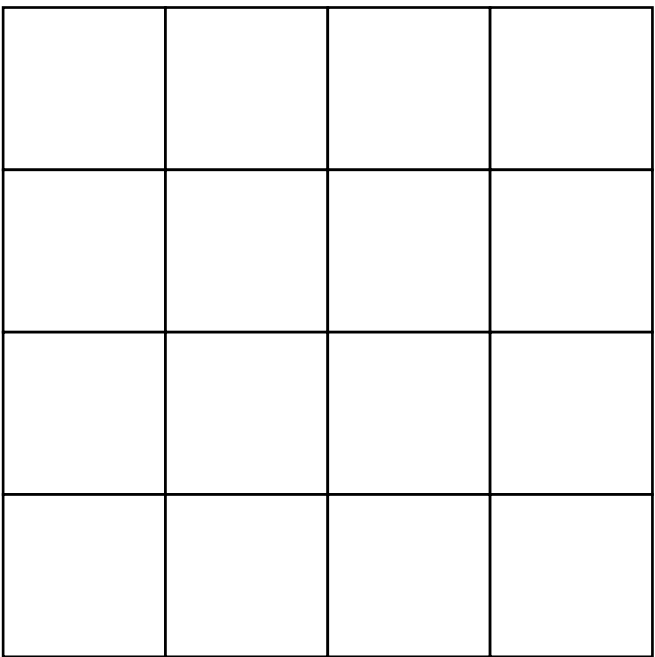
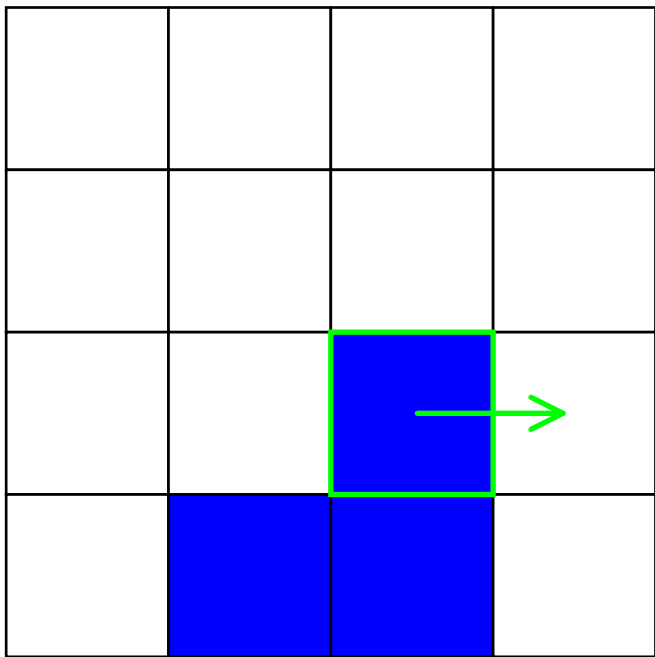


...:SOLUTION::...: Solvable in 1 moves (blocks positions: {(2, 2): <Color: blue>, (3, 1): <Color: blue>, (3, 2): <Color: blue>})

INITIAL STATE: (MOVE 1)

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

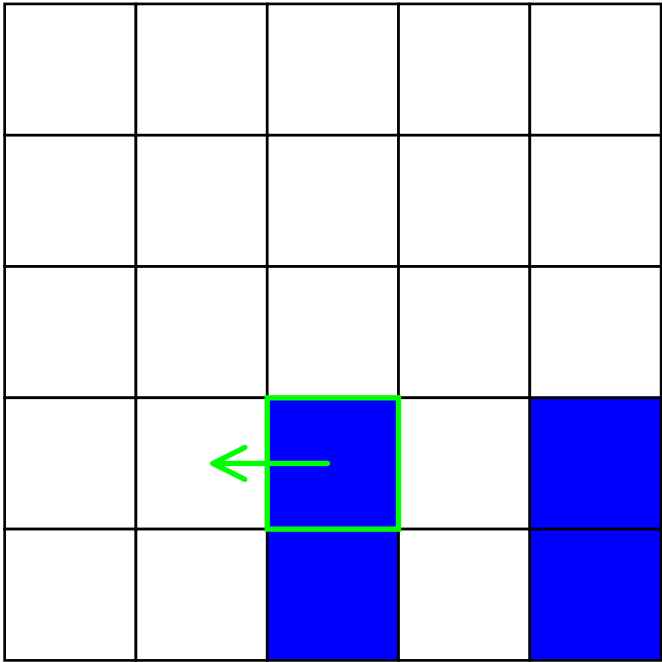
FINAL STATE



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

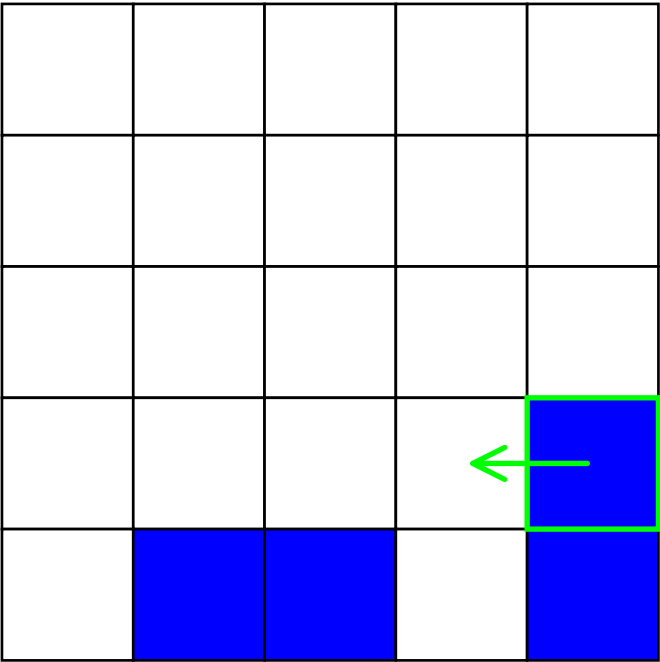
INITIAL STATE: (MOVE 1)

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

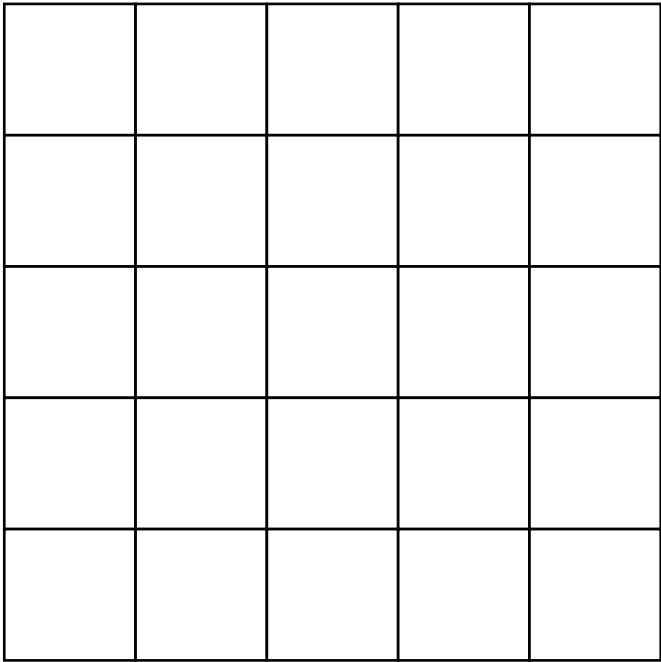


(MOVE 2)

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



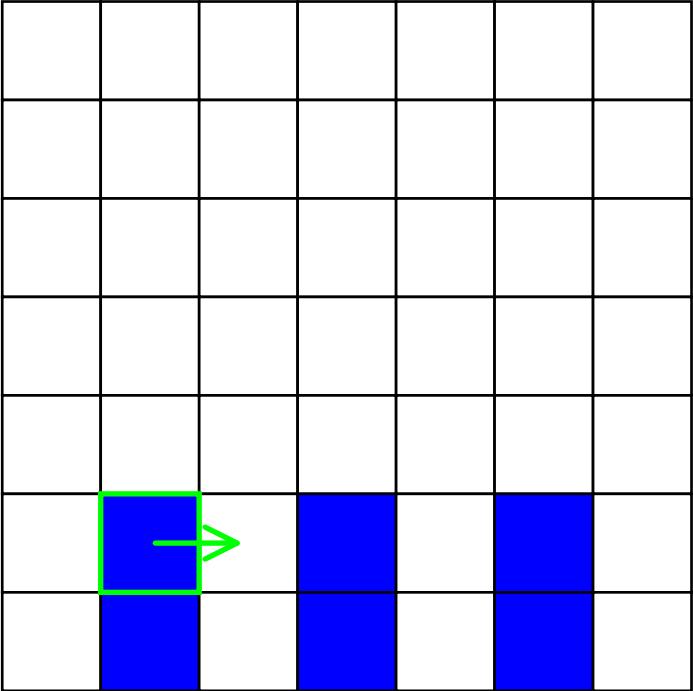
FINAL STATE



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

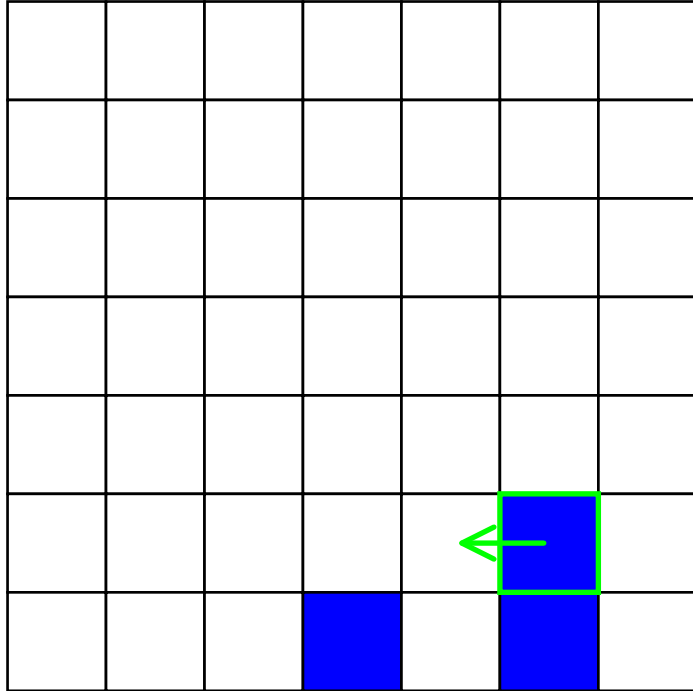
INITIAL STATE: (MOVE 1)

Perform: move right at position: (5, 1):

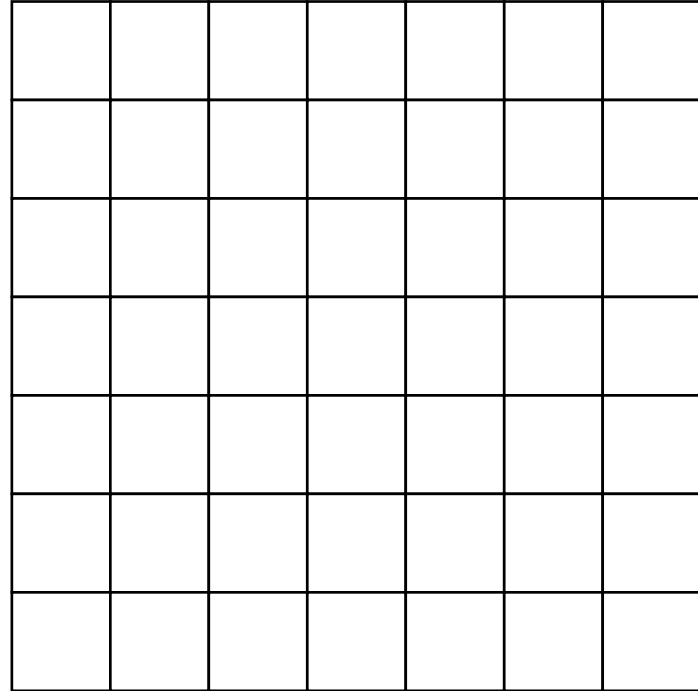


(MOVE 2)

Perform: move left at position: (5, 5):

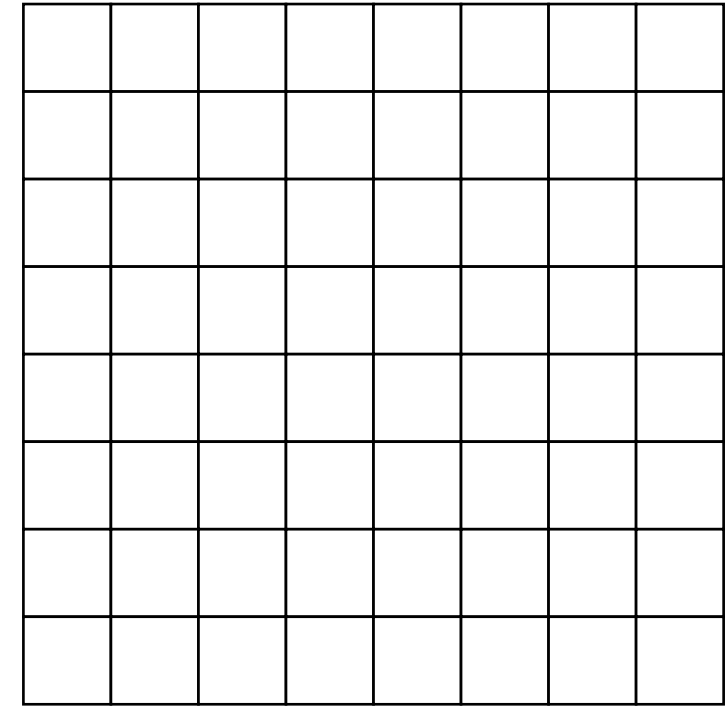


FINAL STATE



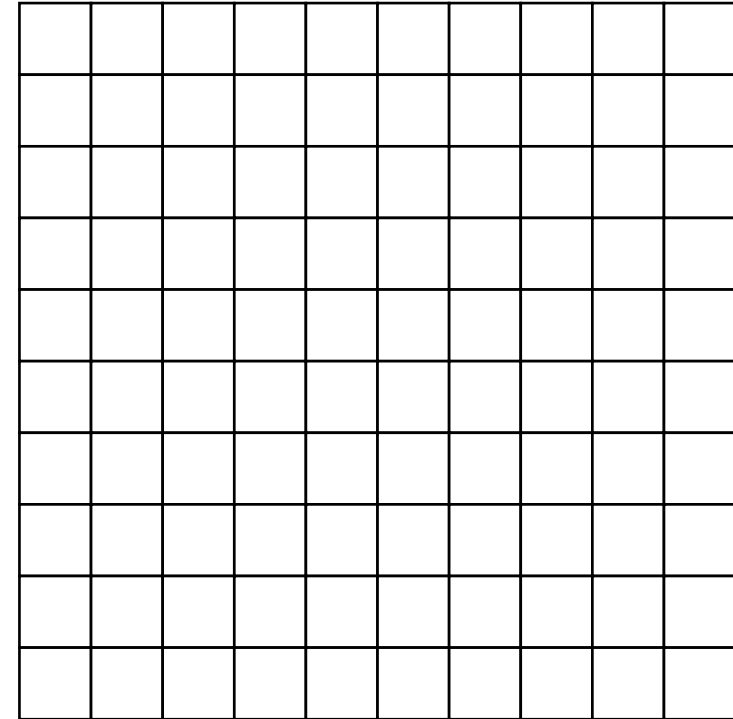
INITIAL STATE: (MOVE 1)

(MOVE 2)



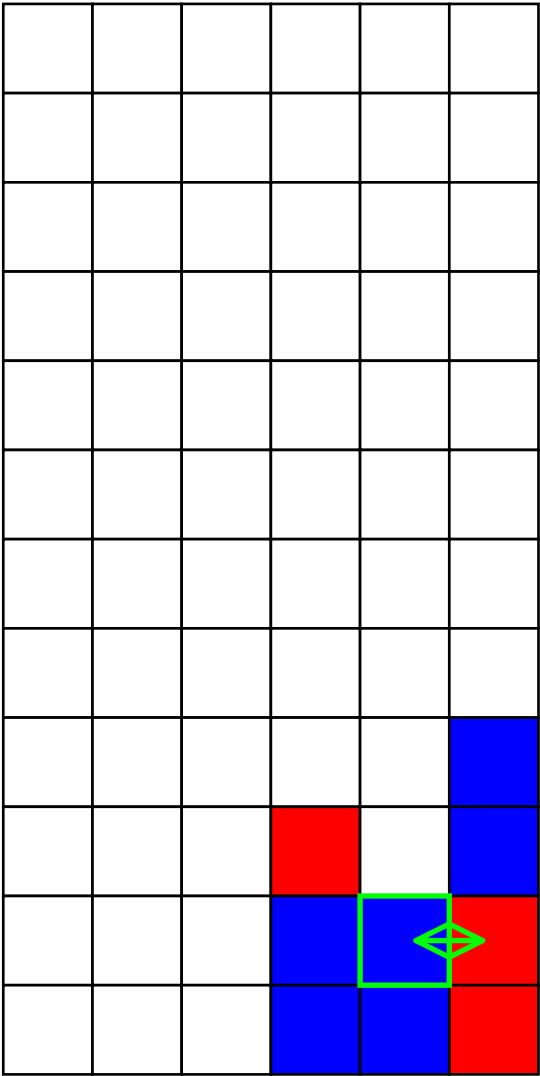
INITIAL STATE: (MOVE 1)

(MOVE 2)

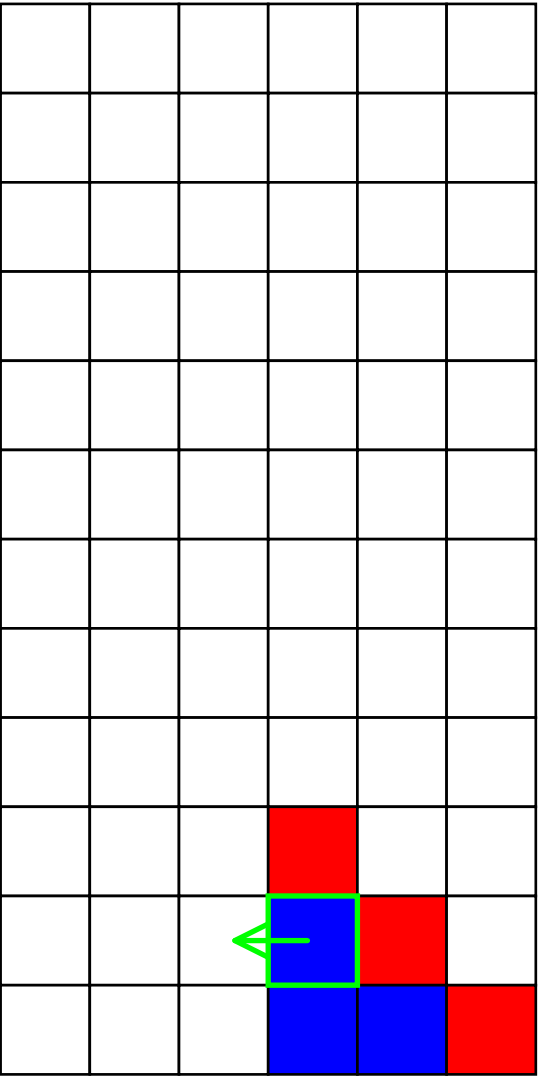


...:SOLUTION::...: Solvable in 2 moves (blocks positions: {(8, 5): <Color: blue>, (9, 3): <Color: red>, (9, 5): <Color: blue>, (10, 3): <Color: blue>, (10, 4): <Color: blue>, (10, 5): <Color: blue>})

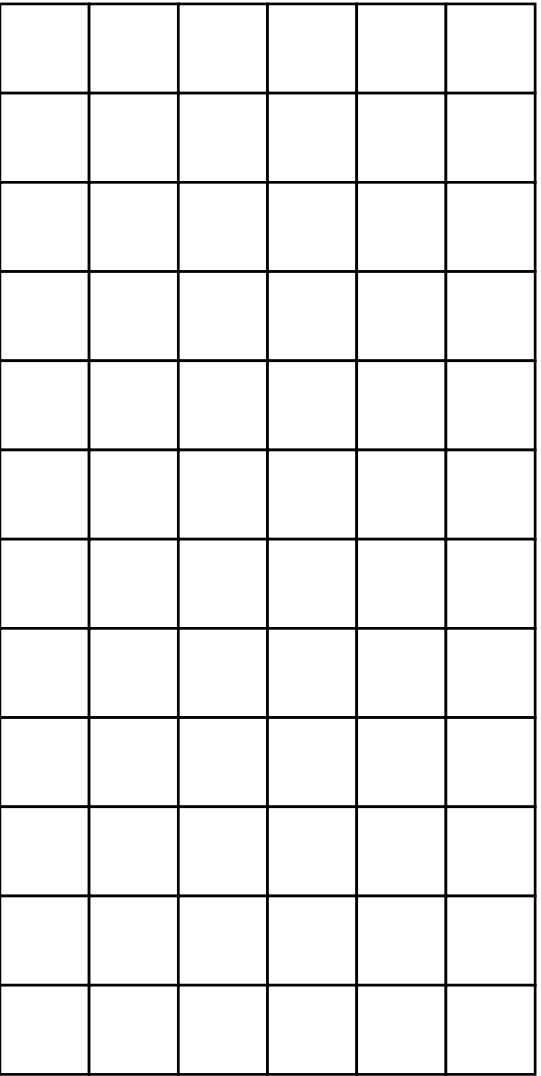
INITIAL STATE: (MOVE 1)
Perform: exchange_right at position: (10, 4):



(MOVE 2)
Perform: move_left at position: (10, 3):



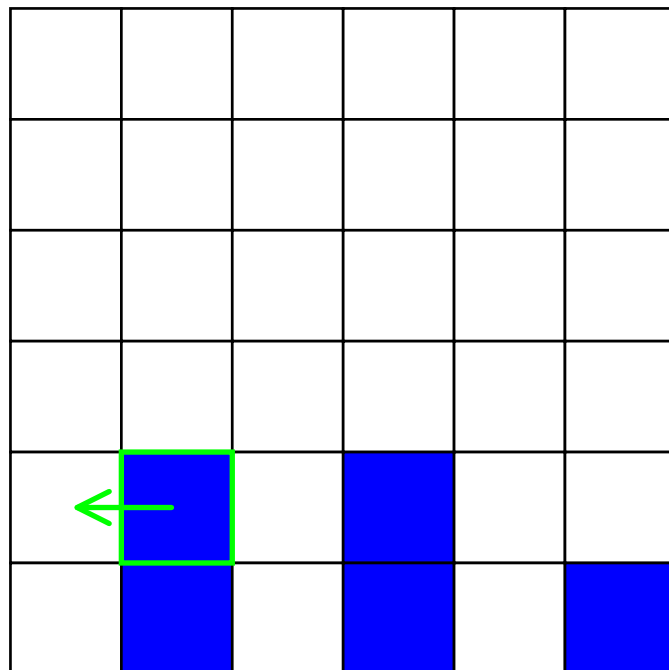
FINAL STATE



...: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>})

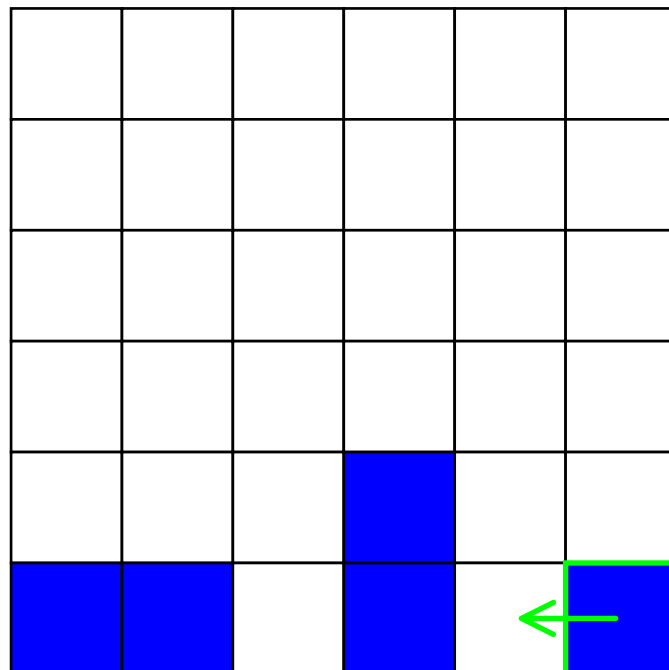
INITIAL STATE: (MOVE 1)

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



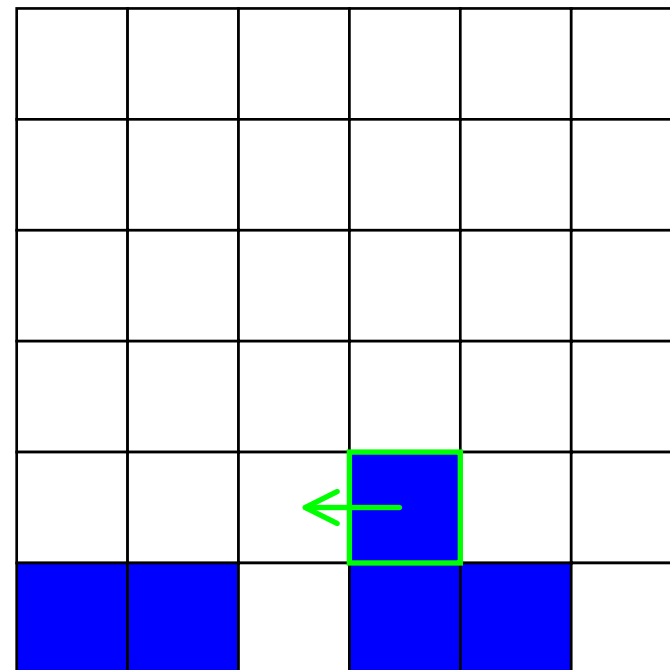
(MOVE 2)

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

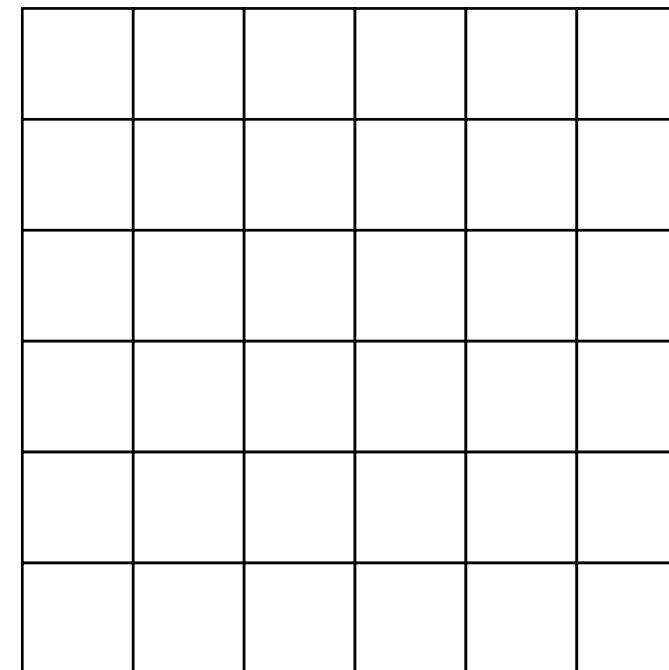


(MOVE 3)

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



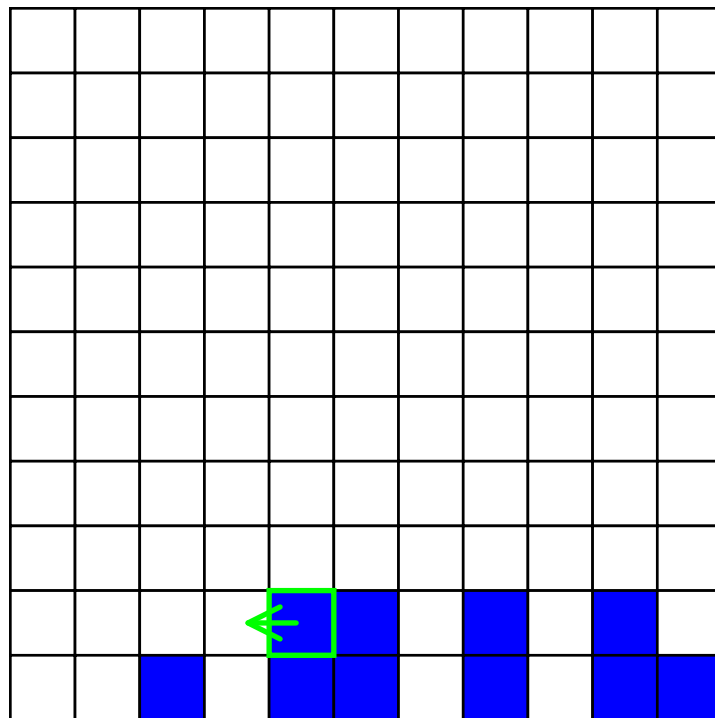
FINAL STATE



...:SOLUTION:...: Solvable in 3 moves (blocks positions: {(9, 4): <Color: blue>, (9, 5): <Color: blue>, (9, 7): <Color: blue>, (9, 9): <Color: blue>, (10, 2): <Color: blue>, (10, 4): <Color: blue>, (10, 5): <Color: blue>, (10, 7): <Color: blue>, (10, 9): <Color: blue>})

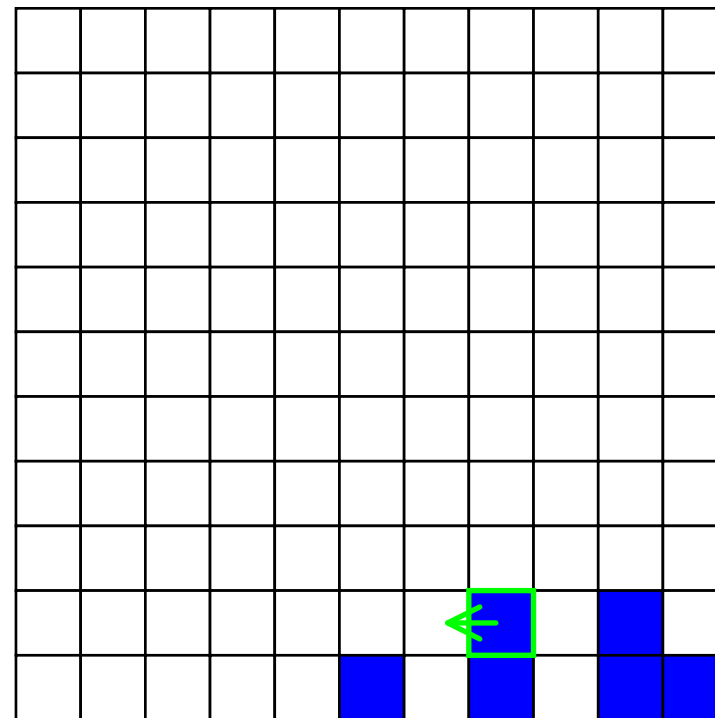
INITIAL STATE: (MOVE 1)

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



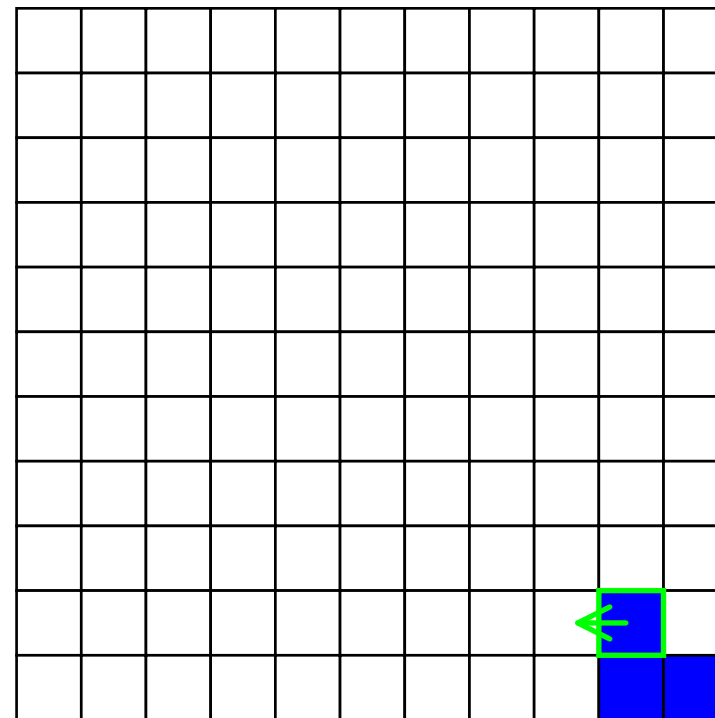
(MOVE 2)

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

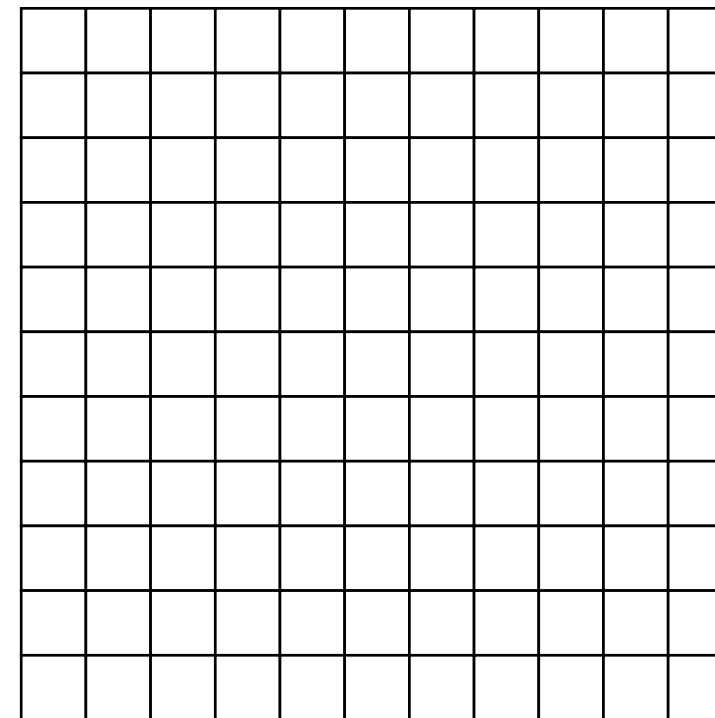


(MOVE 3)

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

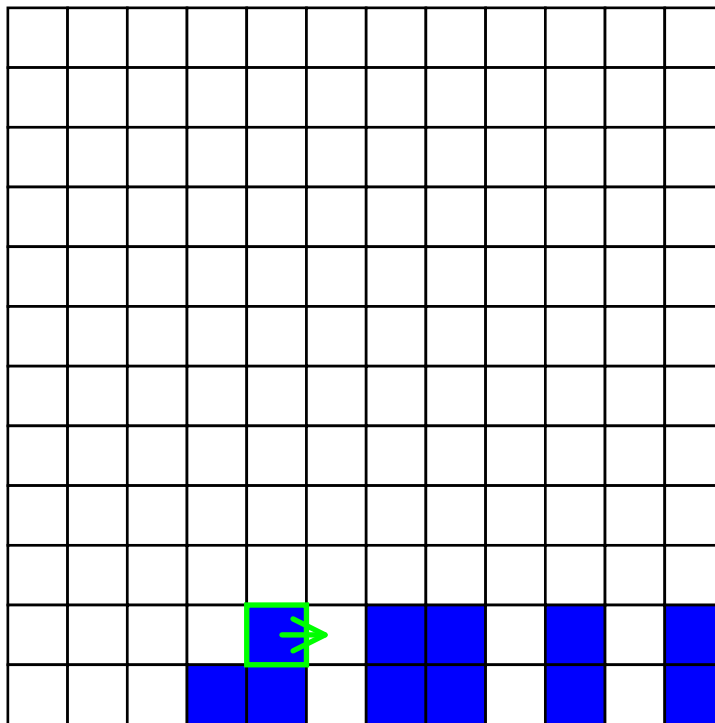


FINAL STATE

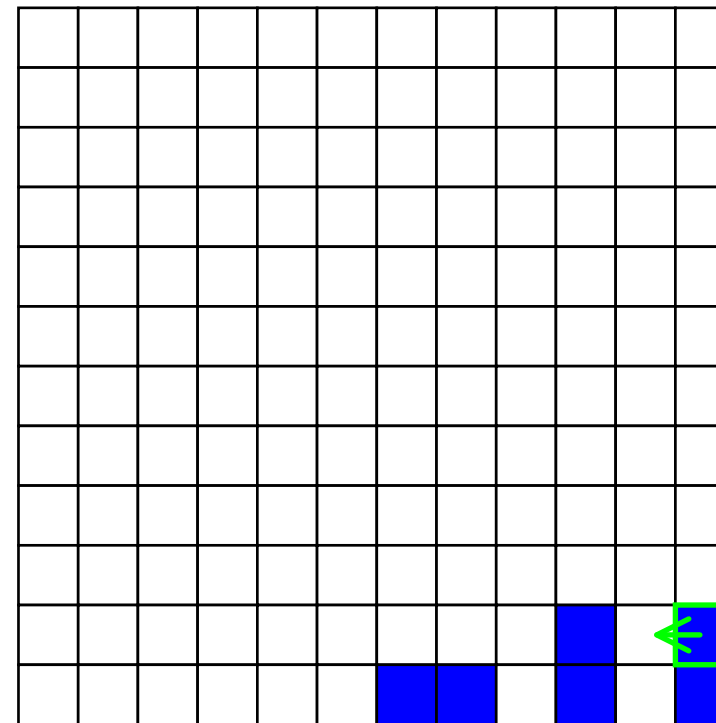


...:SOLUTION:...: Solvable in 3 moves (blocks positions: {(10, 4): <Color: blue>, (10, 6): <Color: blue>, (10, 7): <Color: blue>, (10, 9): <Color: blue>, (10, 11): <Color: blue>, (11, 3): <Color: blue>, (11, 4): <Color: blue>, (11, 6): <Color: blue>, (11, 7): <Color: blue>})

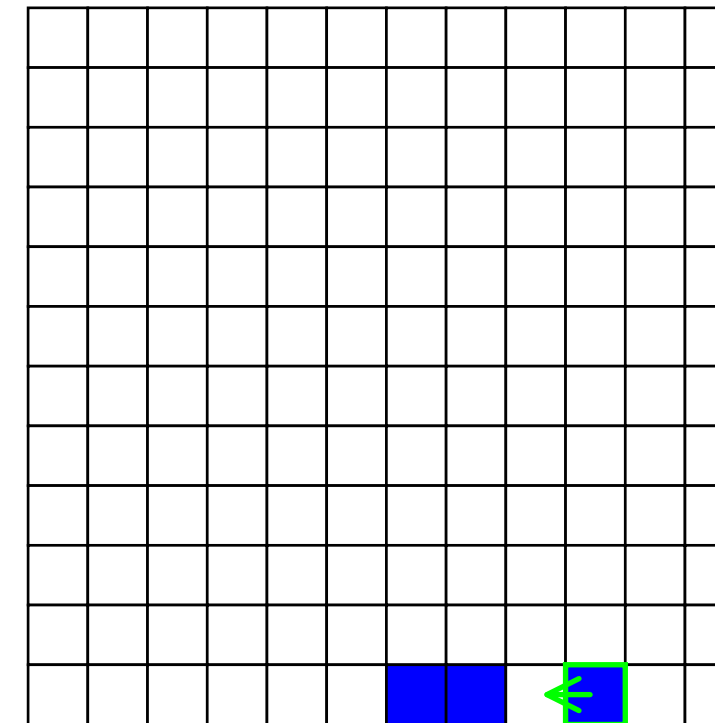
INITIAL STATE: (MOVE 1)
Perform: move_right at position: (10, 4):



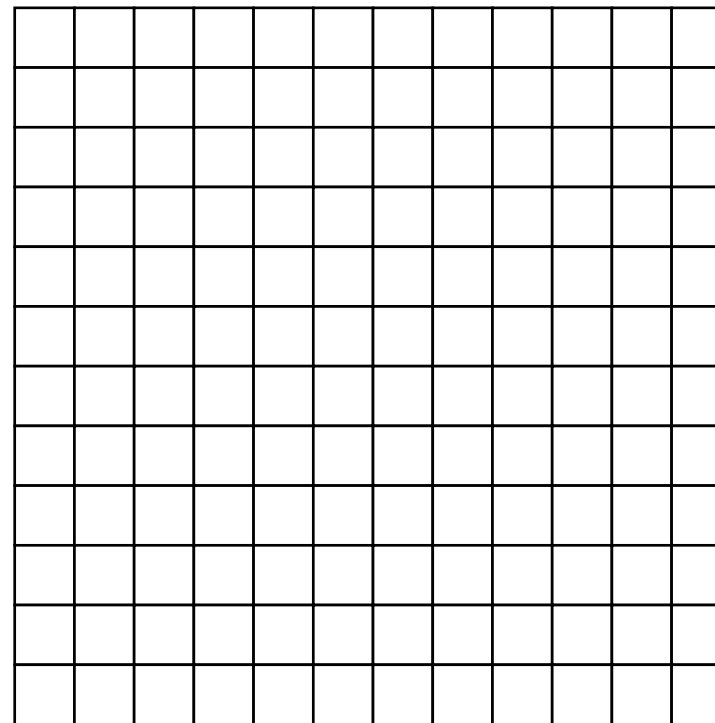
(MOVE 2)
Perform: move_left at position: (10, 11):



(MOVE 3)
Perform: move_left at position: (11, 9):

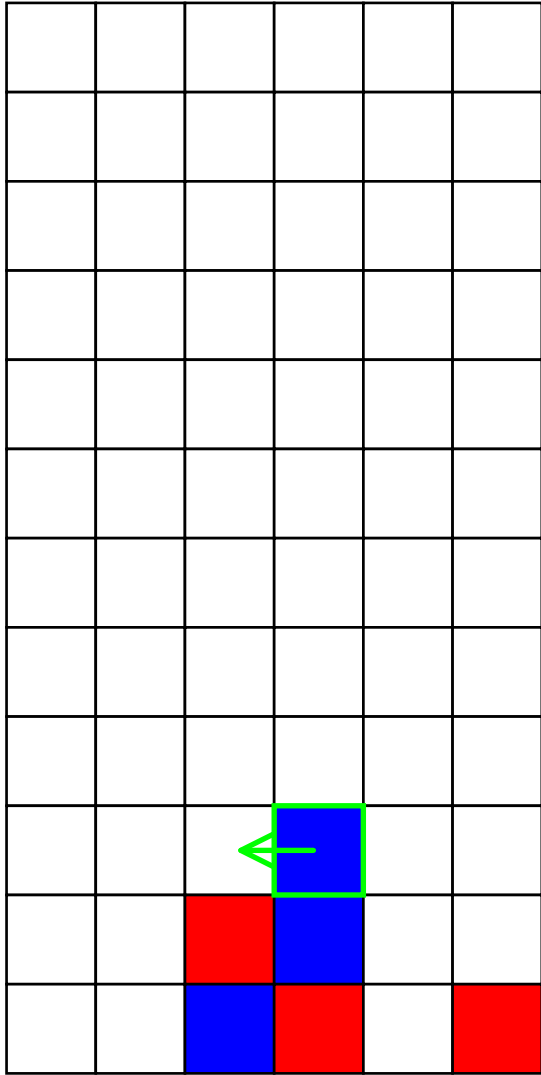


FINAL STATE

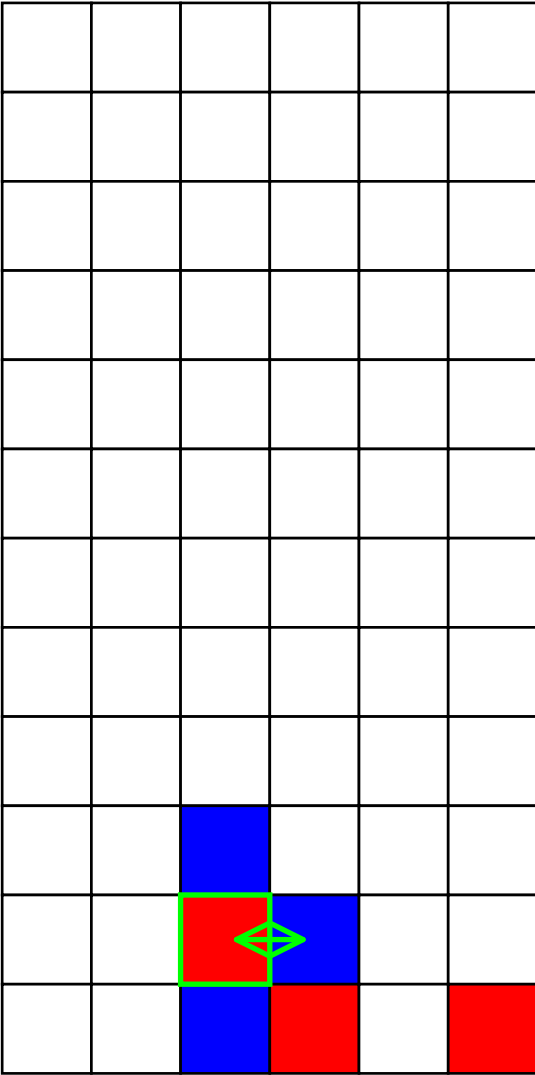


...:SOLUTION:...: Solvable in 3 moves (blocks positions: {(9, 3): <Color: blue>, (10, 2): <Color: red>, (10, 3): <Color: blue>, (11, 2): <Color: blue>, (11, 3): <Color: red>, (11, 5): <Color: red>})

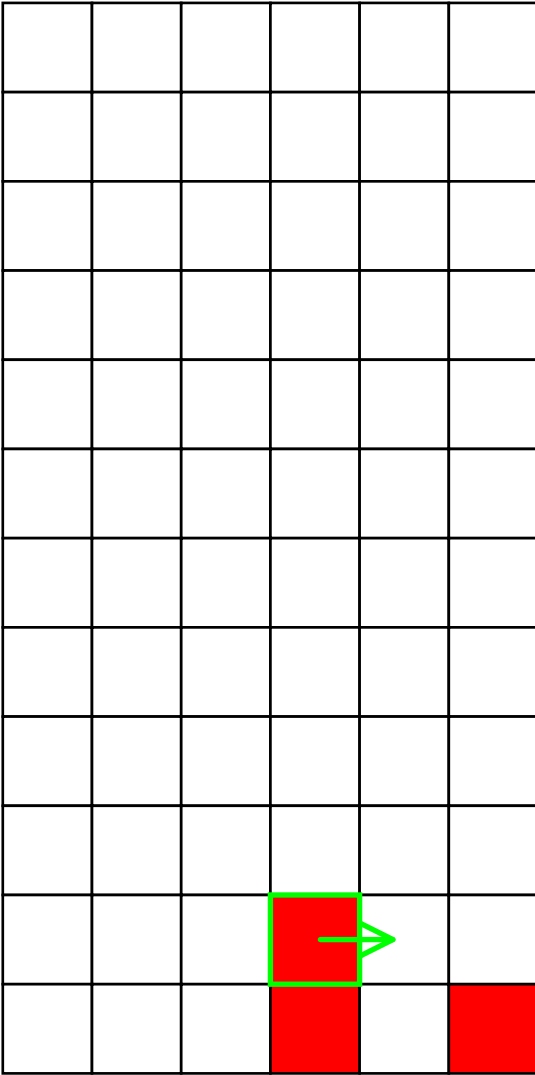
INITIAL STATE: (MOVE 1)
Perform: move_left at position: (9, 3):



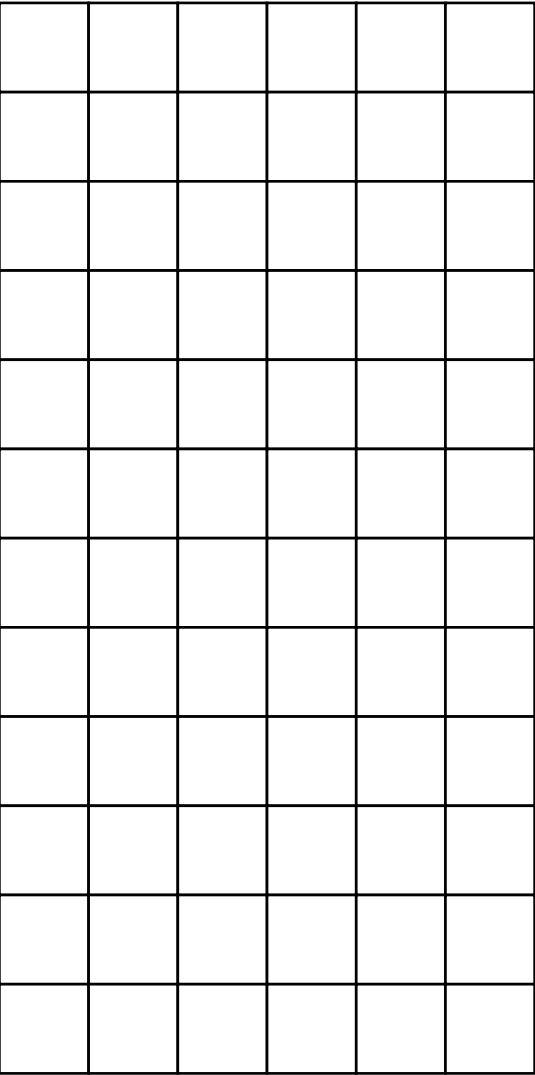
(MOVE 2)
Perform: exchange_right at position: (10, 2):



(MOVE 3)
Perform: move_right at position: (10, 3):



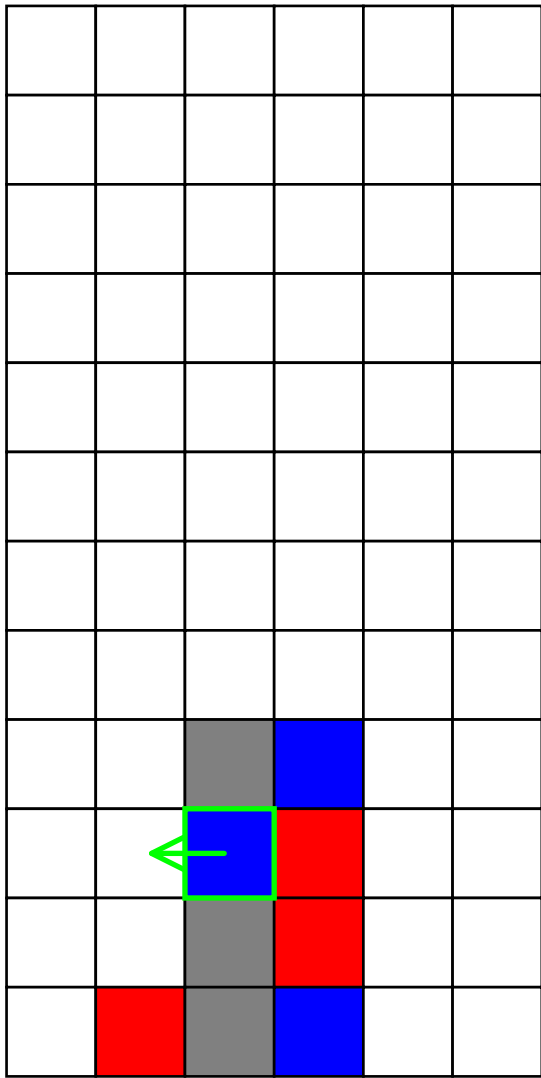
FINAL STATE



...:SOLUTION:...: Solvable in 3 moves (blocks positions: {(8, 2): <Color: gray>, (8, 3): <Color: blue>, (9, 2): <Color: blue>, (9, 3): <Color: red>, (10, 2): <Color: gray>, (10, 3): <Color: red>, (11, 1): <Color: red>, (11, 2): <Color: gray>, (11, 3): <C

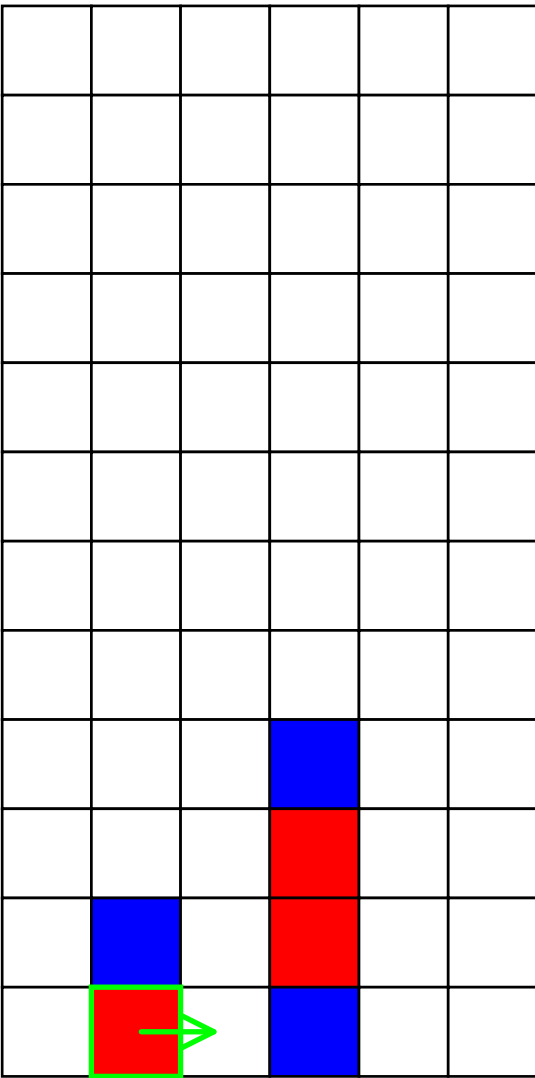
INITIAL STATE: (MOVE 1)

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



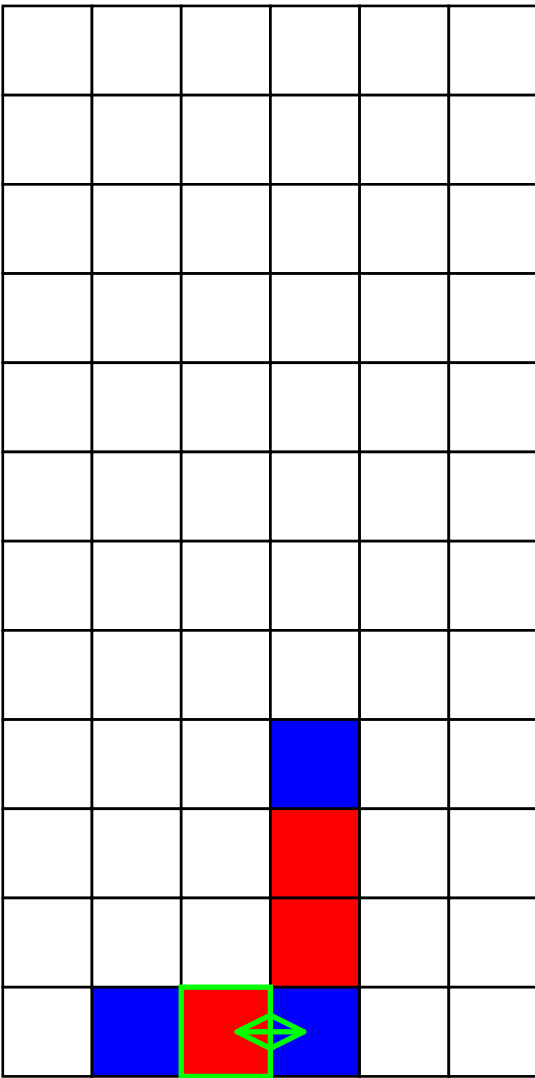
(MOVE 2)

Perform: move_right at position: (11, 1):

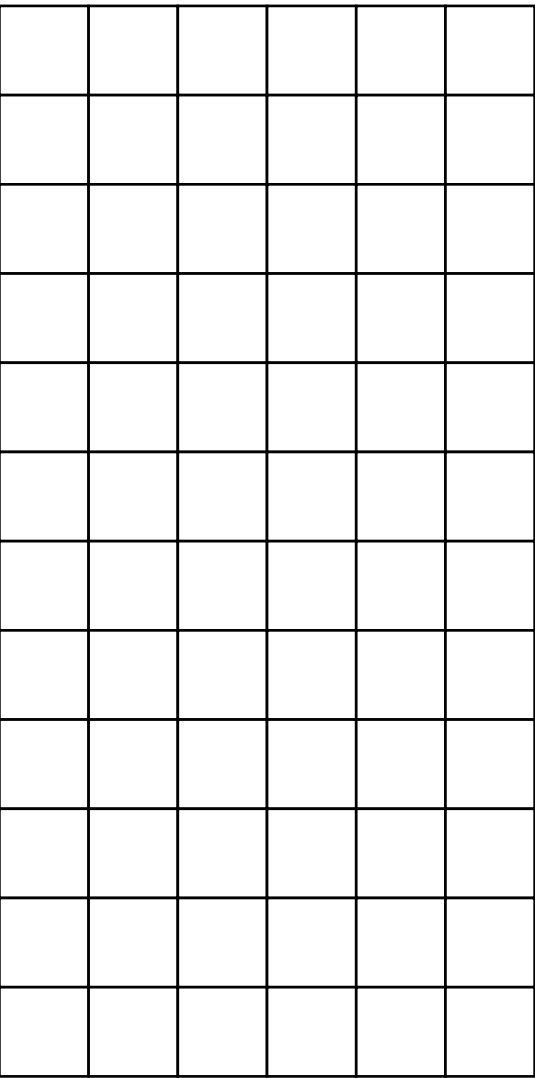


(MOVE 3)

Perform: exchange_right at position: (11, 2):



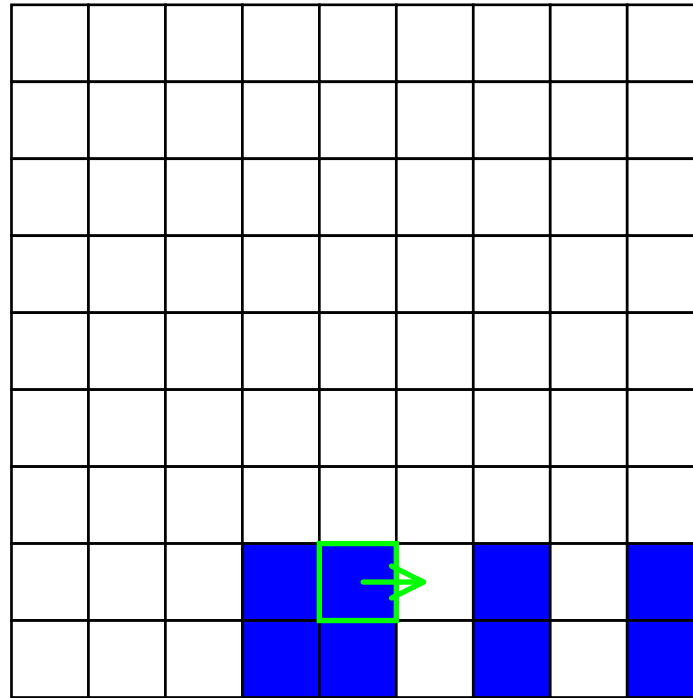
FINAL STATE



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

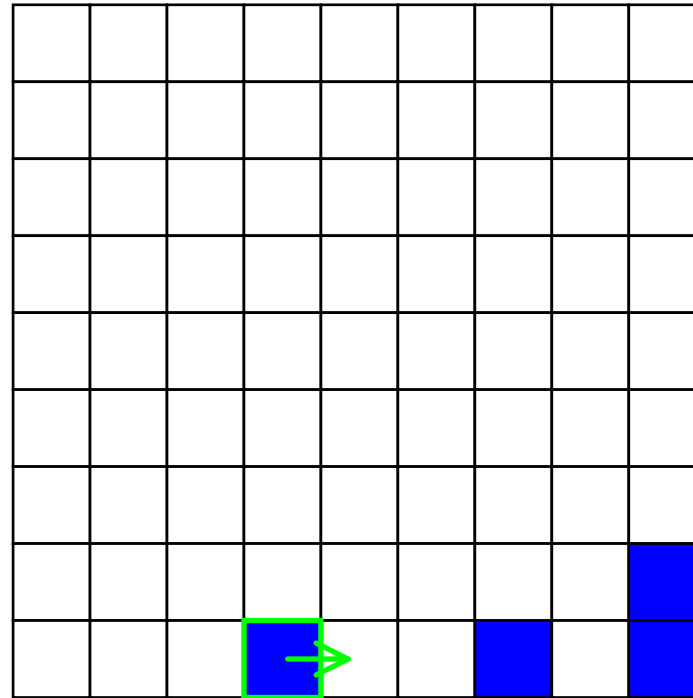
INITIAL STATE: (MOVE 1)

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



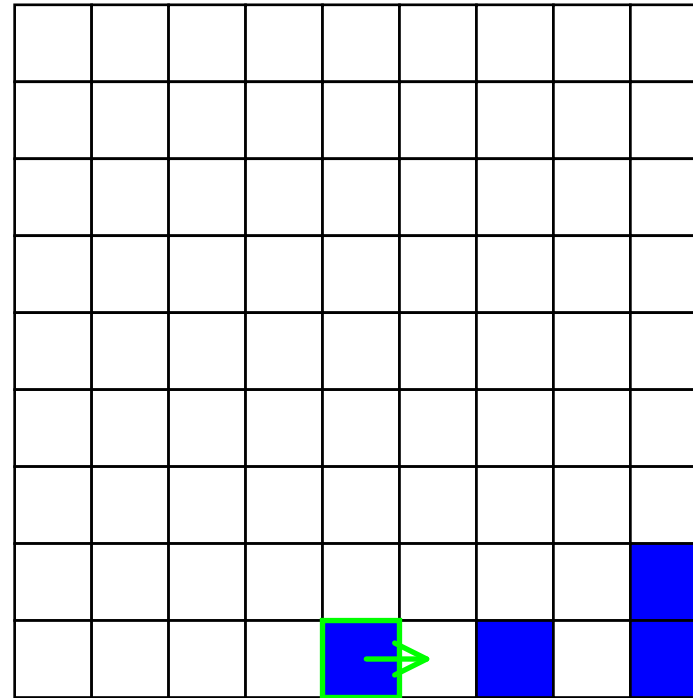
(MOVE 2)

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



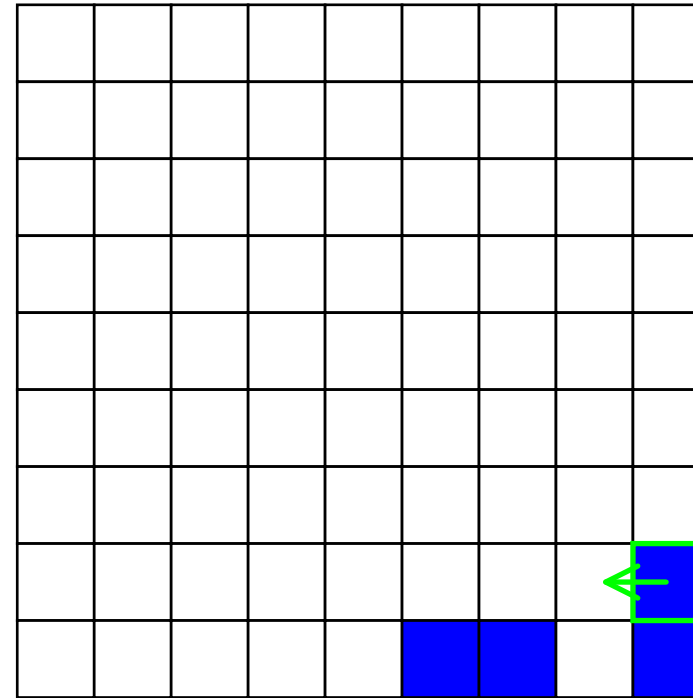
(MOVE 3)

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

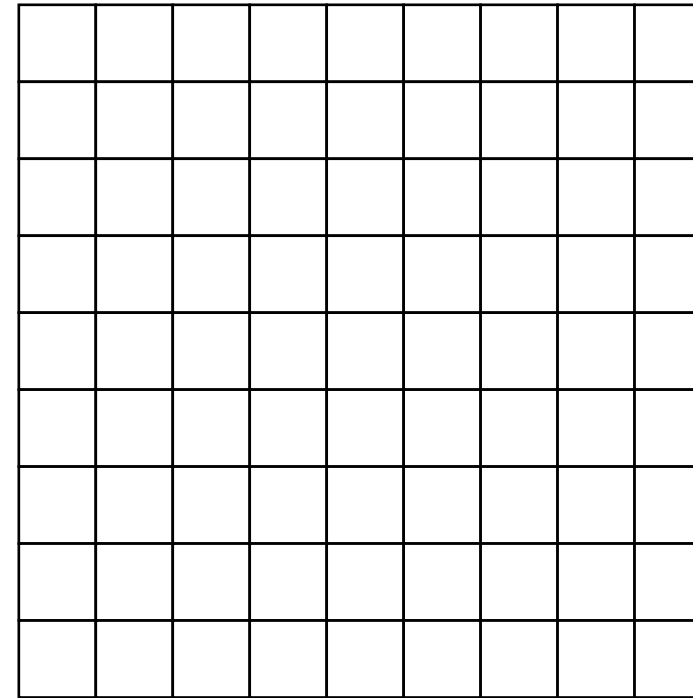


(MOVE 4)

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

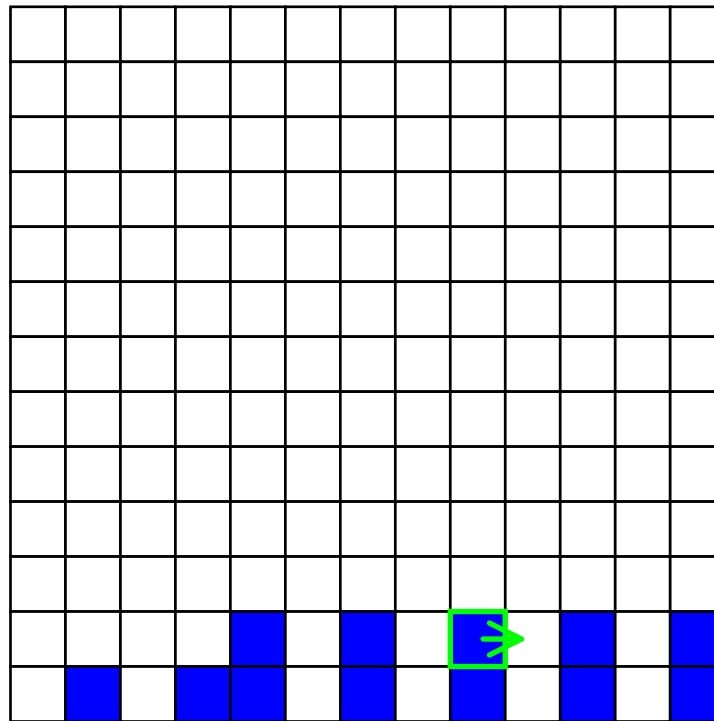


FINAL STATE

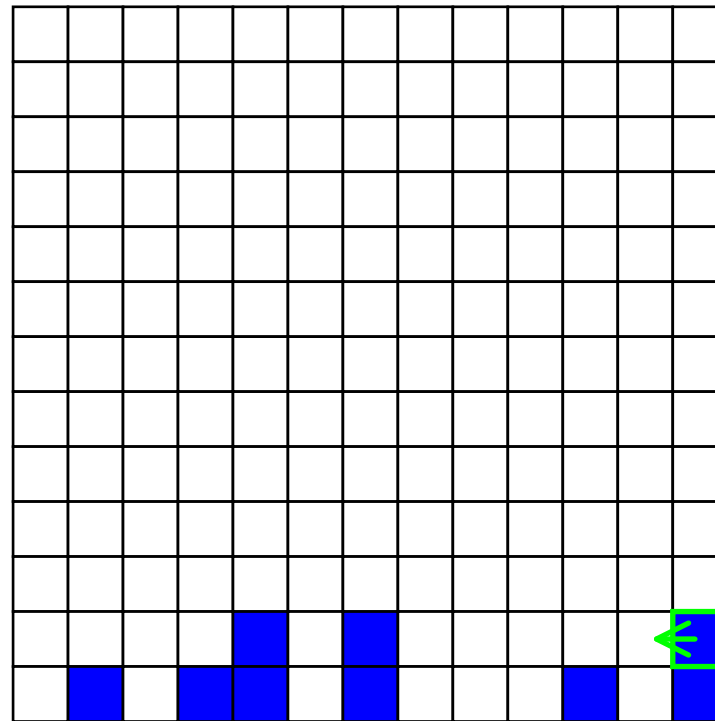


...:SOLUTION::...: Solvable in 4 moves (blocks positions: {(11, 4): <Color: blue>, (11, 6): <Color: blue>, (11, 8): <Color: blue>, (11, 10): <Color: blue>, (11, 12): <Color: blue>, (12, 1): <Color: blue>, (12, 3): <Color: blue>, (12, 4): <Color: blue>, (12, 6): <Color: blue>, (12, 8): <Color: blue>, (12, 10): <Color: blue>}

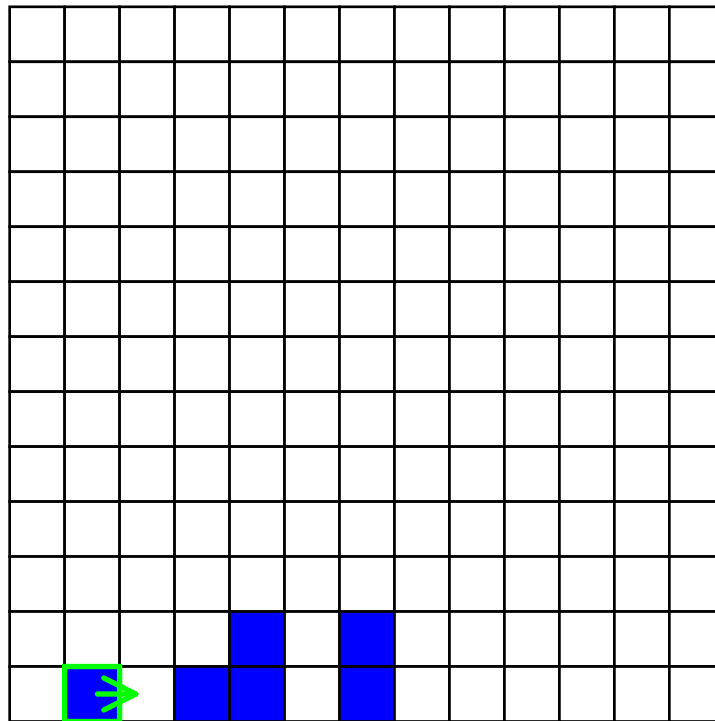
INITIAL STATE: (MOVE 1)
Perform: move_right at position: (11, 8):



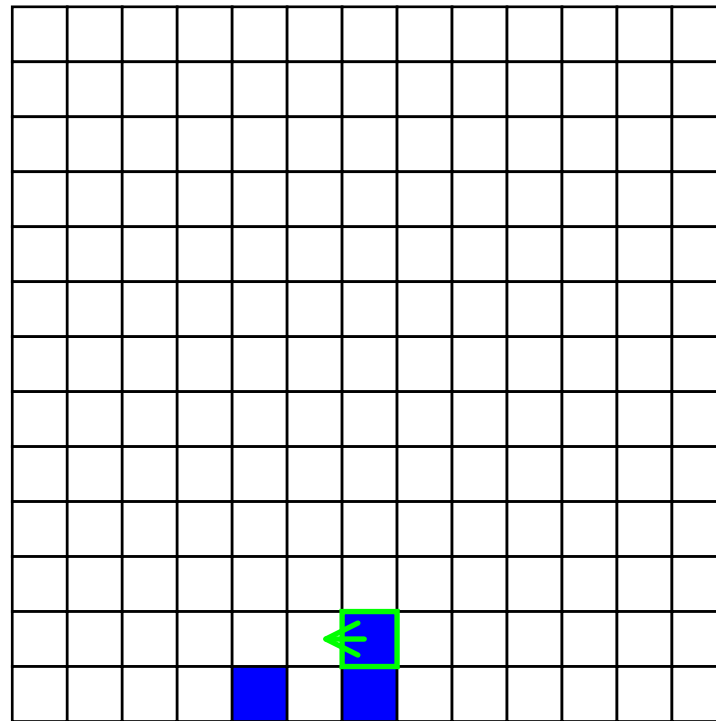
(MOVE 2)
Perform: move_left at position: (11, 12):



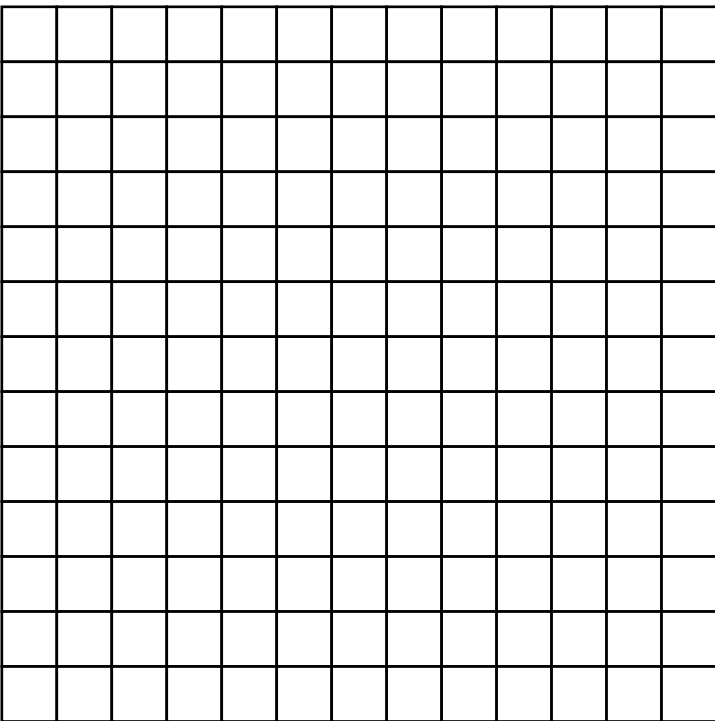
(MOVE 3)
Perform: move_right at position: (12, 1):



(MOVE 4)
Perform: move_left at position: (11, 6):



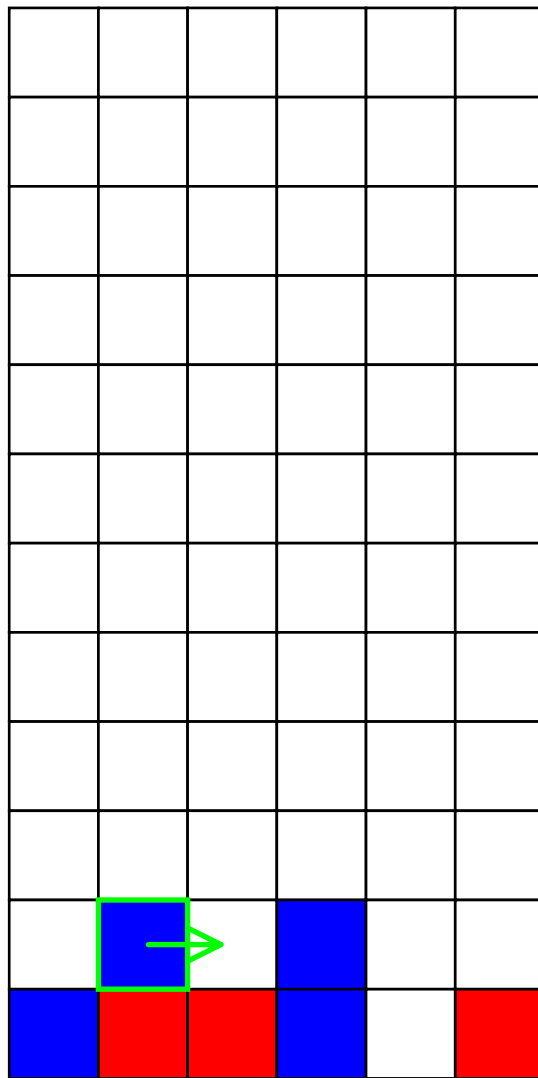
FINAL STATE



...:SOLUTION:...: Solvable in 4 moves (blocks positions: {(10, 1): <Color: blue>, (10, 3): <Color: blue>, (11, 0): <Color: blue>, (11, 1): <Color: red>, (11, 2): <Color: red>, (11, 3): <Color: blue>, (11, 5): <Color: red>})

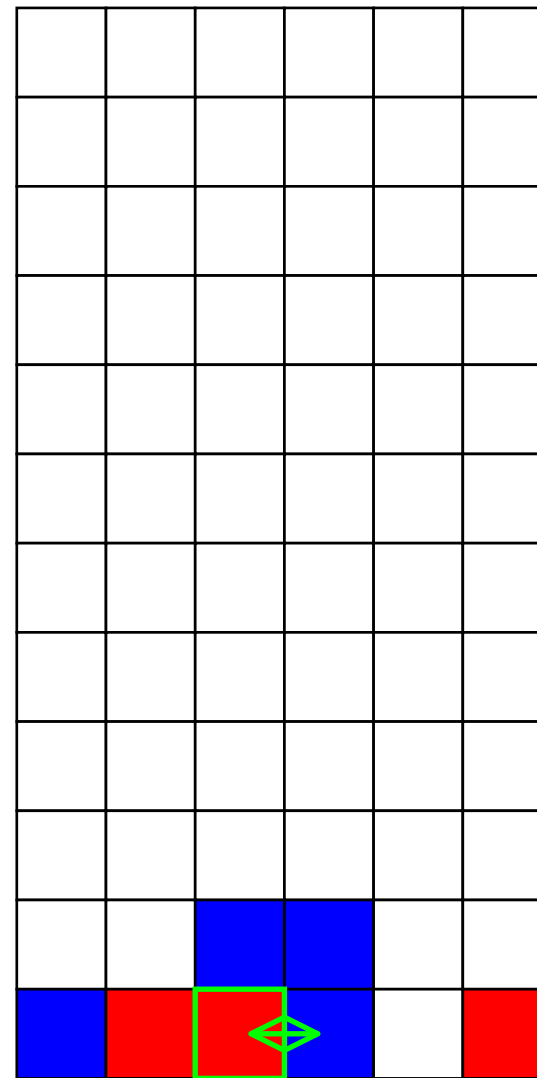
INITIAL STATE: (MOVE 1)

```
Perform: move_right at position: (10, 1):
```



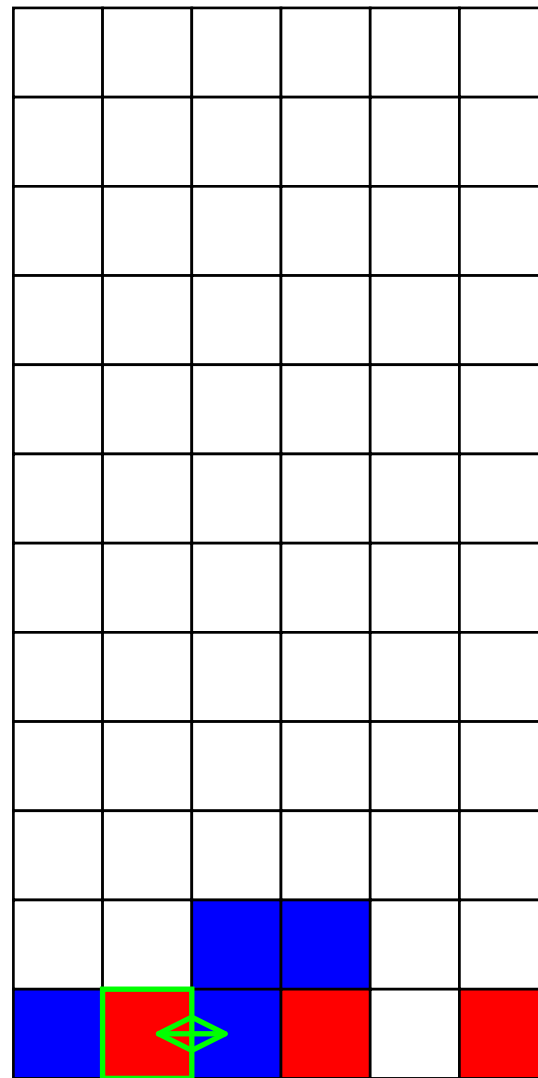
(MOVE 2)

Perform: exchange_right at position: (11, 2):



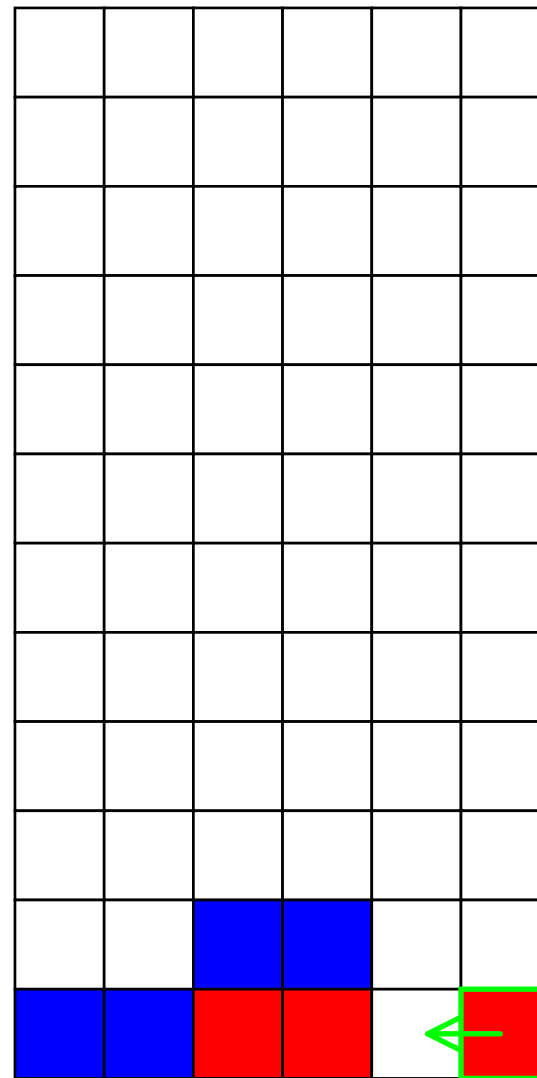
(MOVE 3)

Perform: exchange_right at position: (11, 1):

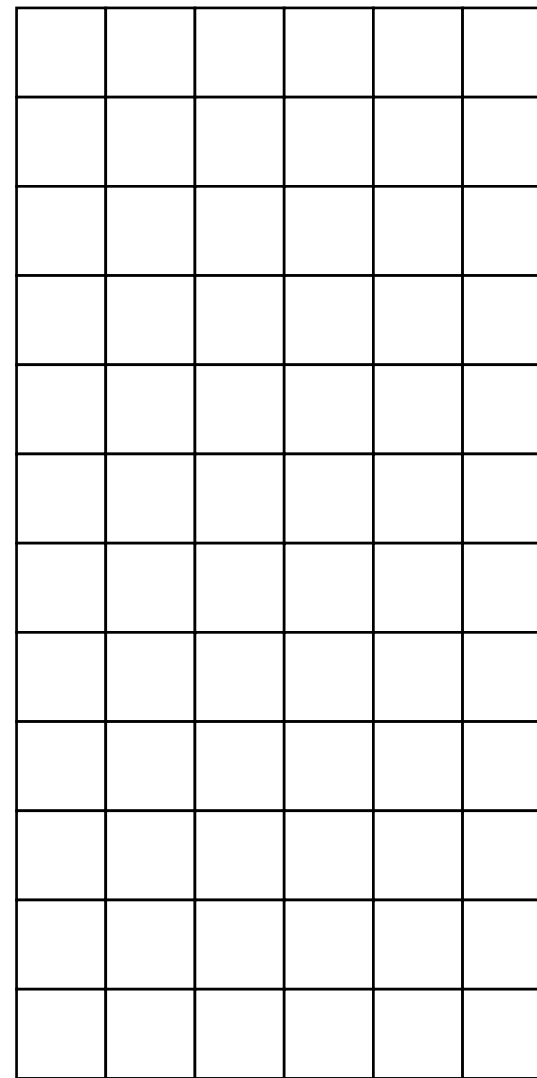


(MOVE 4)

Perform: move_left at position: (11, 5):



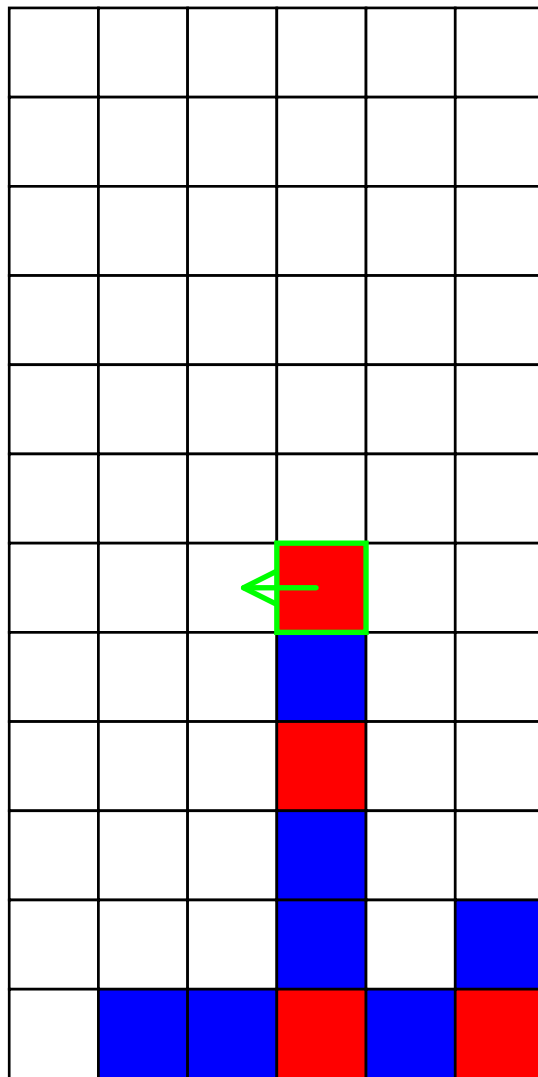
FINAL STATE



...:SOLUTION:...: Solvable in 4 moves (blocks positions: {(6, 3): <Color: red>, (7, 3): <Color: blue>, (8, 3): <Color: red>, (9, 3): <Color: blue>, (10, 3): <Color: blue>, (10, 5): <Color: blue>, (11, 1): <Color: blue>, (11, 2): <Color: blue>, (11, 3): <Color: red>, (11, 4): <Color: blue>, (11, 5): <Color: red>})

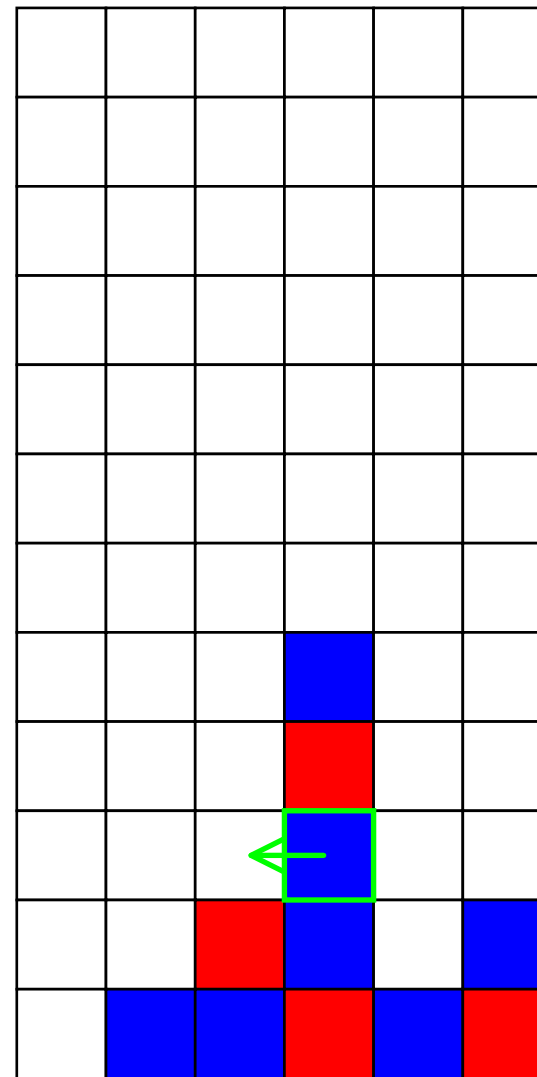
INITIAL STATE: (MOVE 1)

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



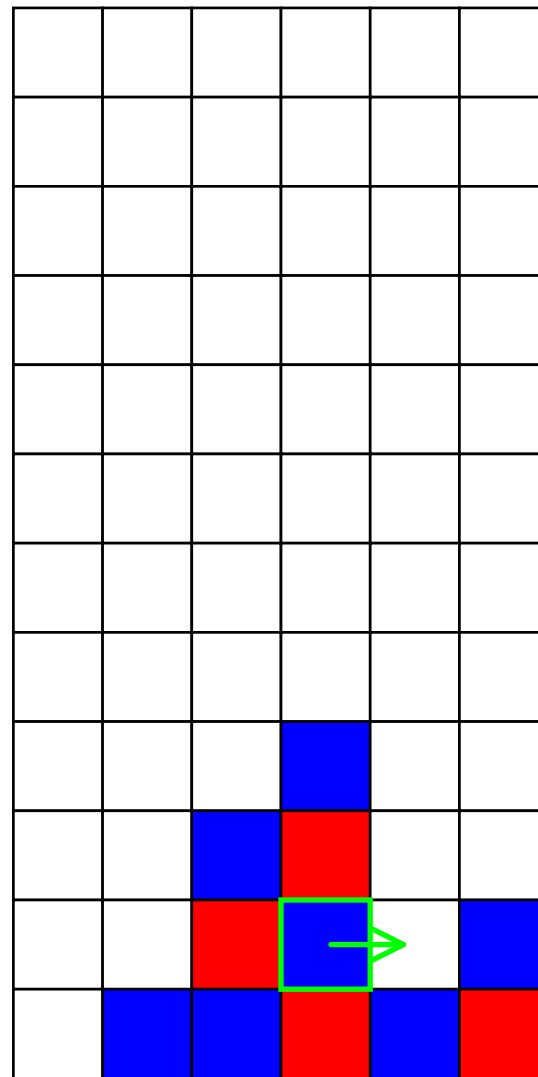
(MOVE 2)

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



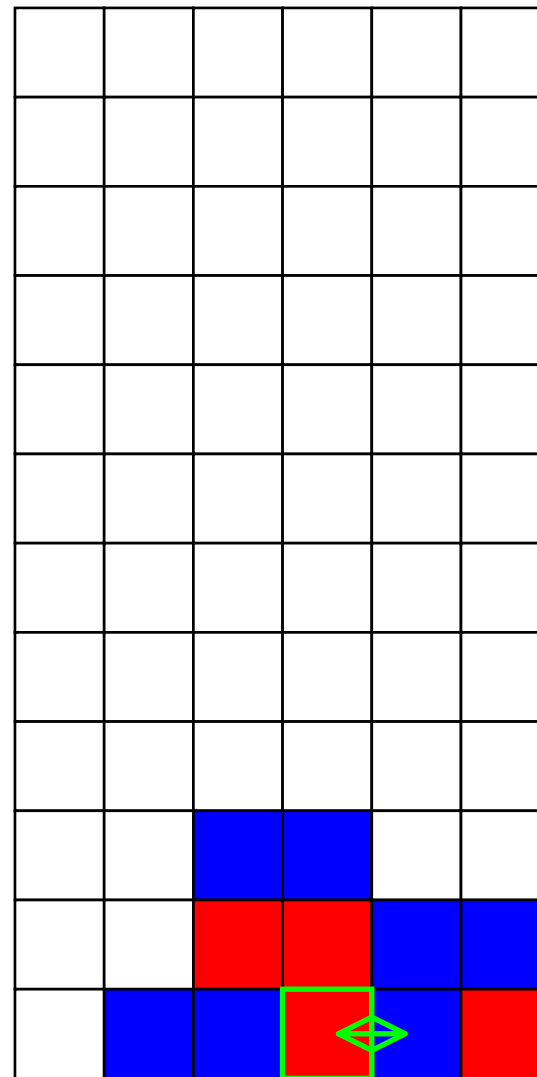
(MOVE 3)

Perform: move_right at position: (10, 3):

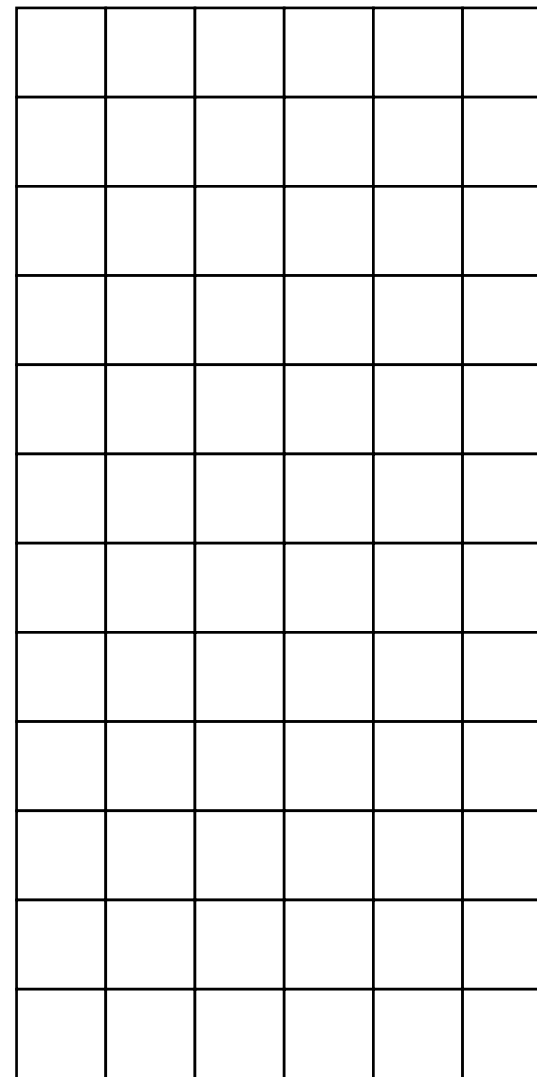


(MOVE 4)

Perform: exchange_right at position: (11, 3):



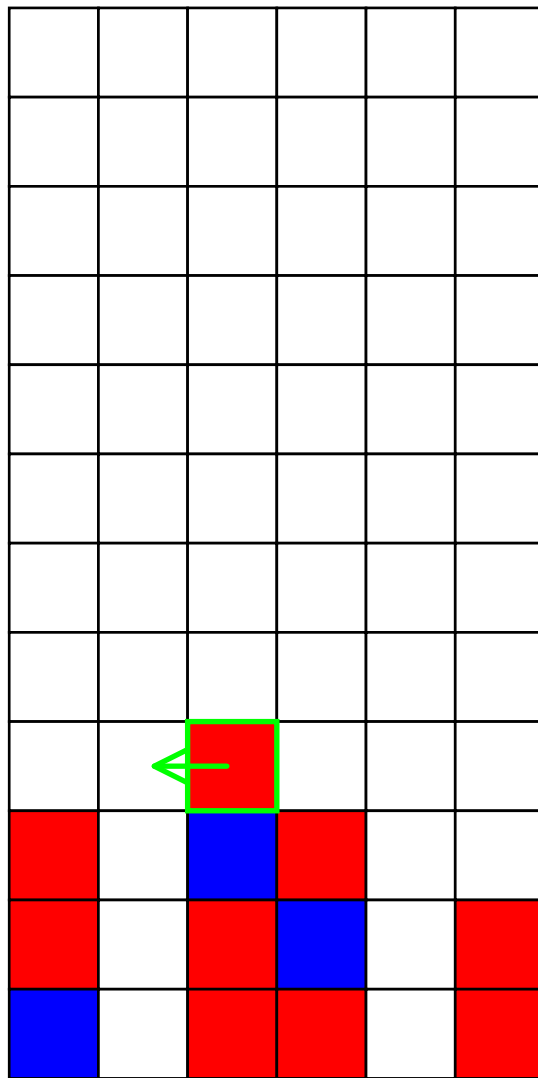
FINAL STATE



...:SOLUTION:...: Solvable in 4 moves (blocks positions: {(8, 2): <Color: red>, (9, 0): <Color: red>, (9, 2): <Color: blue>, (9, 3): <Color: red>, (10, 0): <Color: red>, (10, 2): <Color: red>, (10, 3): <Color: blue>, (10, 5): <Color: red>, (11, 0): <Color: blue>, (11, 2): <Color: red>, (11, 3): <Color: red>, (11, 5): <Color: red>}

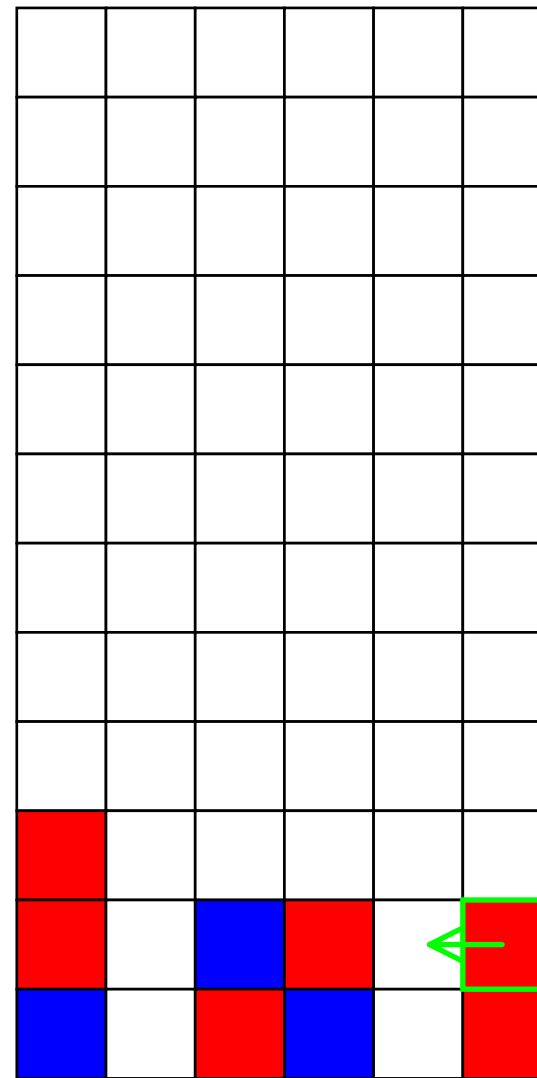
INITIAL STATE: (MOVE 1)

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



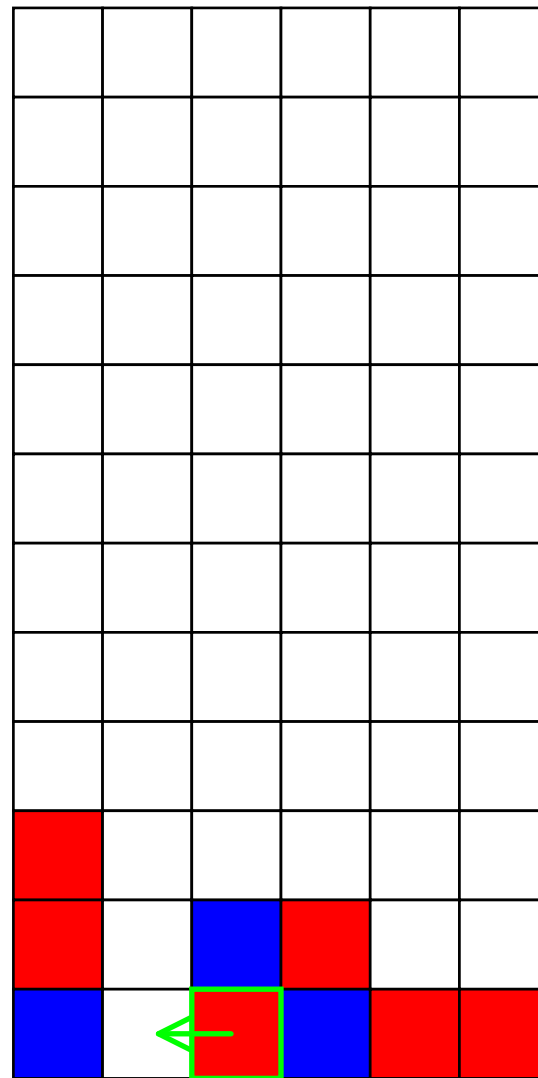
(MOVE 2)

Perform: move_left at position: (10, 5):



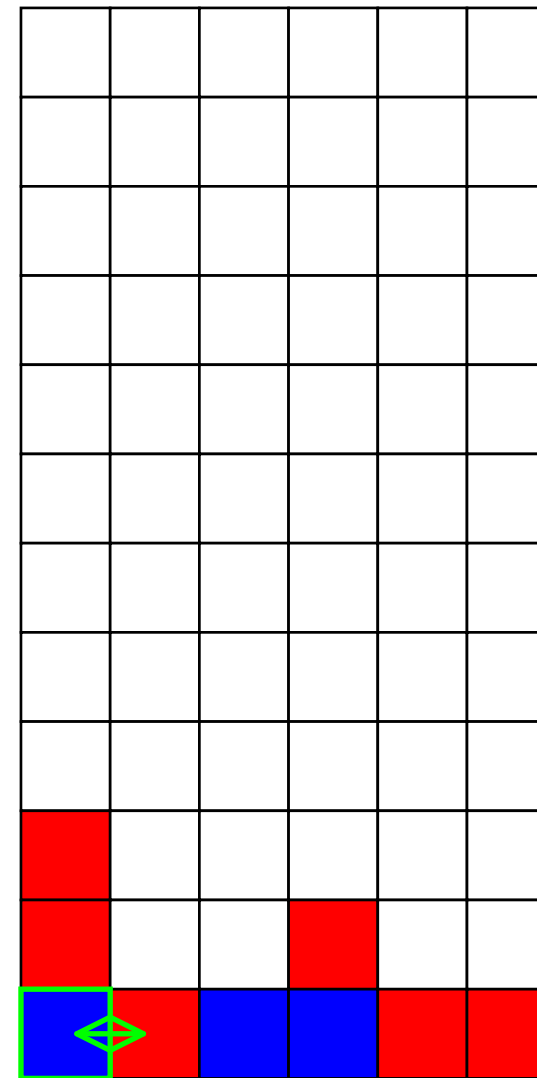
(MOVE 3)

Perform: move_left at position: (11, 2):

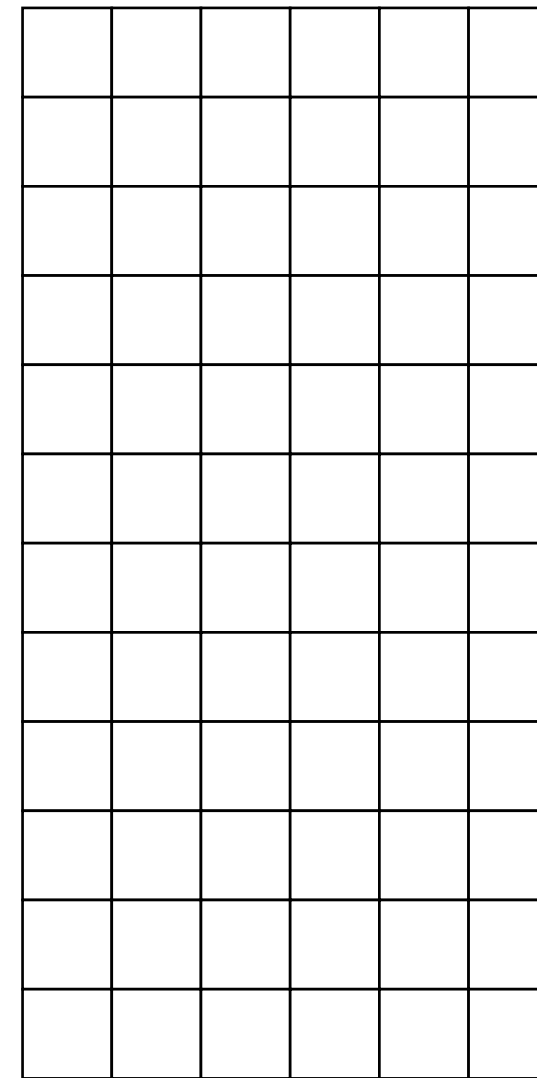


(MOVE 4)

Perform: exchange_right at position: (11, 0):



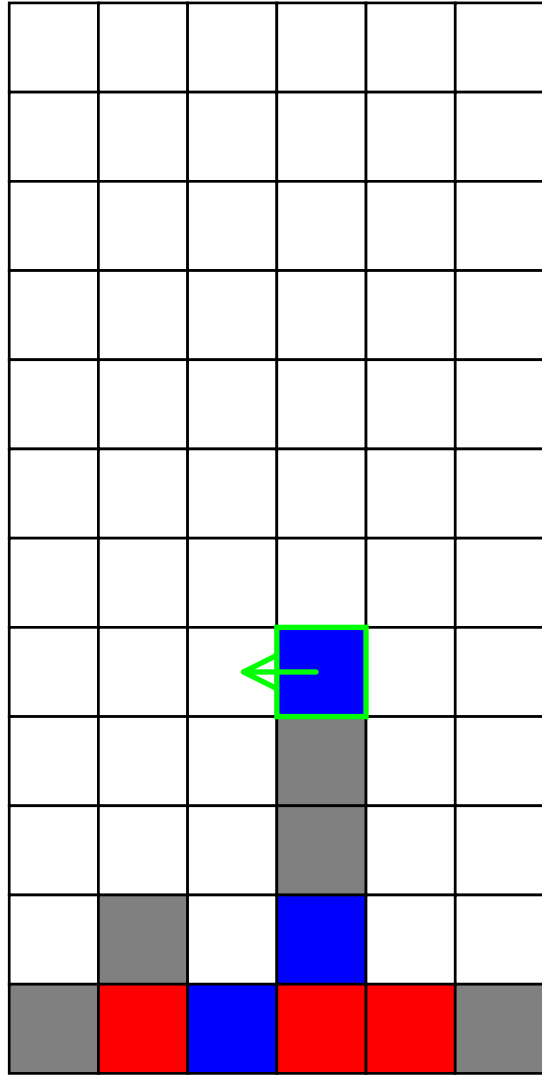
FINAL STATE



...:SOLUTION::...: Solvable in 4 moves (blocks positions: {(7, 3): <Color: blue>, (8, 3): <Color: gray>, (9, 3): <Color: gray>, (10, 1): <Color: gray>, (10, 3): <Color: blue>, (11, 0): <Color: gray>, (11, 1): <Color: red>, (11, 2): <Color: blue>, (11, 3): <Color: red>, (11, 4): <Color: red>, (11, 5): <Color: gray>})

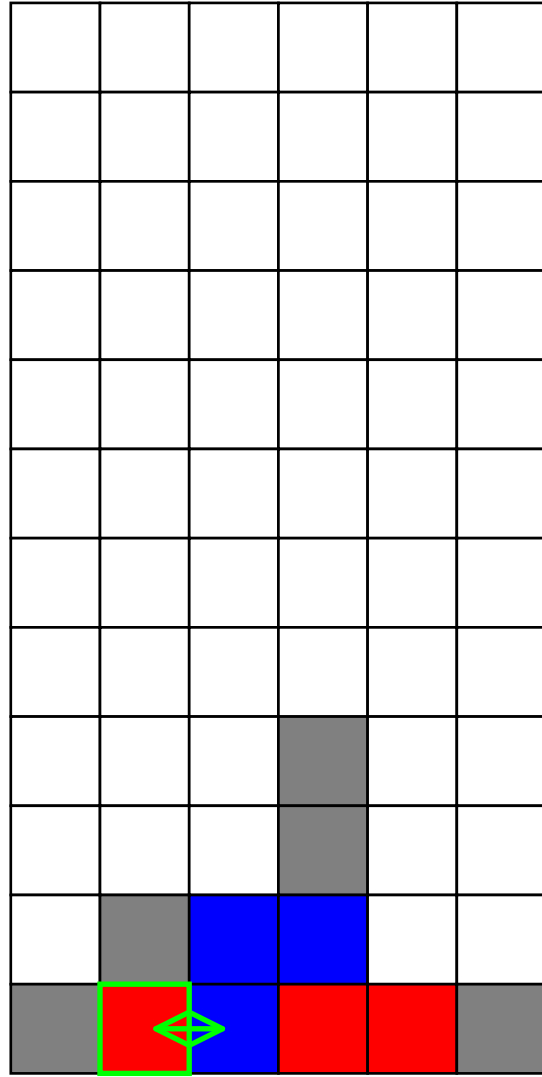
INITIAL STATE: (MOVE 1)

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



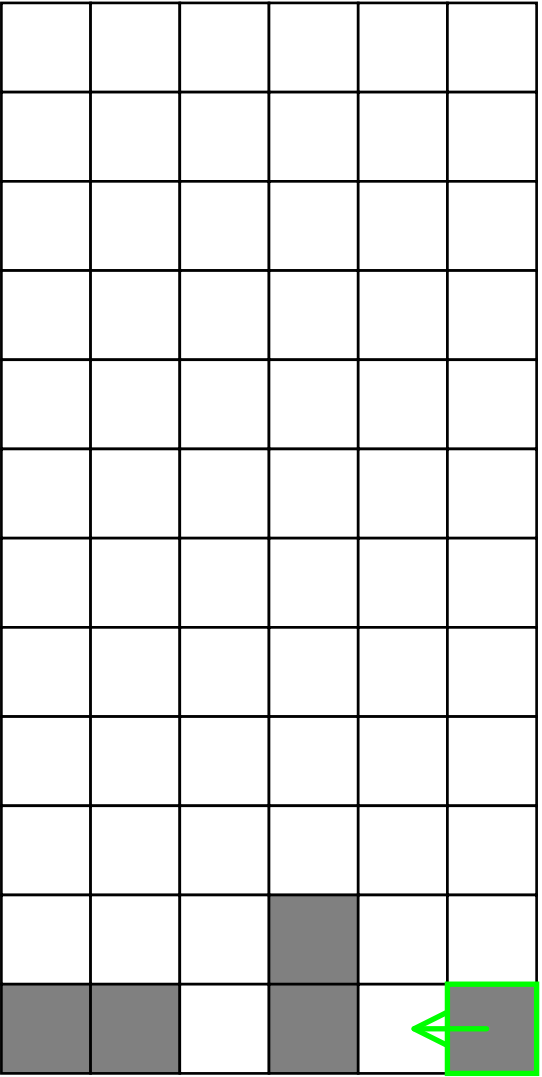
(MOVE 2)

Perform: exchange_right at position: (11, 1):



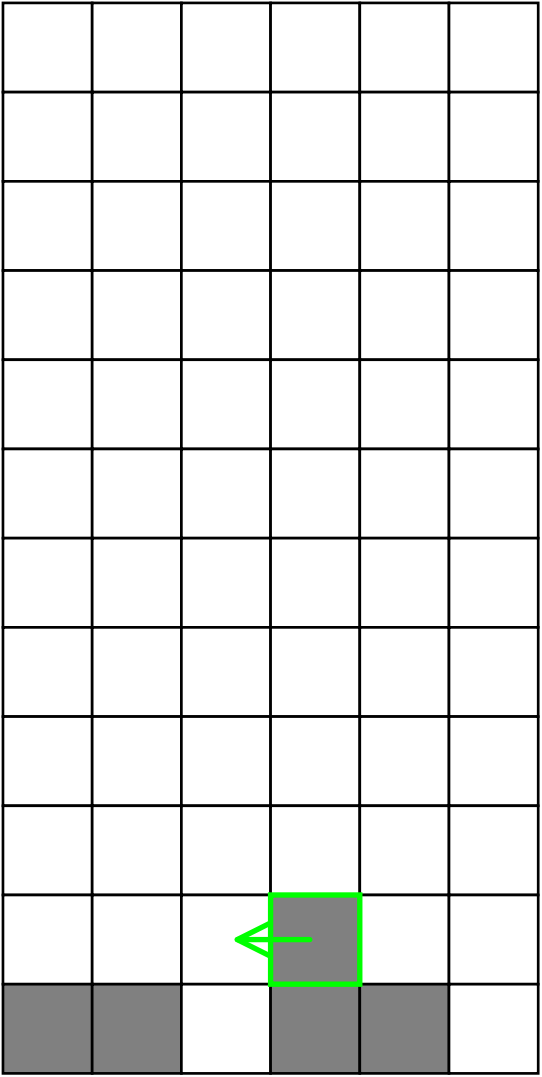
(MOVE 3)

Perform: move_left at position: (11, 5):

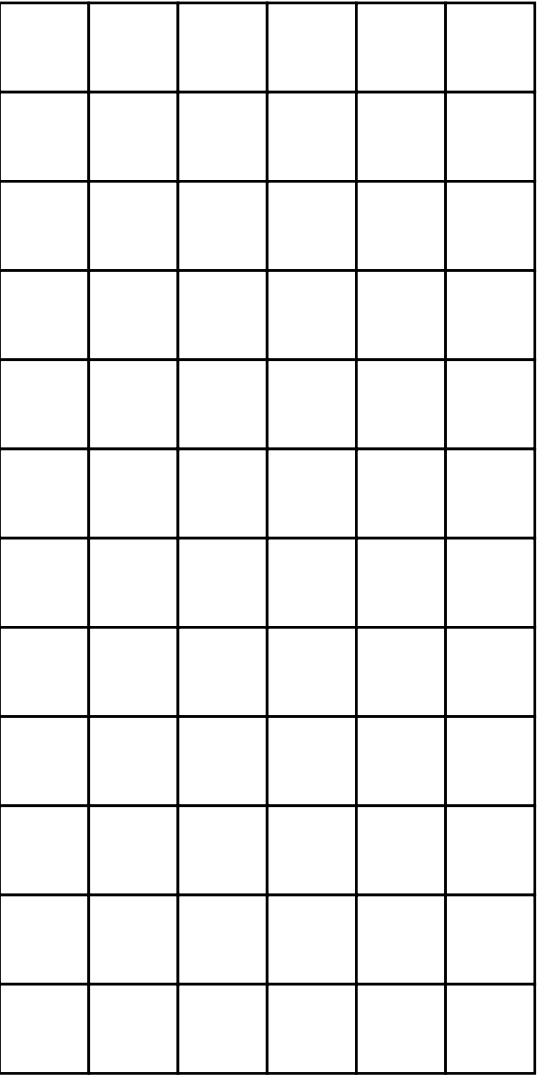


(MOVE 4)

Perform: move_left at position: (10, 3):



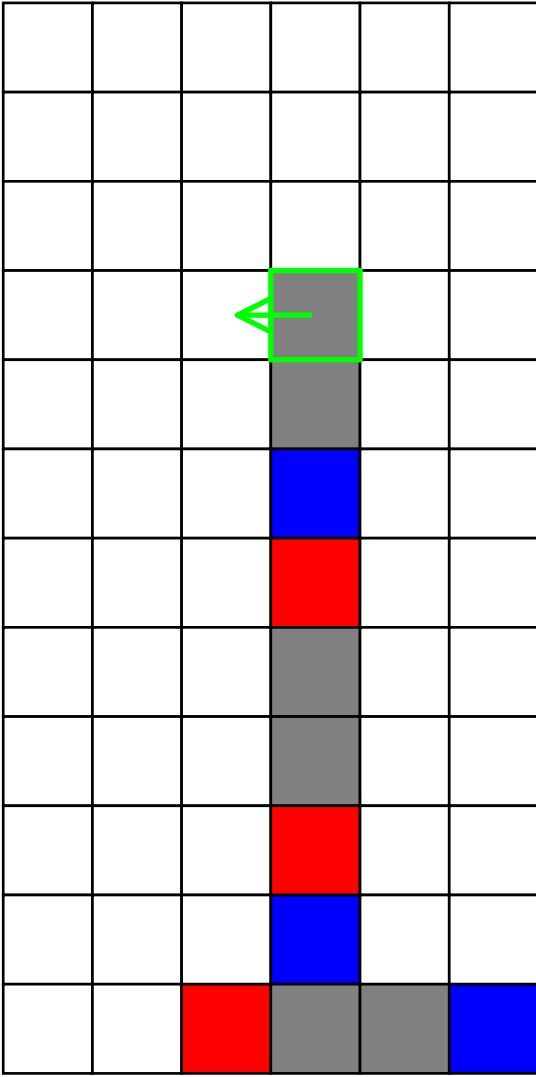
FINAL STATE



...:SOLUTION:...: Solvable in 4 moves (blocks positions: {(3, 3): <Color: gray>, (4, 3): <Color: gray>, (5, 3): <Color: blue>, (6, 3): <Color: red>, (7, 3): <Color: gray>, (8, 3): <Color: gray>, (9, 3): <Color: red>, (10, 3): <Color: blue>, (11, 2): <Color: red>, (11, 3): <Color: gray>, (11, 4): <Color: gray>, (11, 5):

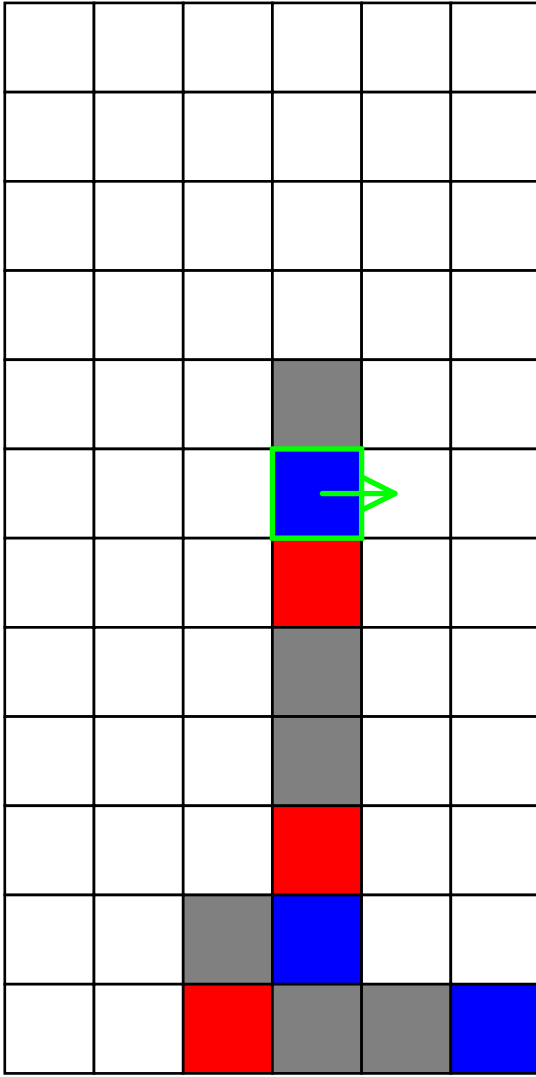
INITIAL STATE: (MOVE 1)

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



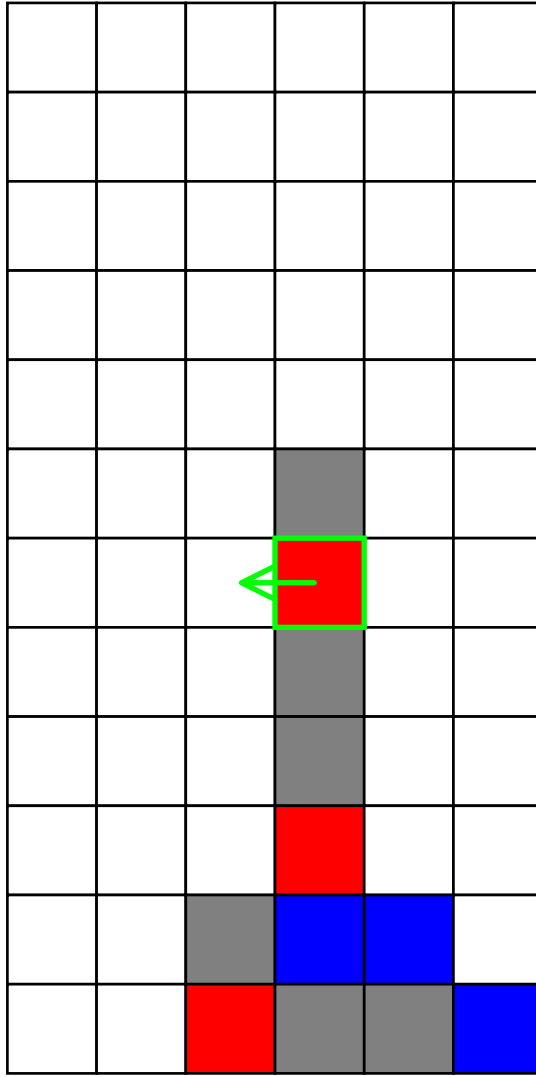
(MOVE 2)

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



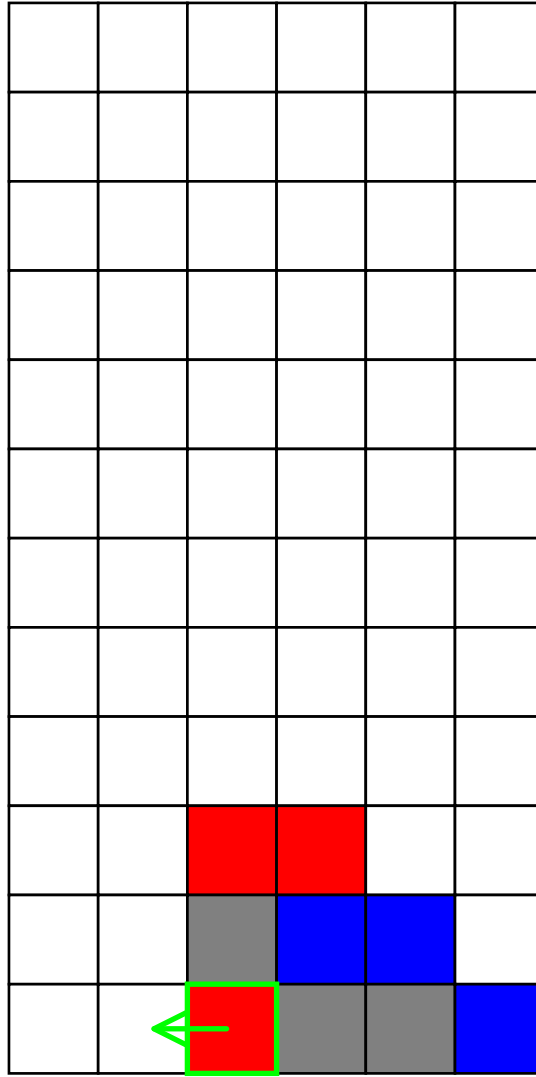
(MOVE 3)

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

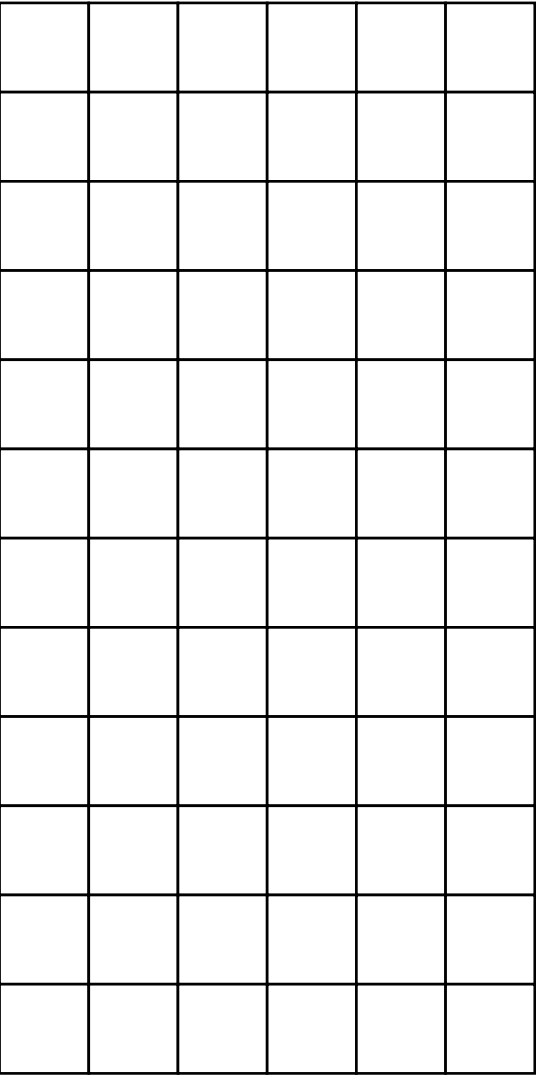


(MOVE 4)

Perform: move_left at position: (11, 2):



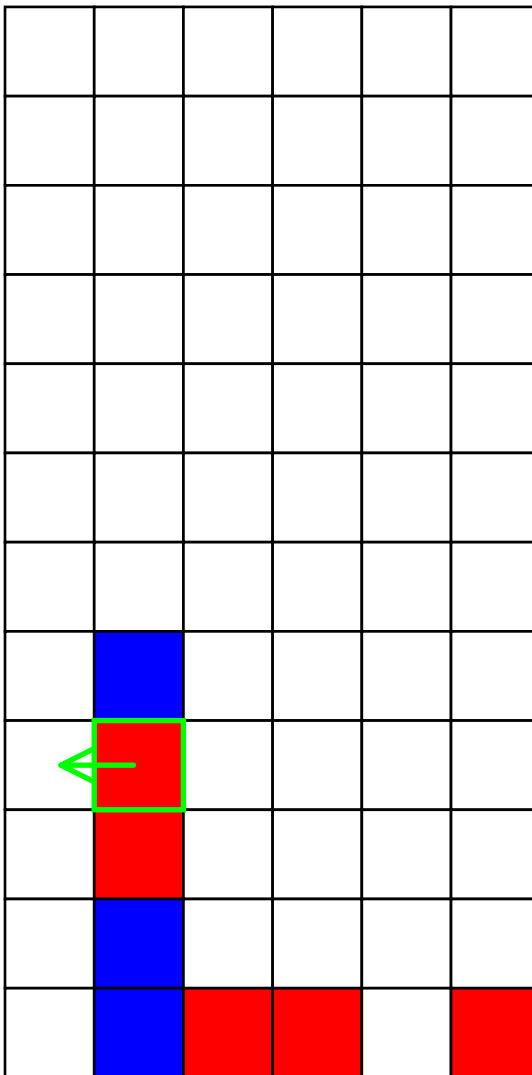
FINAL STATE



...:SOLUTION::...: Solvable in 5 moves (blocks positions: {(7, 1): <Color: blue>, (8, 1): <Color: red>, (9, 1): <Color: red>, (10, 1): <Color: blue>, (11, 1): <Color: blue>, (11, 2): <Color: red>, (11, 3): <Color: red>, (11, 5): <Color: red>})

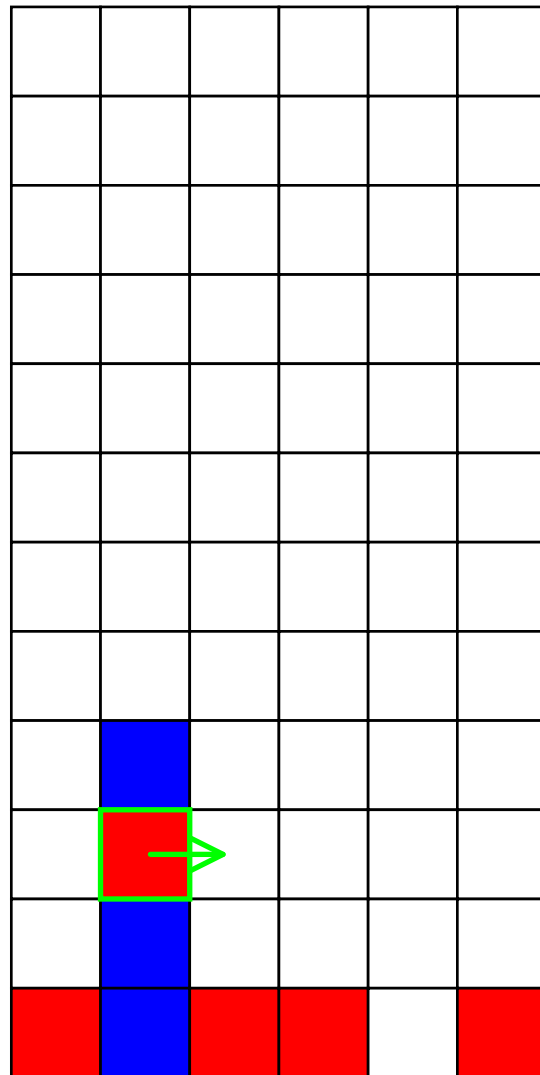
INITIAL STATE: (MOVE 1)

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



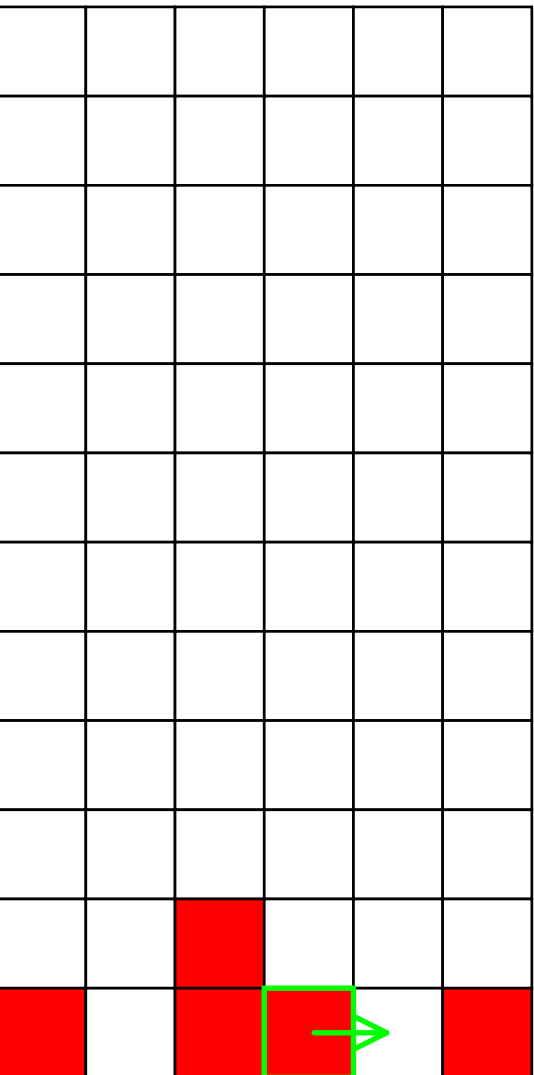
(MOVE 2)

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



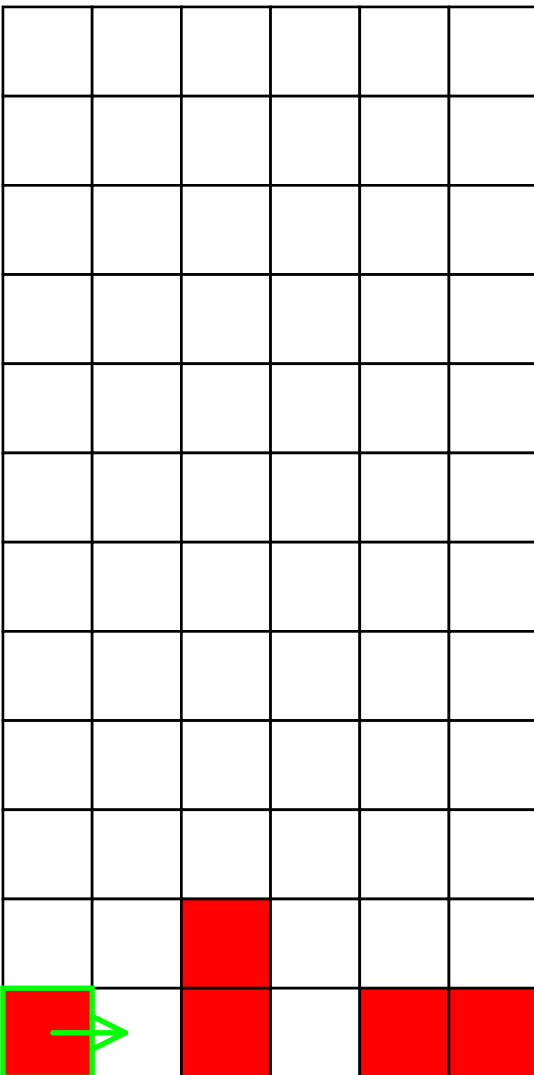
(MOVE 3)

Perform: move_right at position: (11, 3):



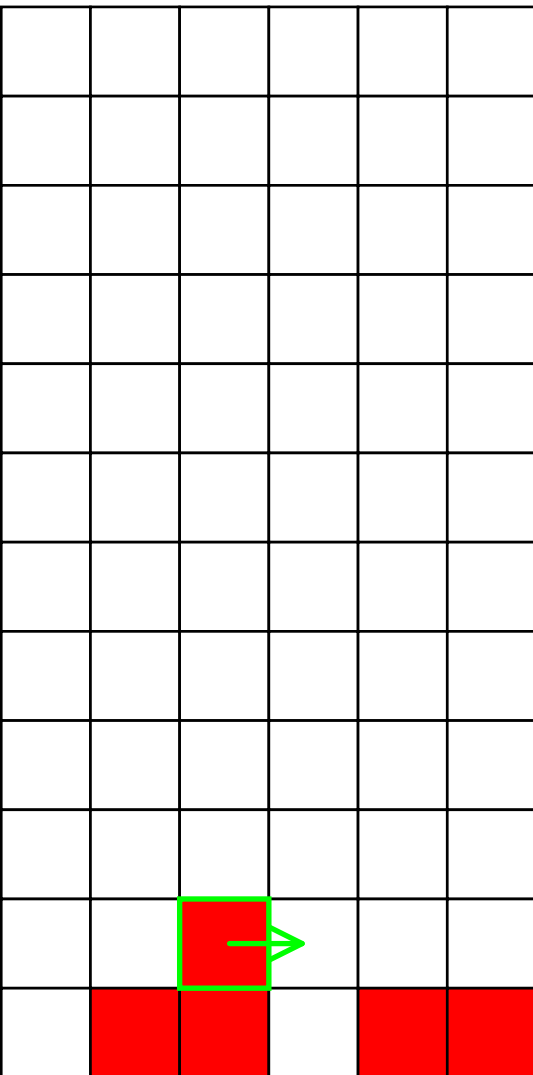
(MOVE 4)

Perform: move_right at position: (11, 0):

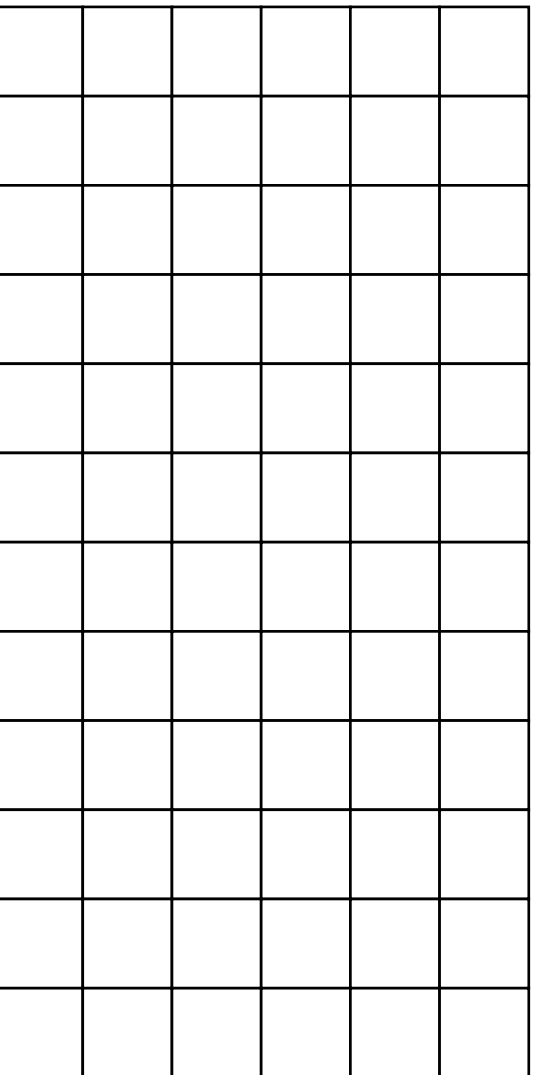


(MOVE 5)

Perform: move_right at position: (10, 2):



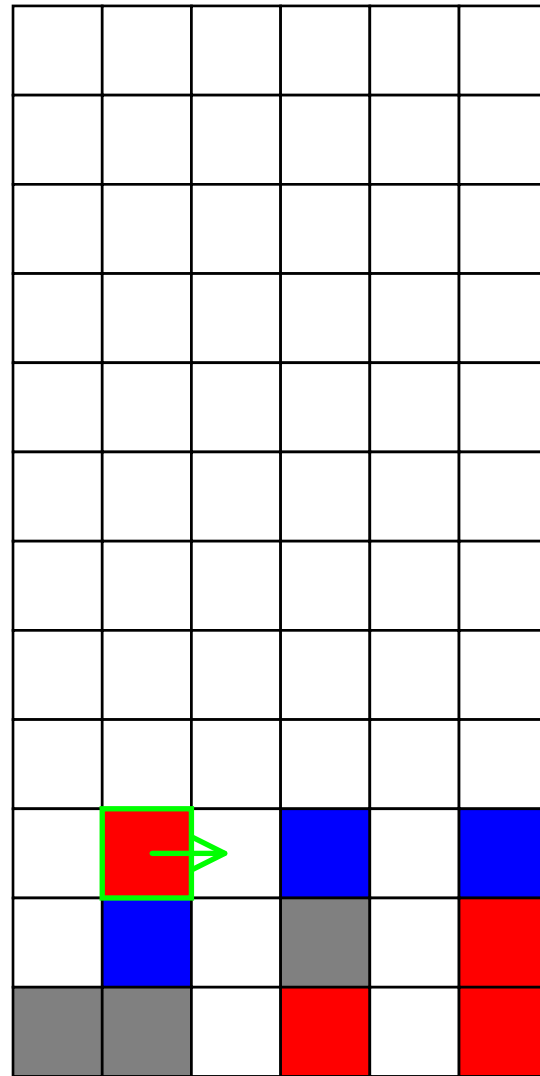
FINAL STATE



....SOLUTION:.... Solvable in 5 moves (blocks positions: {(9, 1): <Color: red>, (9, 3): <Color: blue>, (9, 5): <Color: blue>, (10, 1): <Color: blue>, (10, 3): <Color: gray>, (10, 5): <Color: red>, (11, 0): <Color: gray>, (11, 1): <Color: gray>, (11, 3): <Color: red>, (11, 5): <Color: red>})

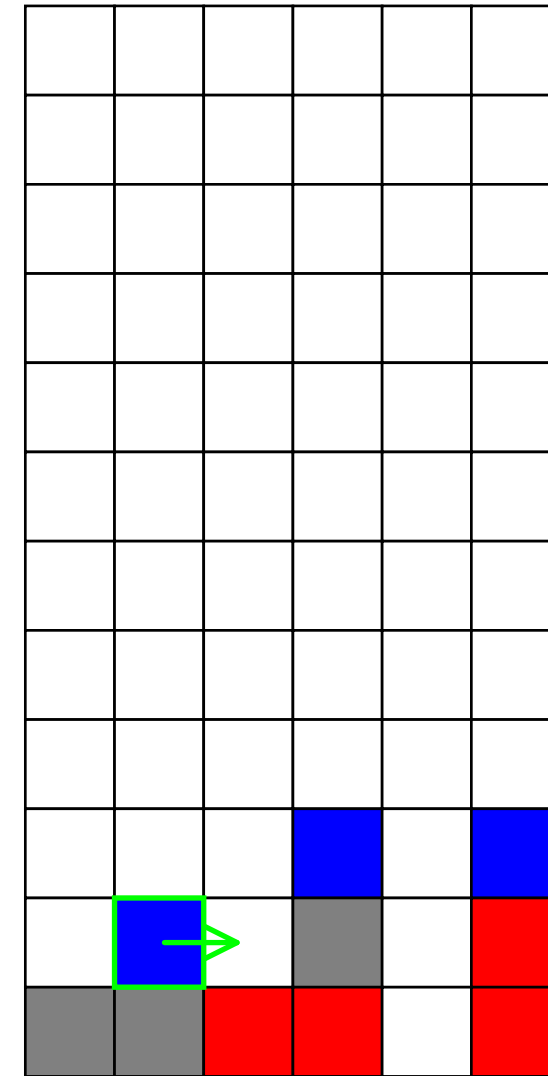
INITIAL STATE: (MOVE 1)

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



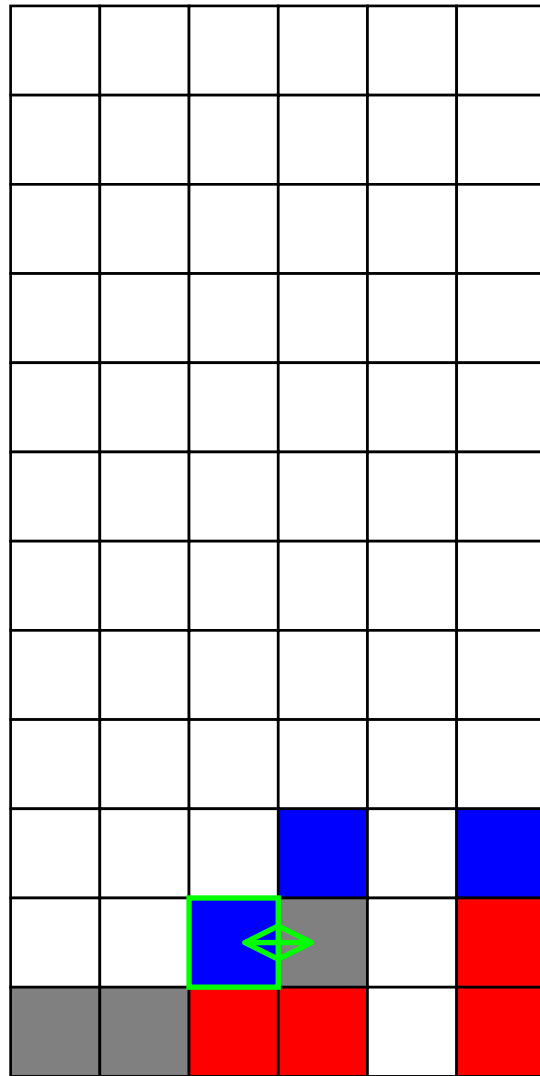
(MOVE 2)

Perform: move_right at position: (10, 1):



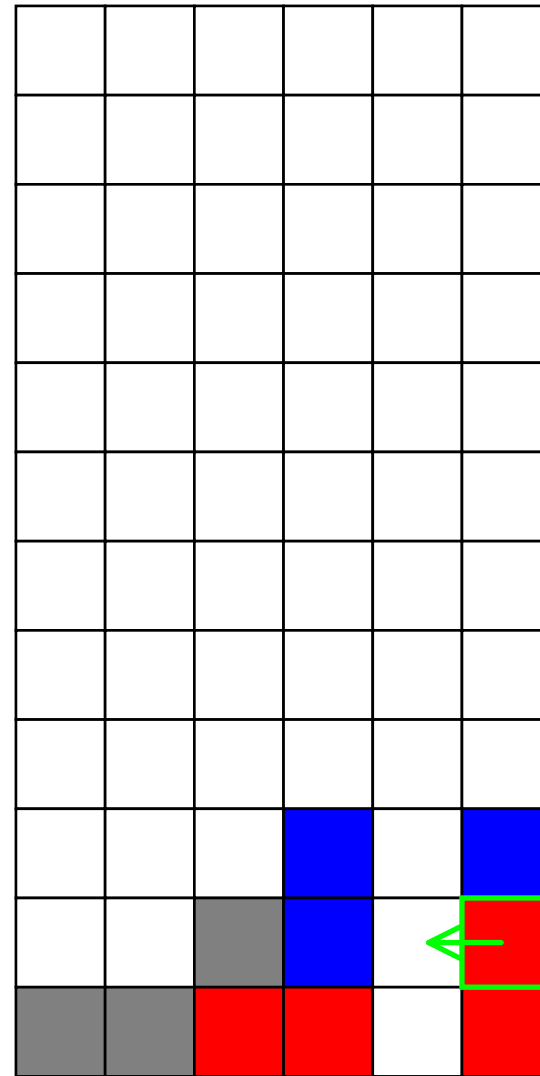
(MOVE 3)

Perform: exchange_right at position: (10, 2):



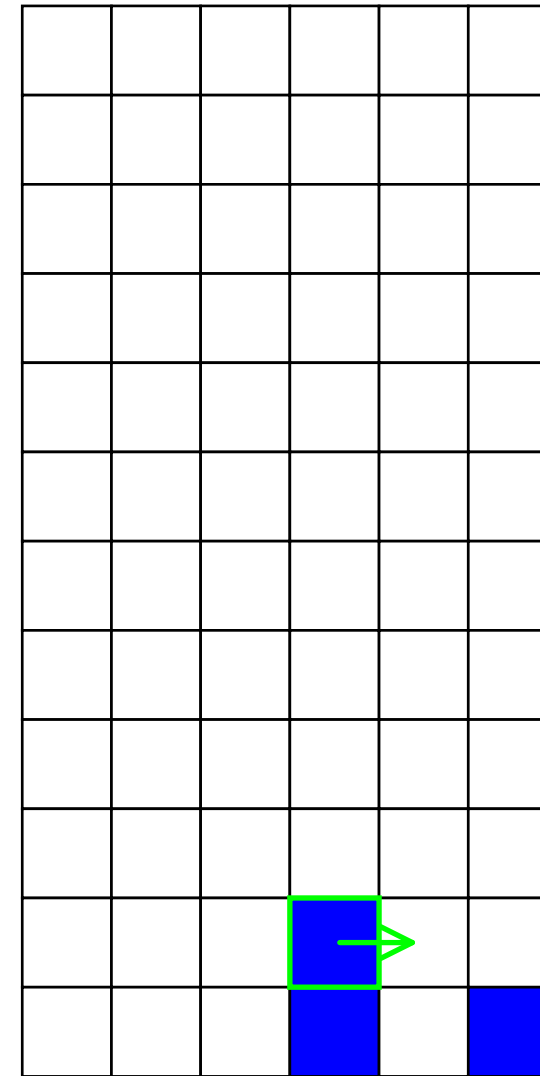
(MOVE 4)

Perform: move_left at position: (10, 5):

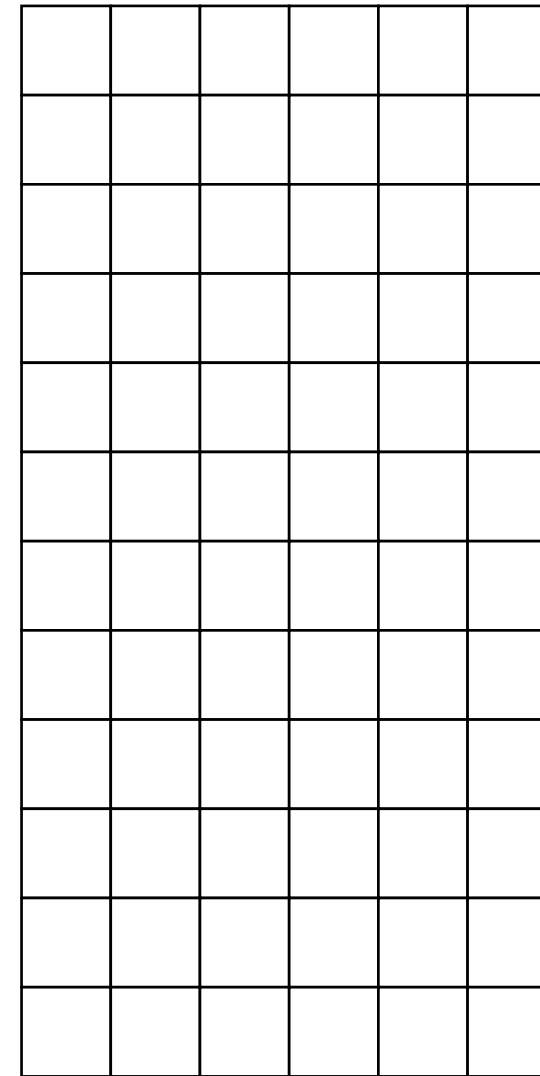


(MOVE 5)

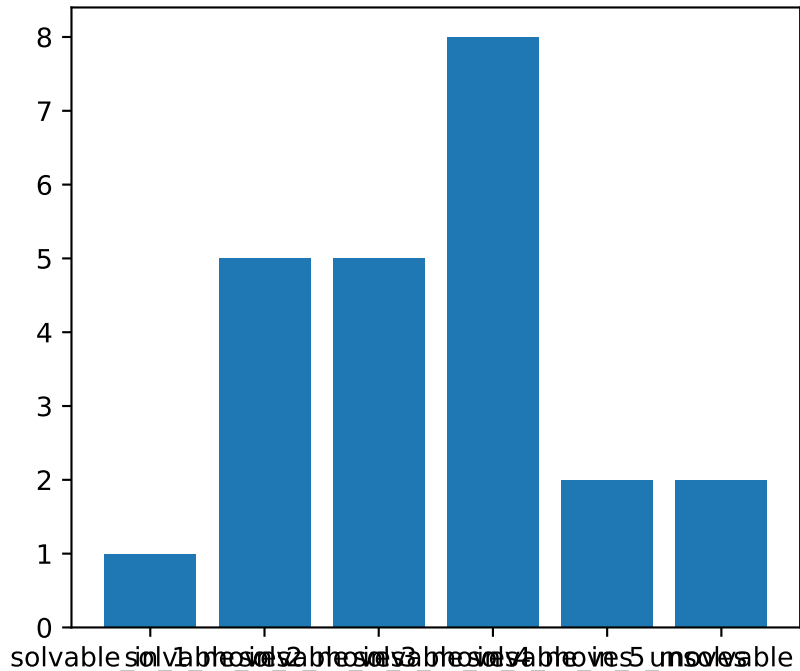
Perform: move_right at position: (10, 3):



FINAL STATE



Number of Puzzles Generated (Bar Chart)



Number of Puzzles Generated (Pie Chart)

