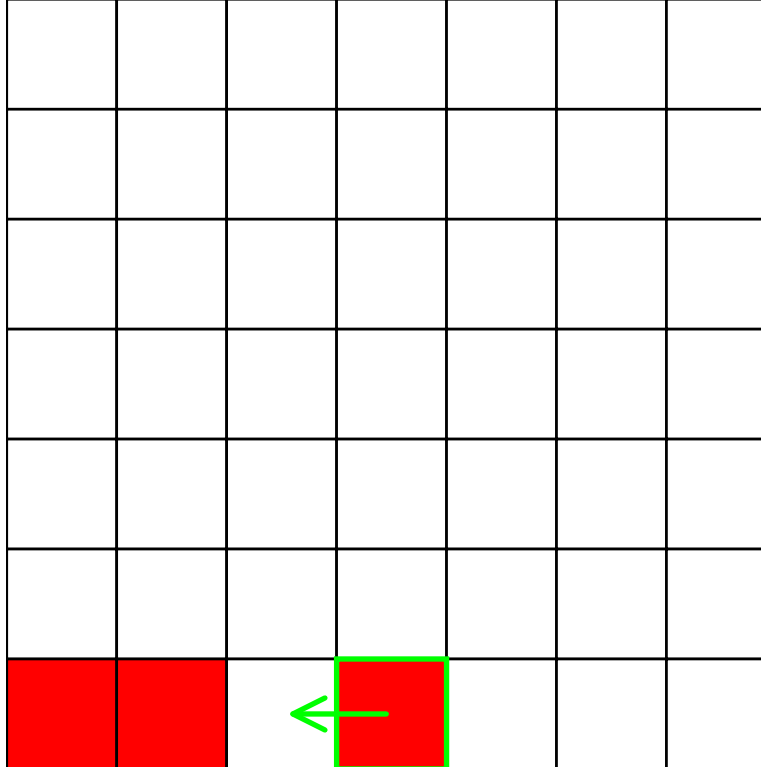
(MOVE 3)

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

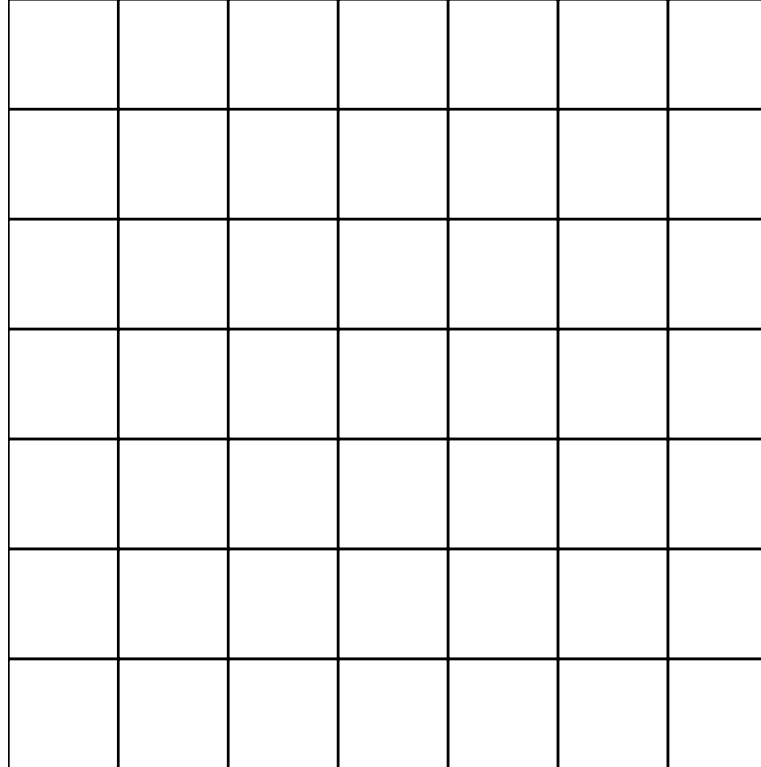


(MOVE 4)

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



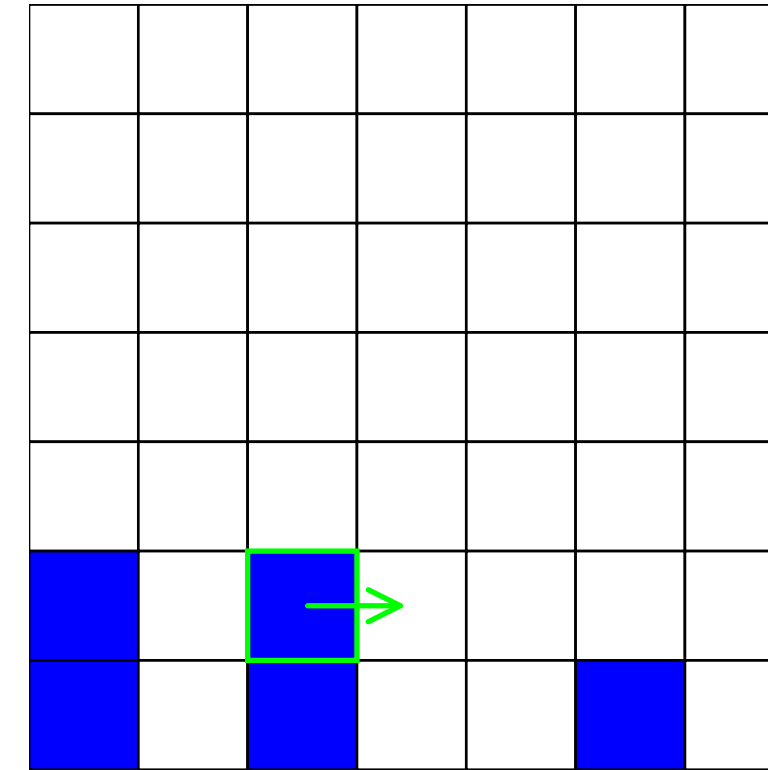
FINAL STATE



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

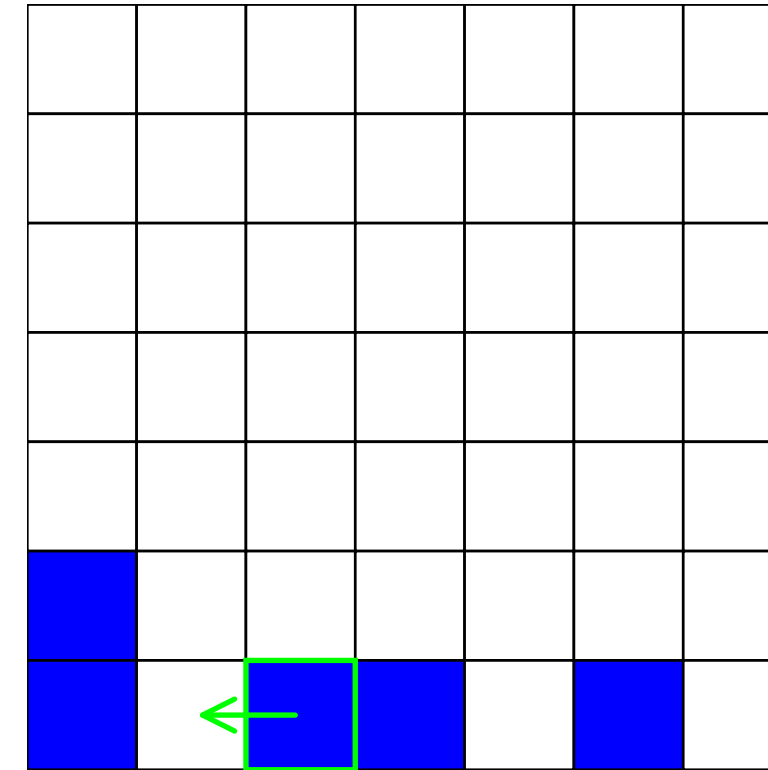
INITIAL STATE: (MOVE 1)

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



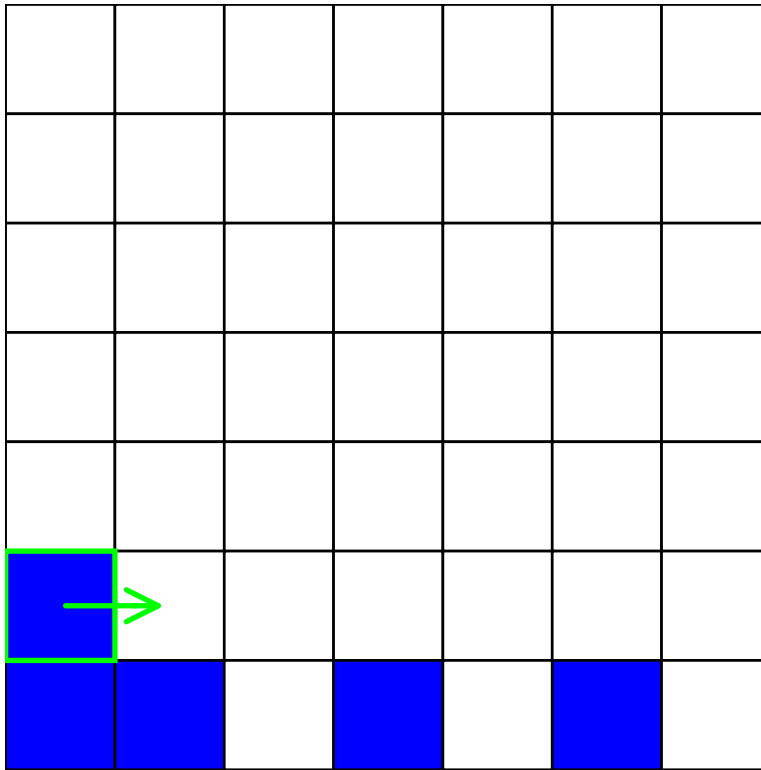
(MOVE 2)

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



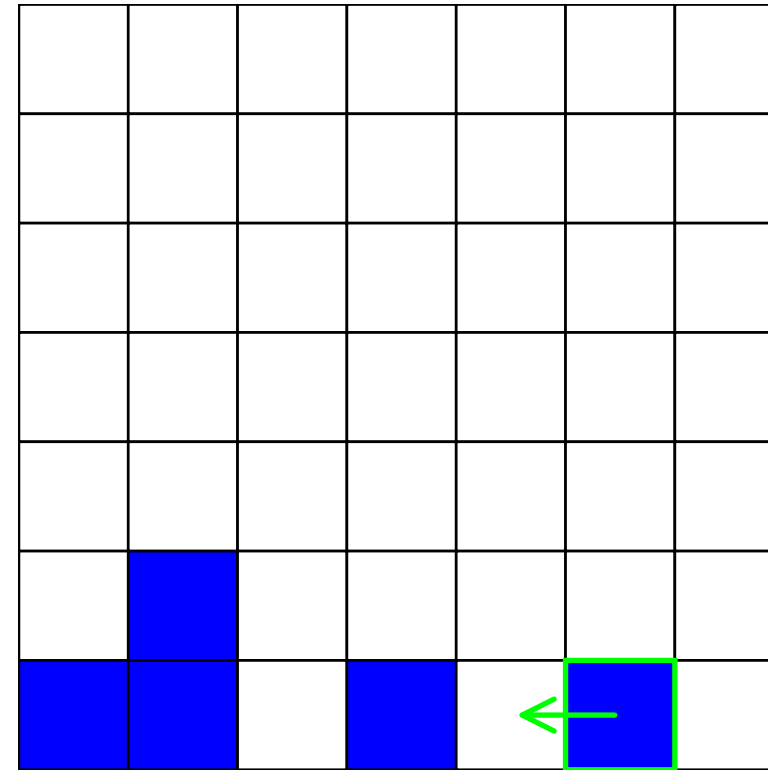
(MOVE 3)

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



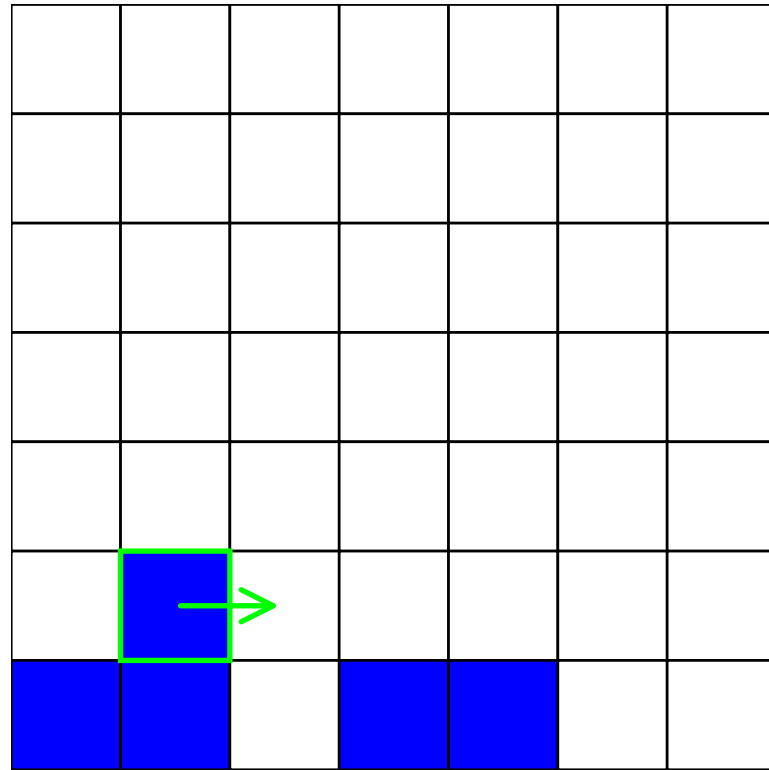
(MOVE 4)

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

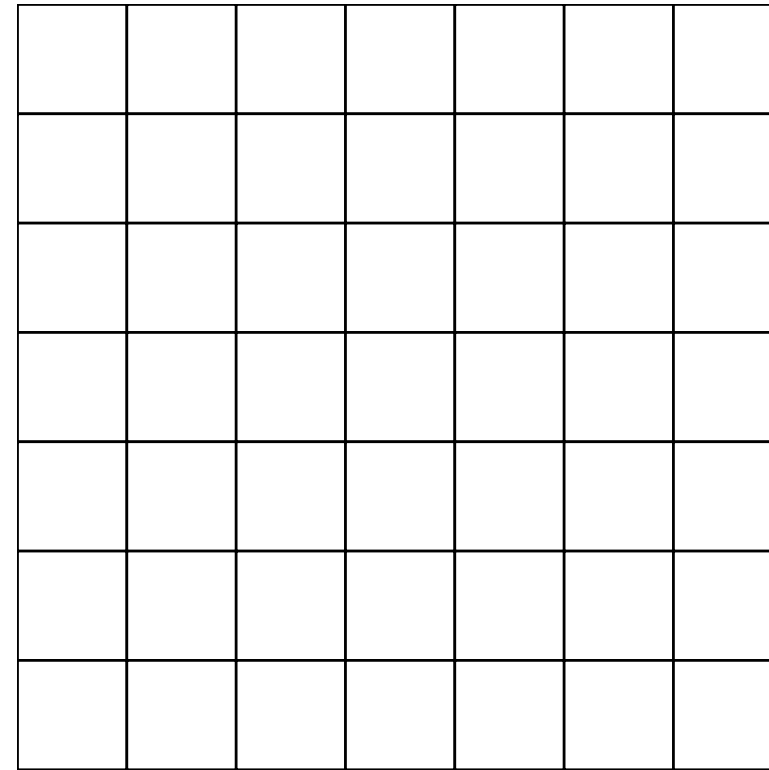


(MOVE 5)

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



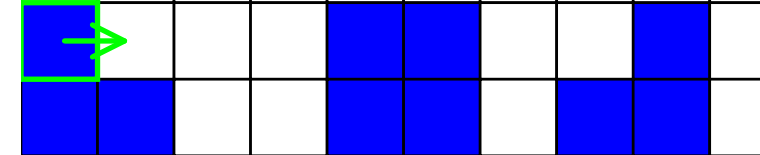
FINAL STATE



·SOLUTION· : Solvable in 5 moves (blocks positions: {(8, 0): <Color: blue> (8, 4): <Color: blue> (8, 5): <Color: blue> (8, 8): <Color: blue> (9, 0): <Color: blue> (9, 1): <Color: blue> (9, 4): <Color: blue> (9, 5): <Color: blue> (9, 7): <Color: blue> (9, 8): <Color: blue>})

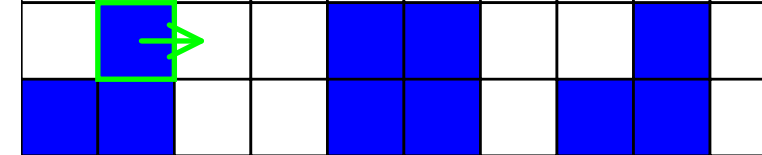
INITIAL STATE: (MOVE 1)

Perform: move right at position: (8, 0):



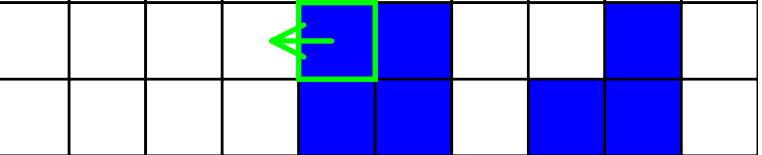
(MOVE 2)

Perform: move right at position: (8, 1):



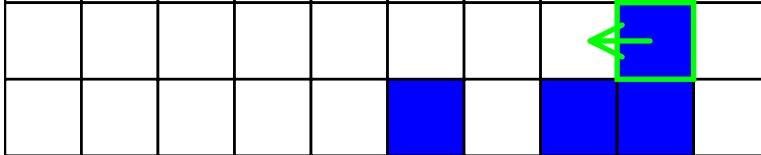
MOVE 3)

```
perform: move left at position: (8, 4):
```



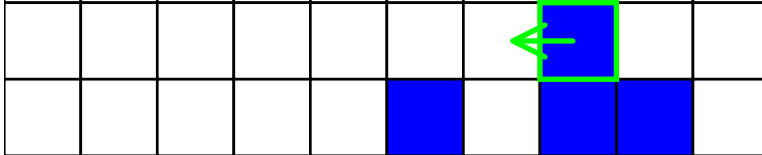
MOVE 4)

perform: move left at position: (8, 8):

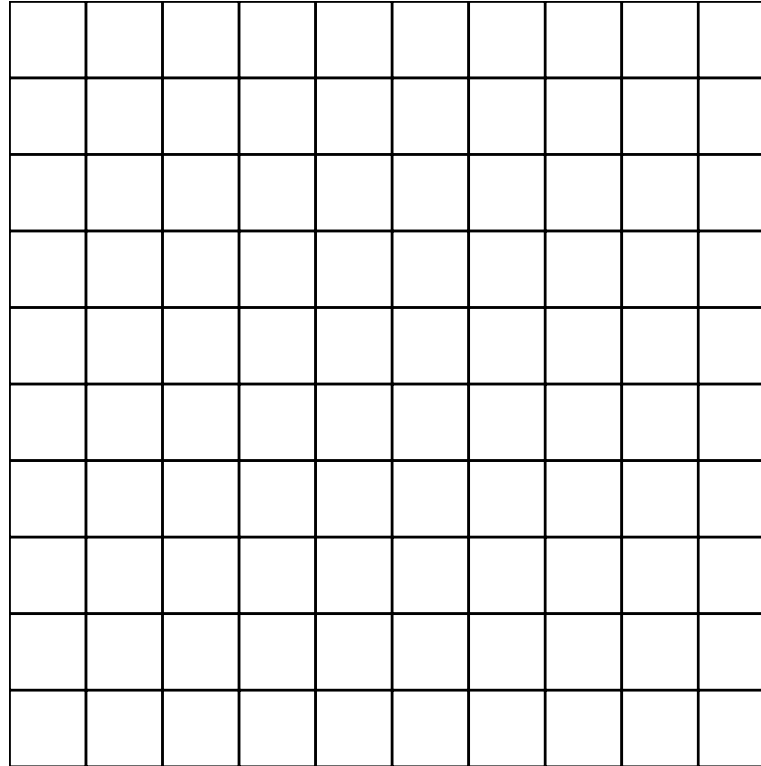


MOVE 5)

```
perform: move left at position: (8, 1):
```



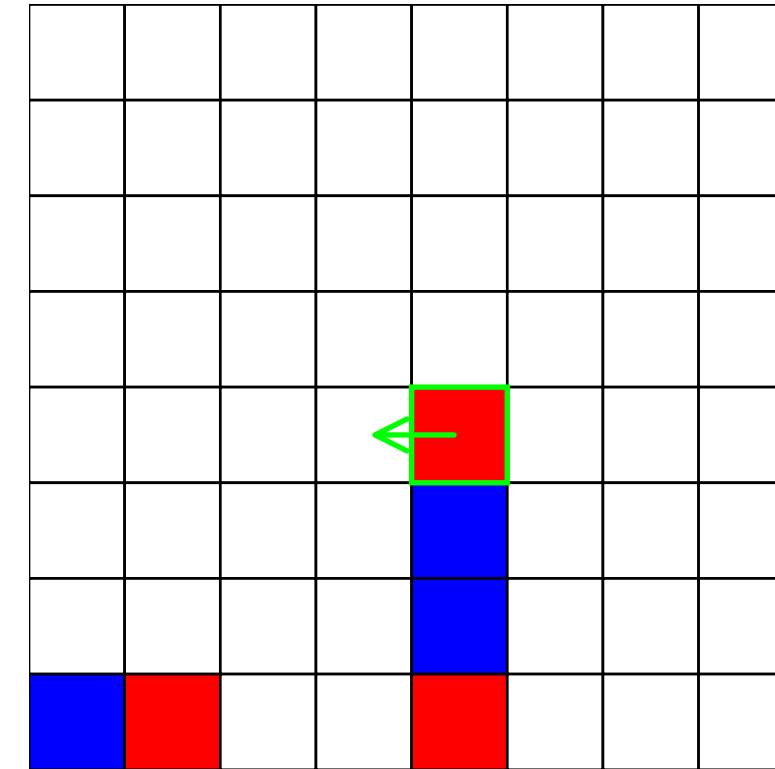
FINAL STATE



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

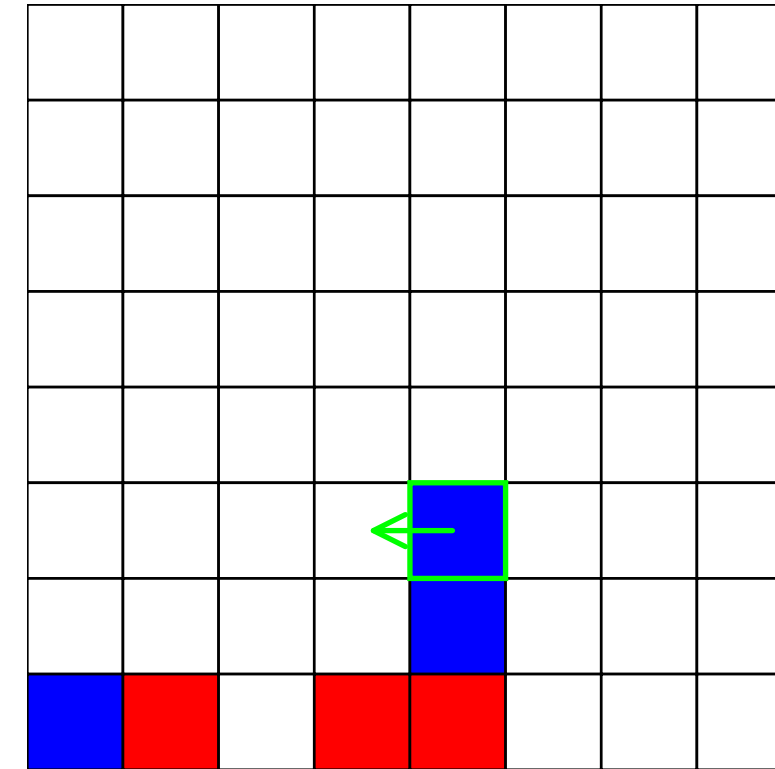
INITIAL STATE: (MOVE 1)

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



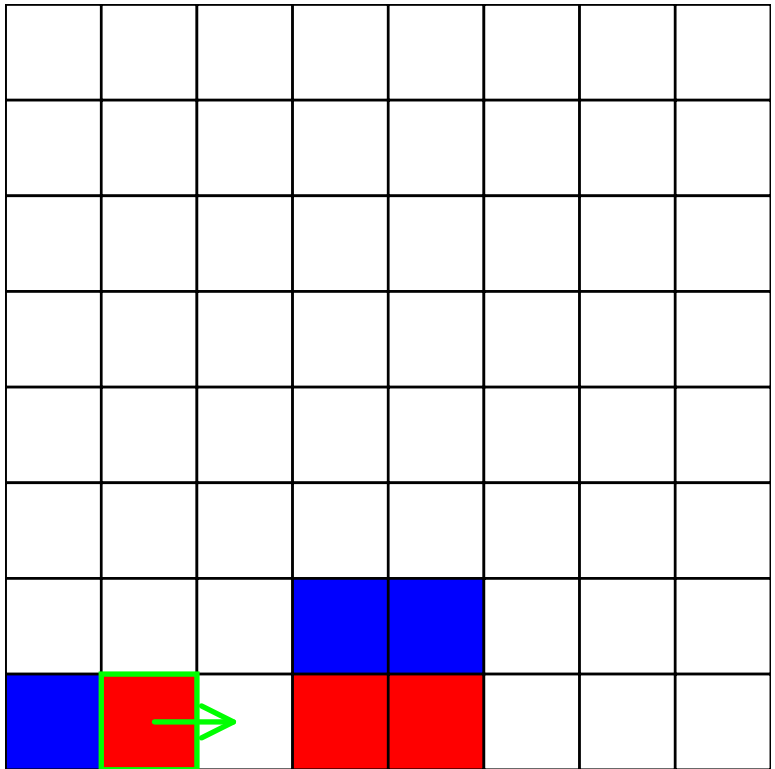
(MOVE 2)

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



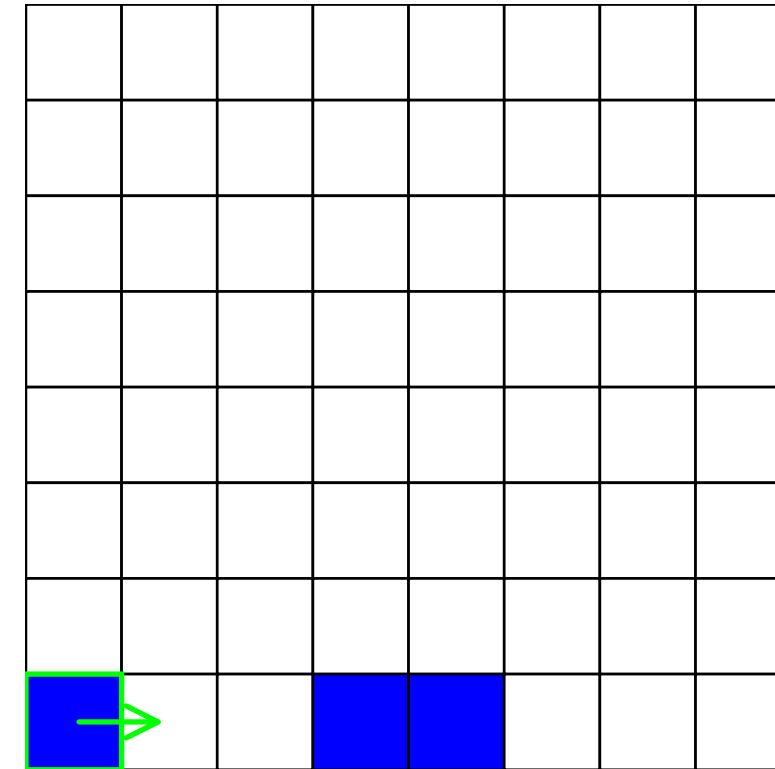
(MOVE 3)

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



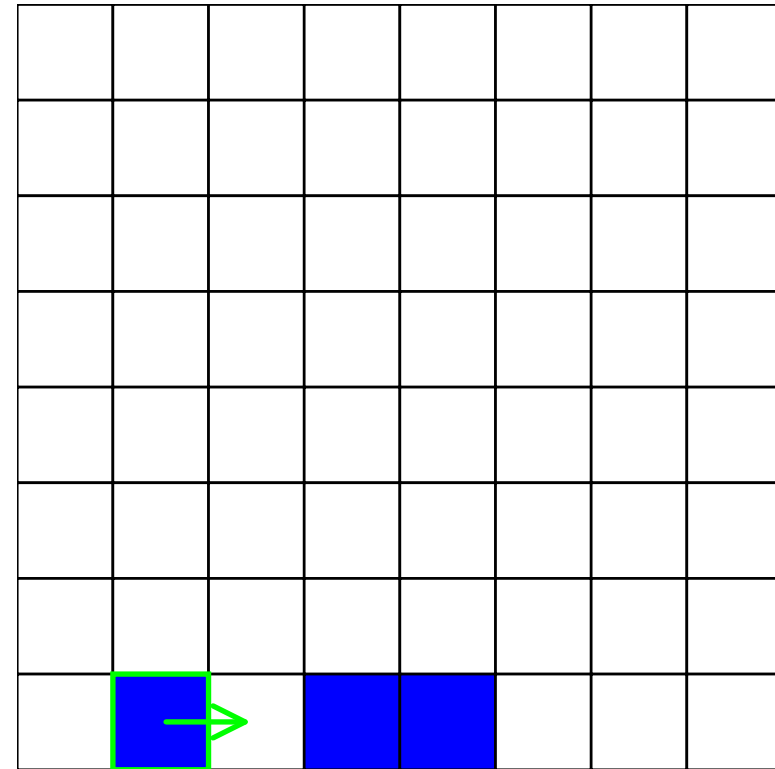
(MOVE 4)

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

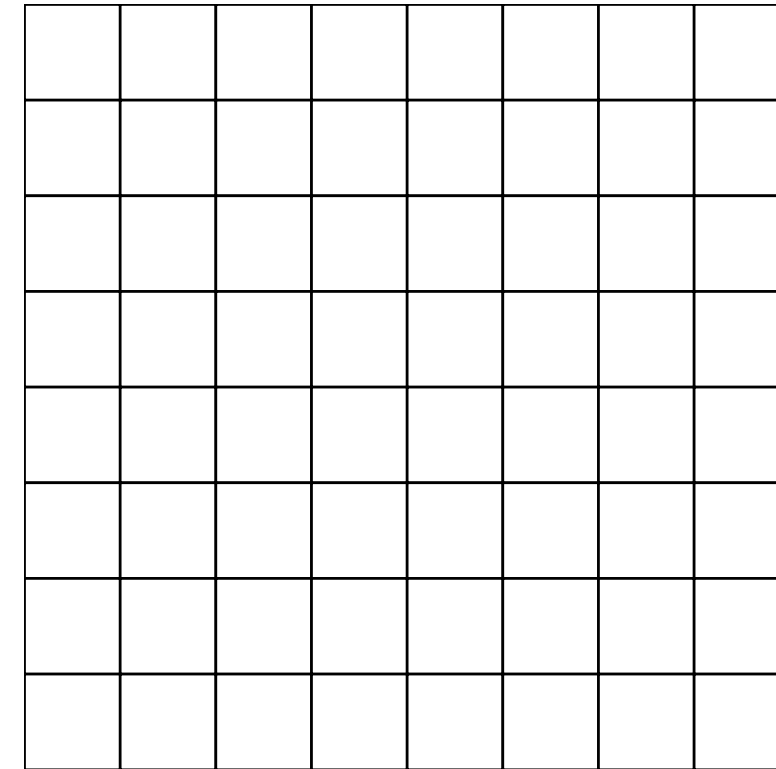


(MOVE 5)

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



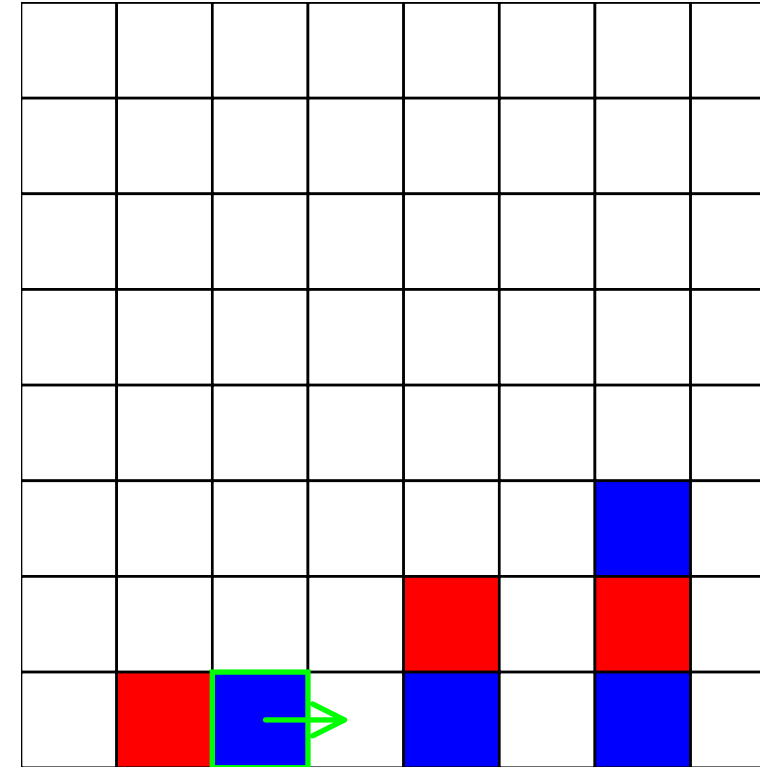
FINAL STATE



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

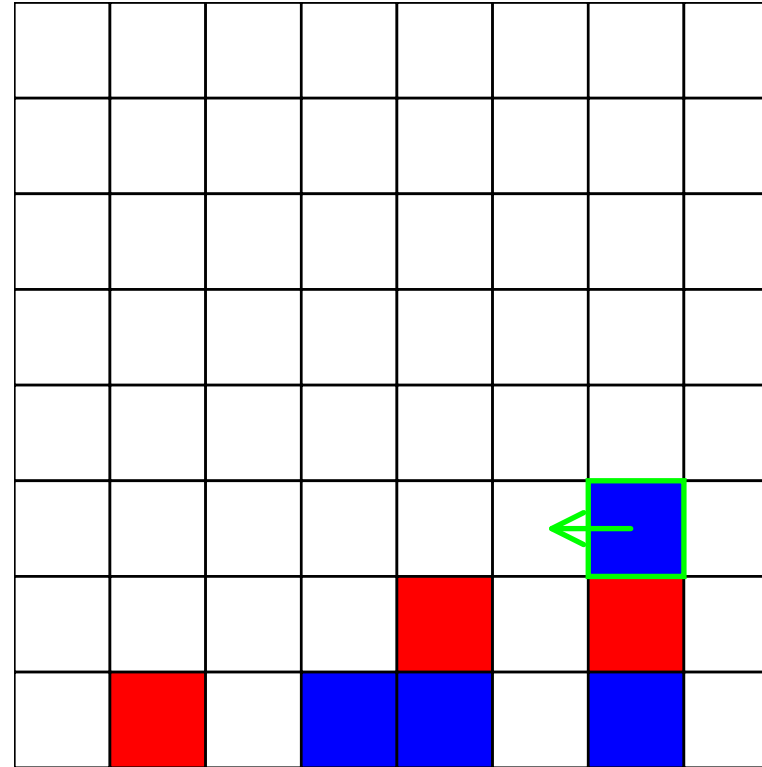
INITIAL STATE: (MOVE 1)

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



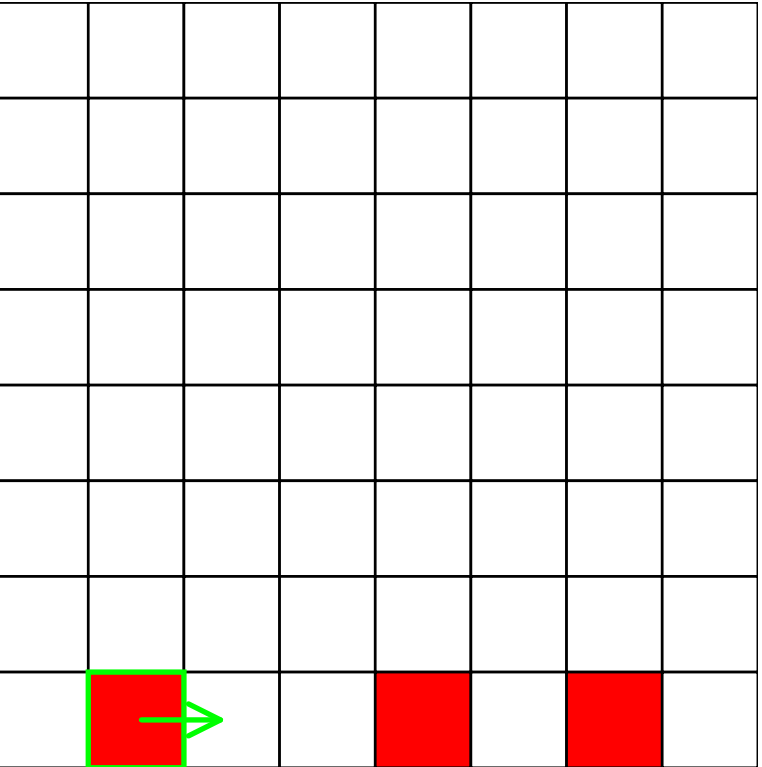
(MOVE 2)

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



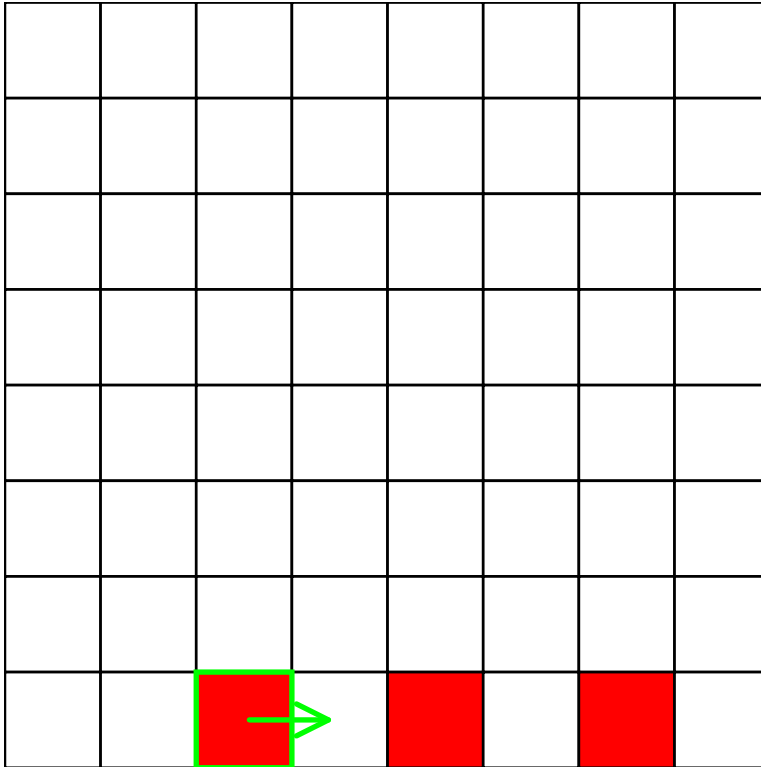
(MOVE 3)

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



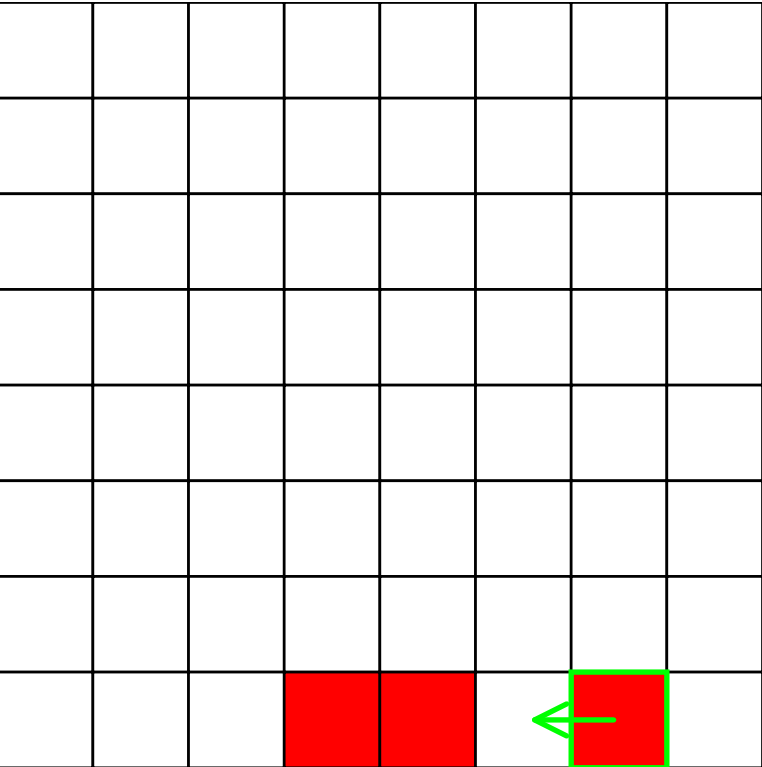
(MOVE 4)

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

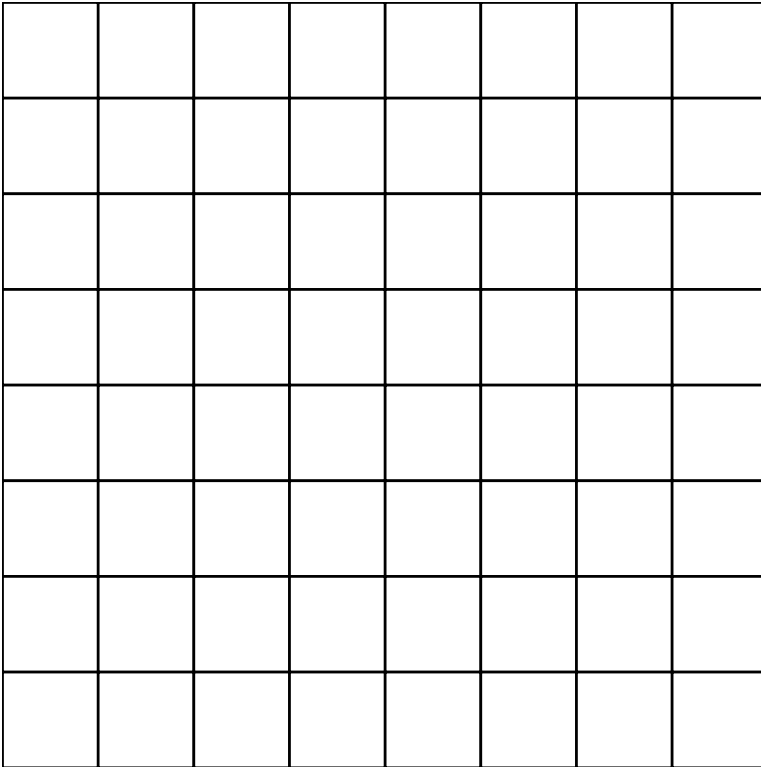


(MOVE 5)

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



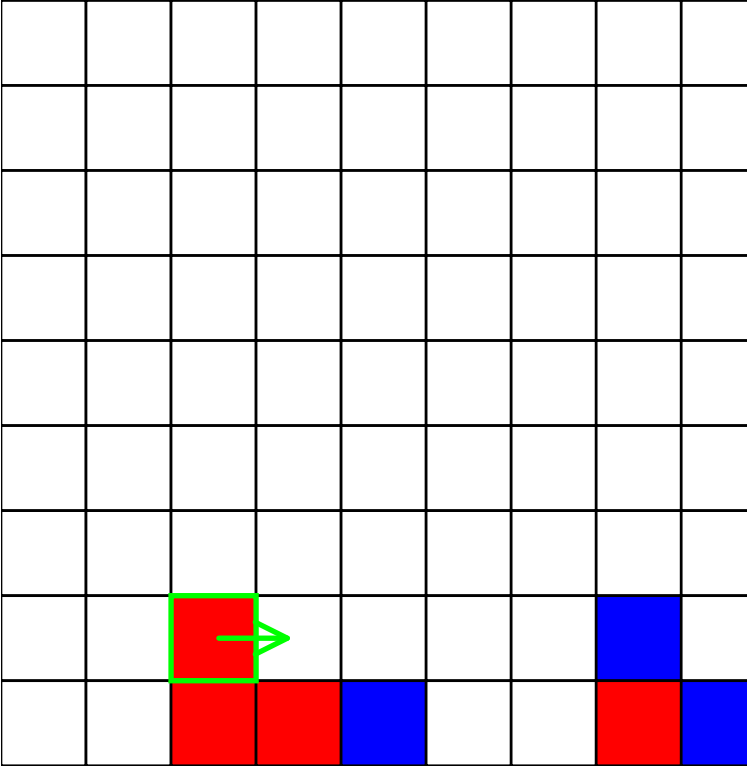
FINAL STATE



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

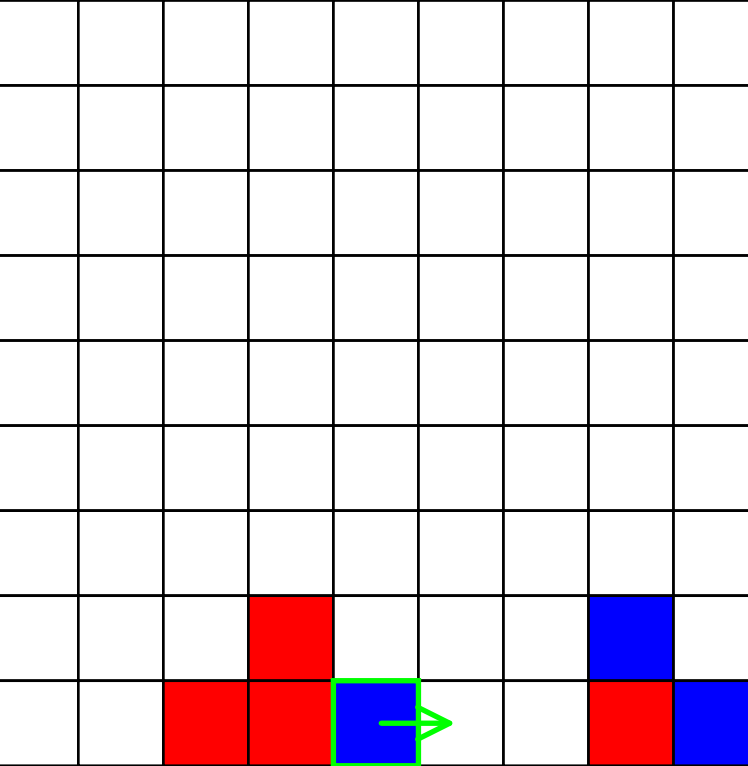
INITIAL STATE: (MOVE 1)

Perform: move_right at position: (1, 2)



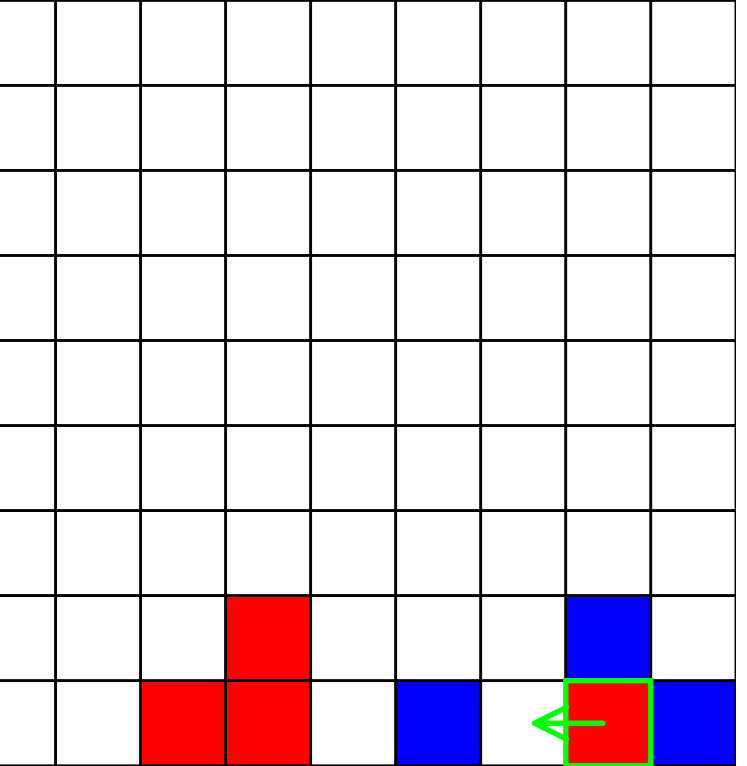
MOVE 2

```
perform: move_right at position: (8, 4):
```



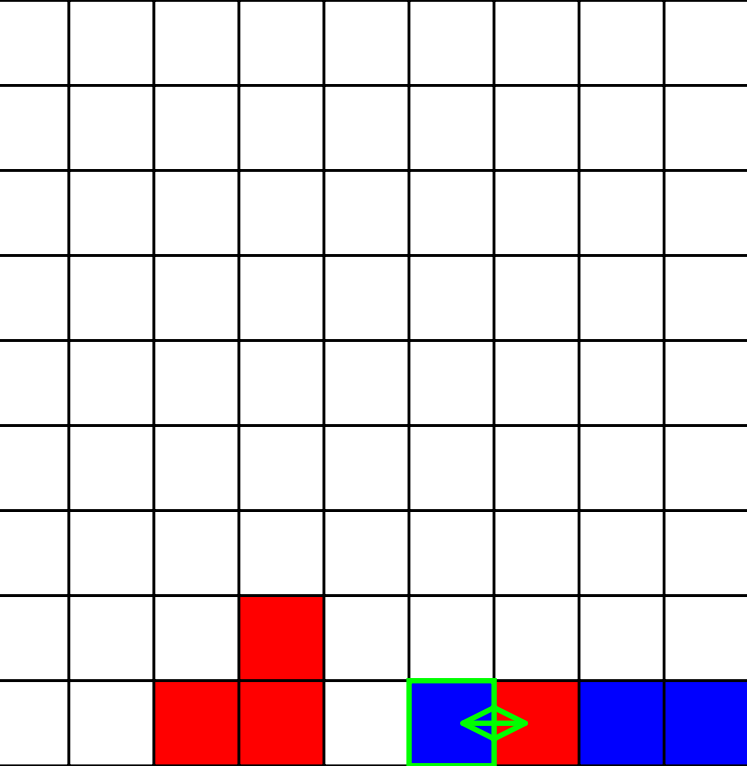
MOVE 3)

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



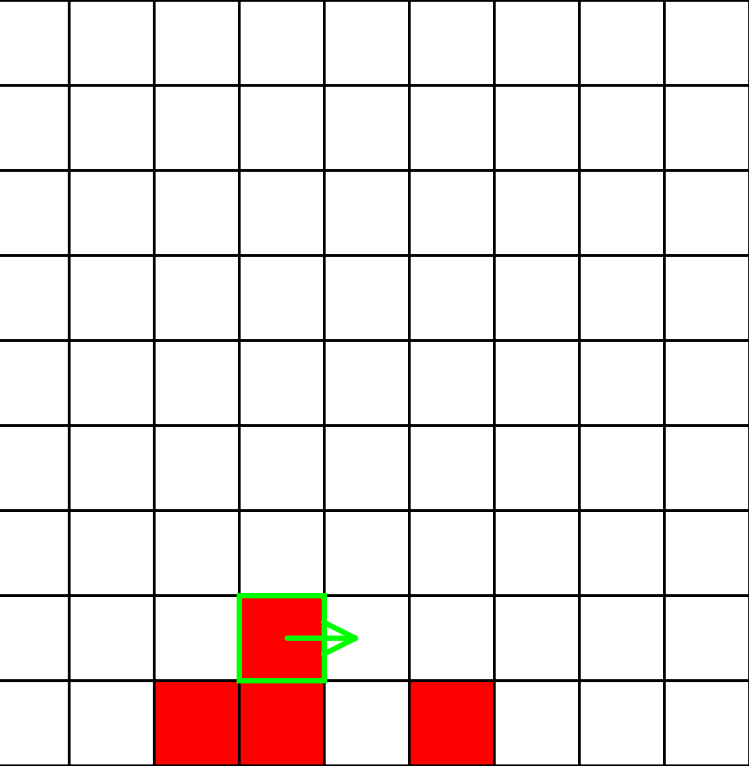
MOVE 4)

```
perform: exchange_right at position: (8, 5):
```

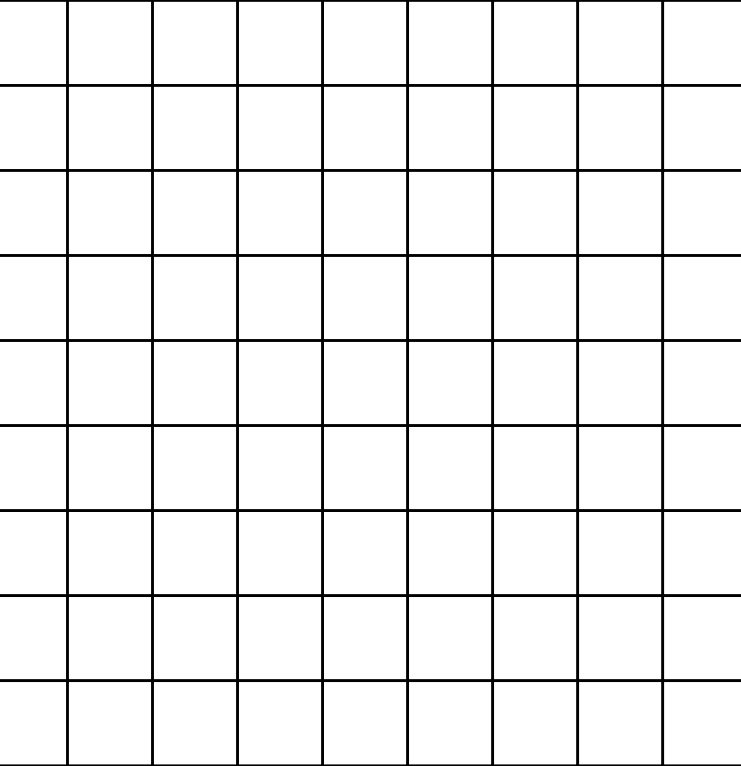


MOVE 5)

```
perform: move_right at position: (1, 3):
```



INITIAL STATE



INITIAL STATE: (MOVE 1

(MOVE 2)

(MOVE 3)

(MOVE 4)

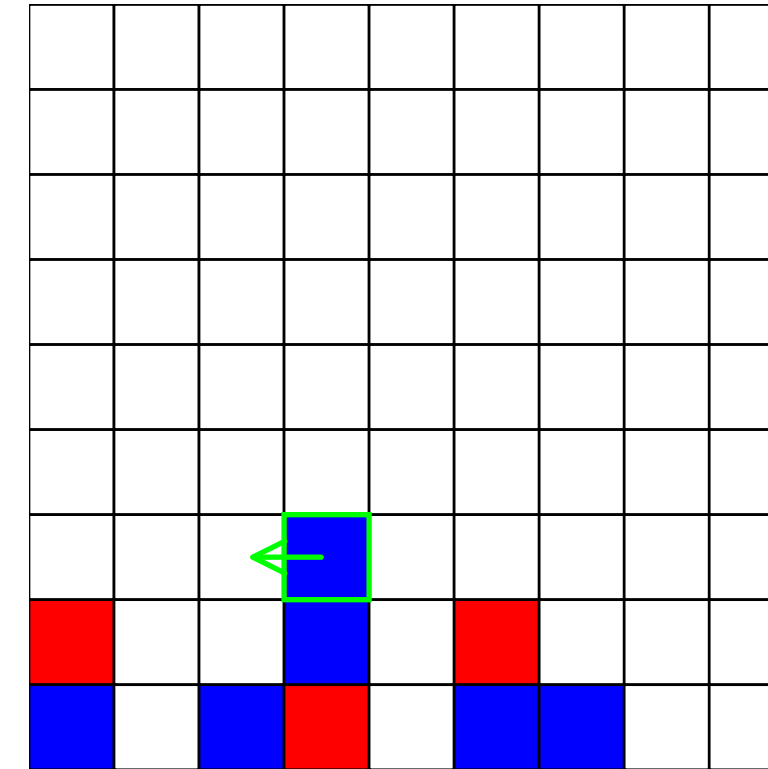
(MOVE 5)

FINAL STATE

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

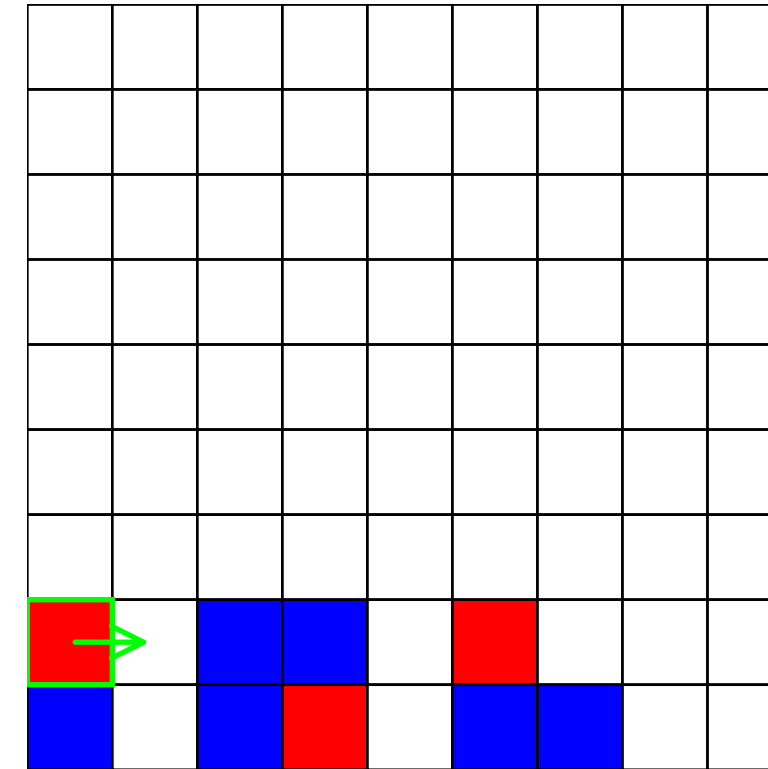
INITIAL STATE: (MOVE 1)

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



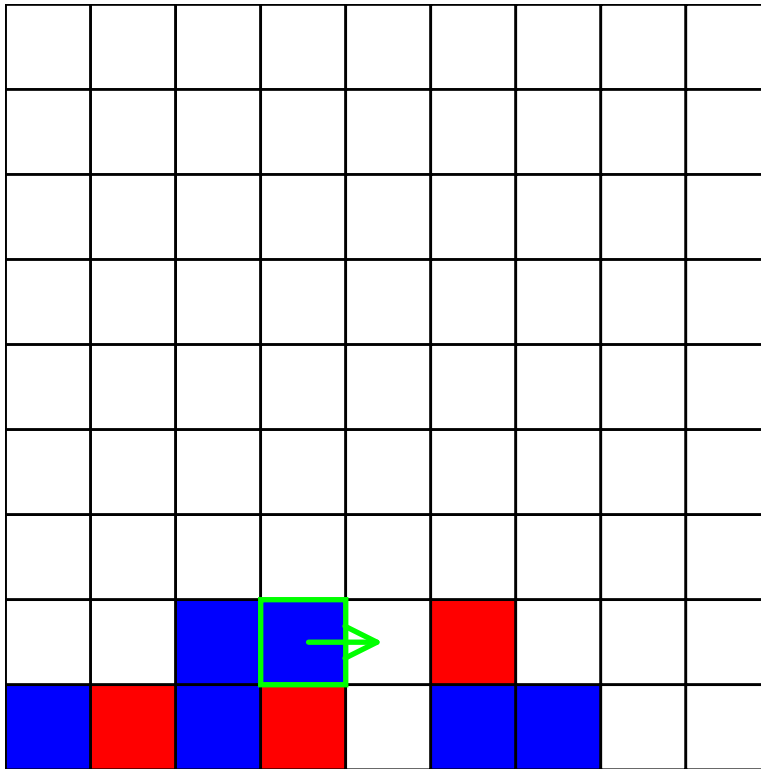
(MOVE 2)

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



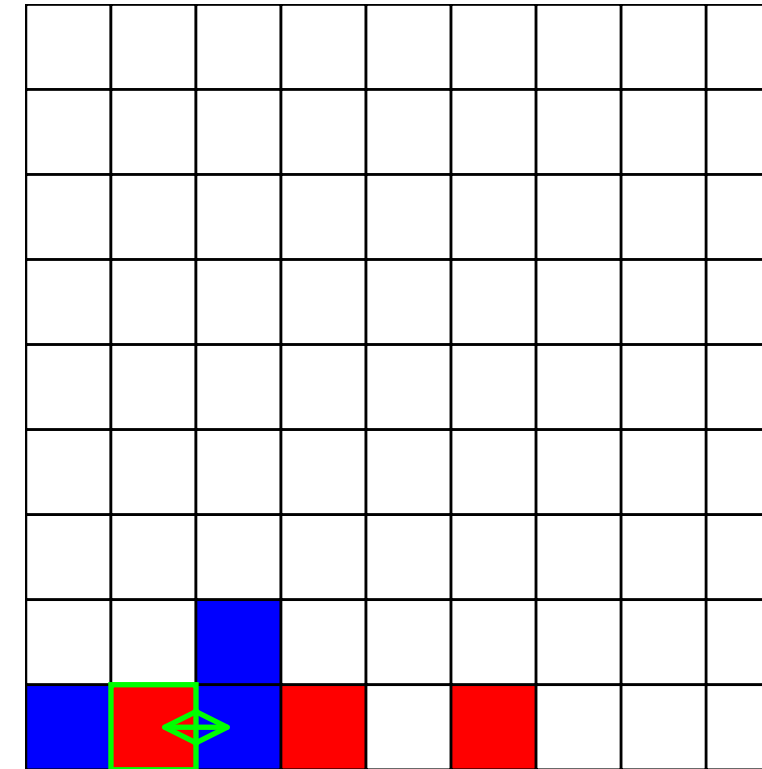
(MOVE 3)

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



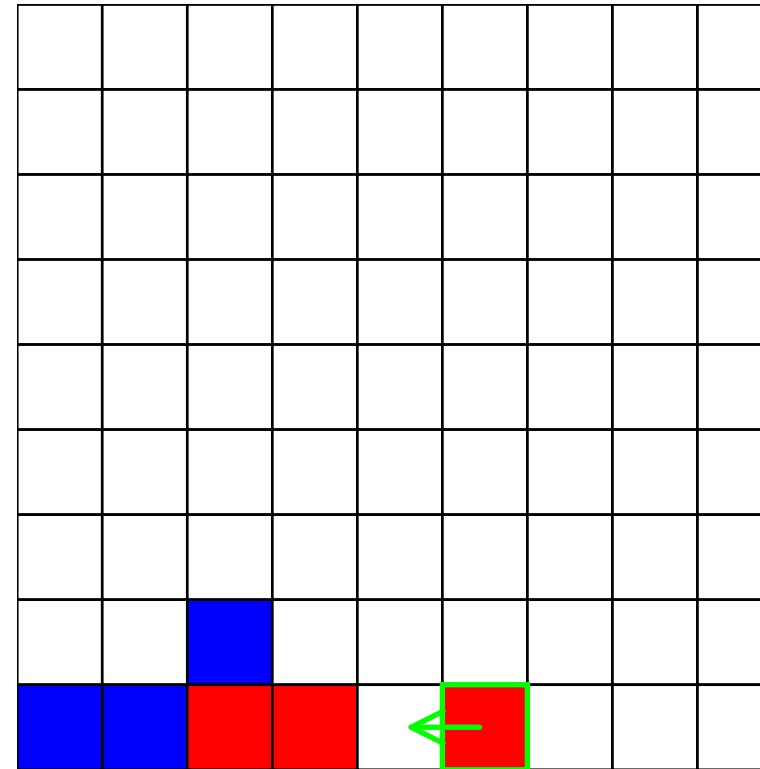
(MOVE 4)

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

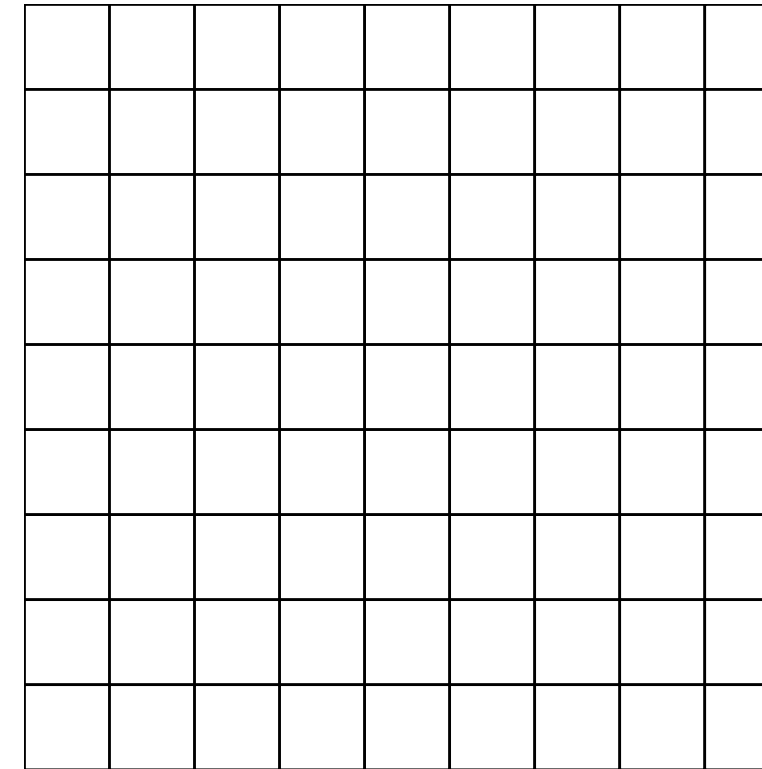


(MOVE 5)

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



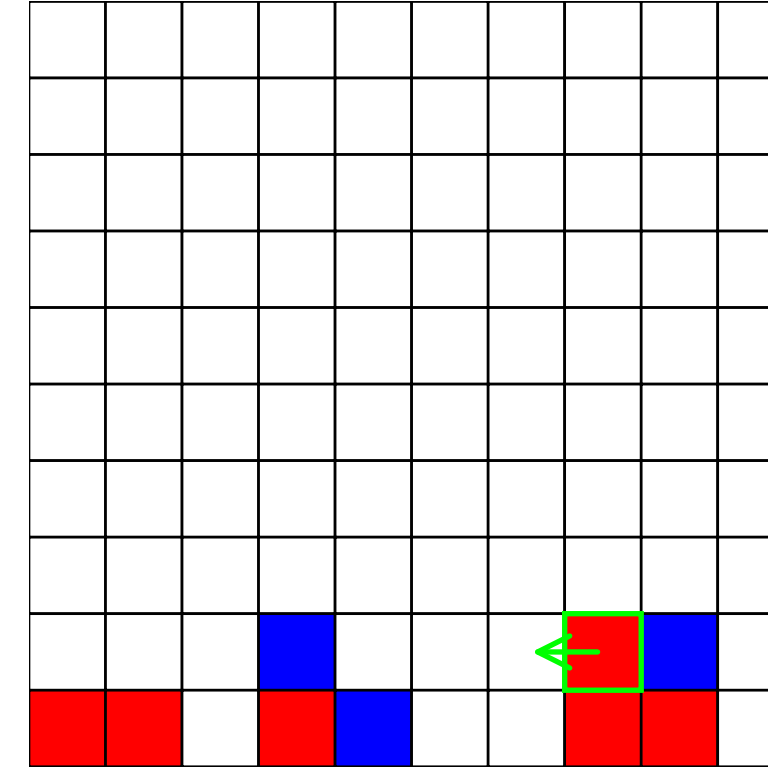
FINAL STATE



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

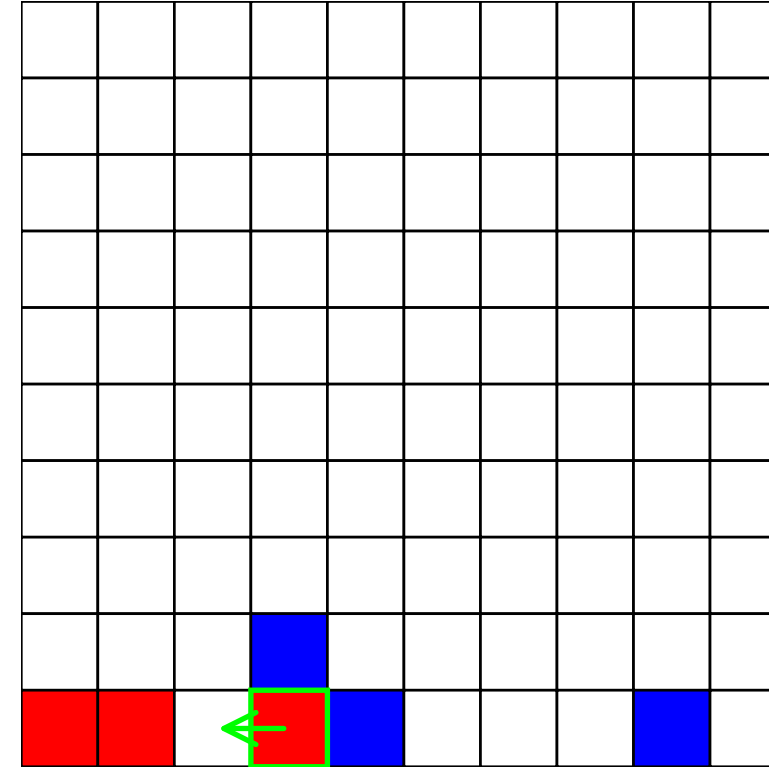
INITIAL STATE: (MOVE 1)

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



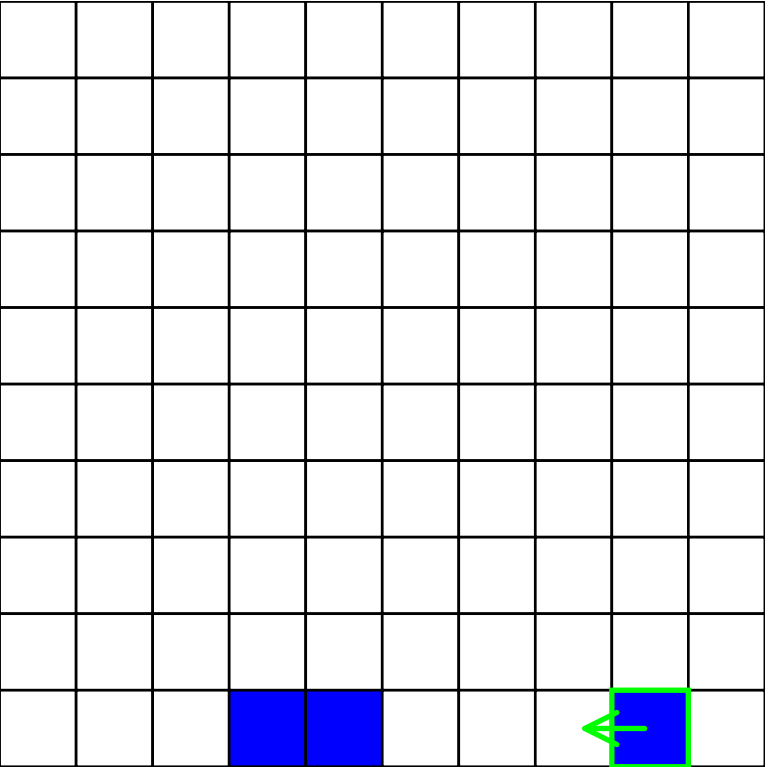
(MOVE 2)

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



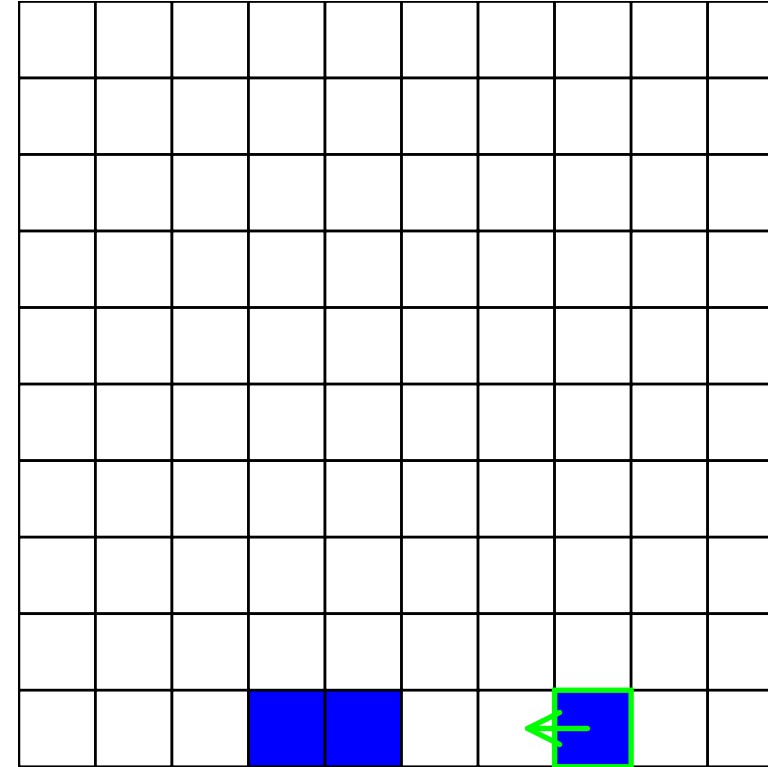
(MOVE 3)

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



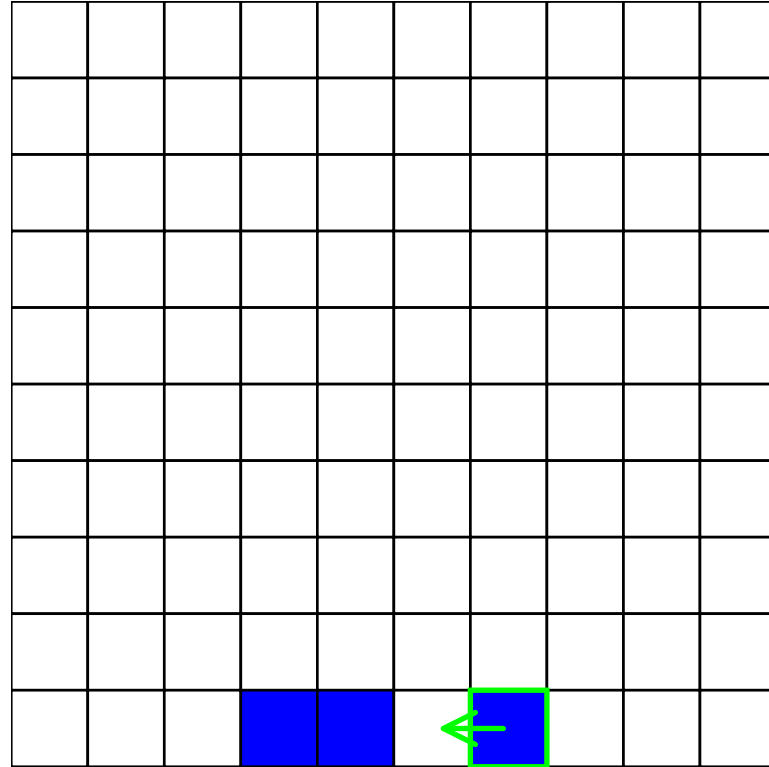
(MOVE 4)

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

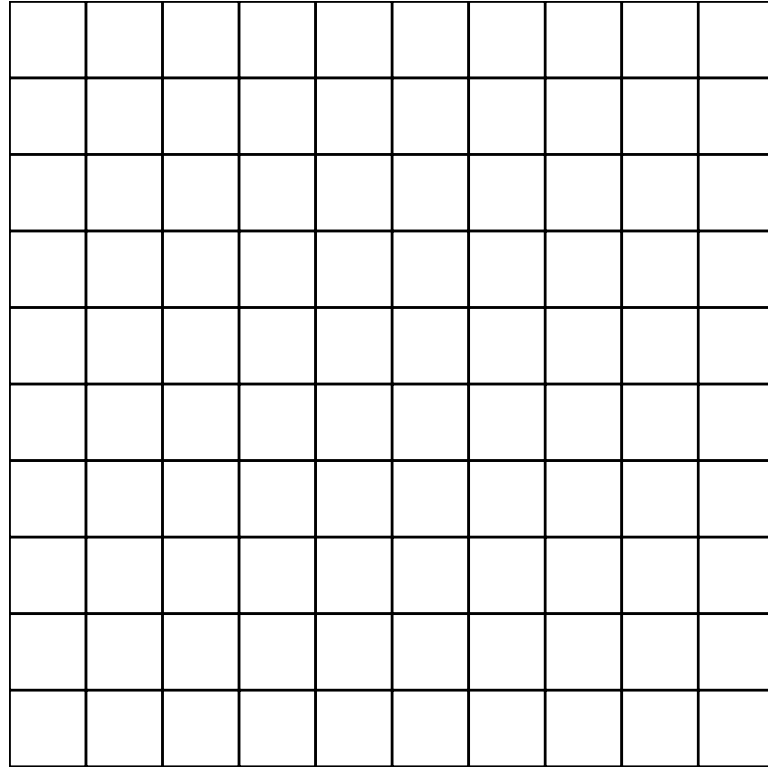


(MOVE 5)

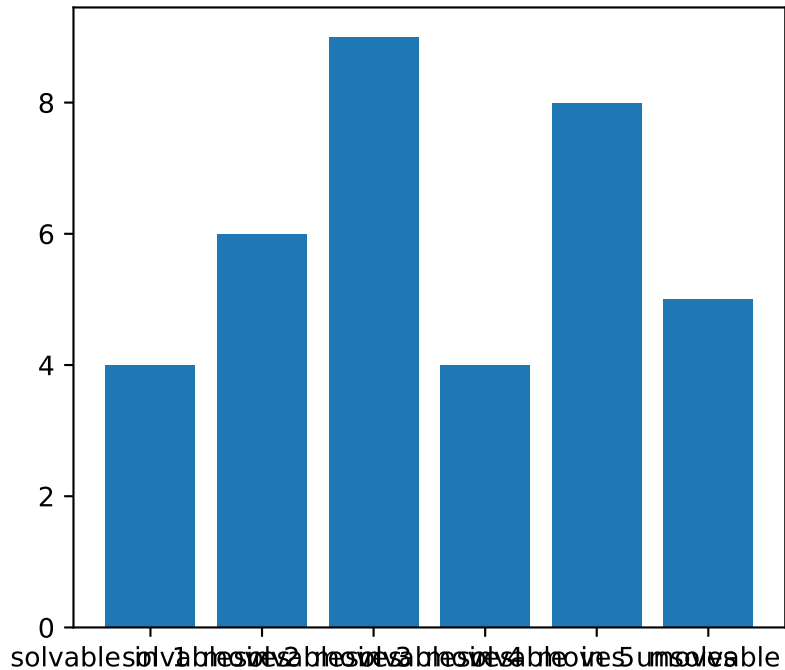
Perform: move_left at position: (9, 6):



FINAL STATE



Number of Puzzles Generated (Bar Chart)



Number of Puzzles Generated (Pie Chart)

