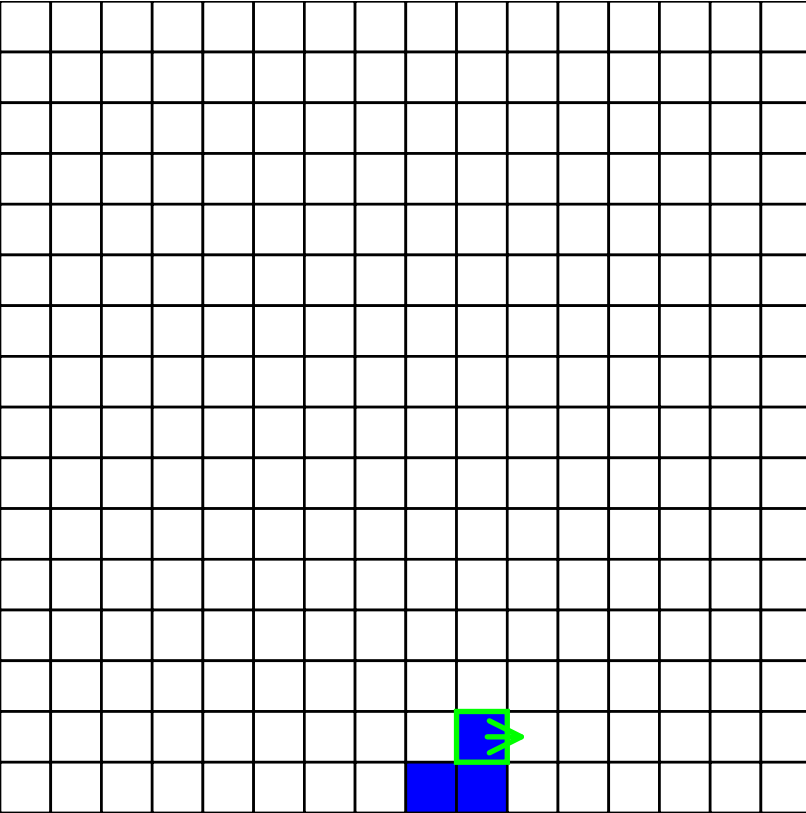


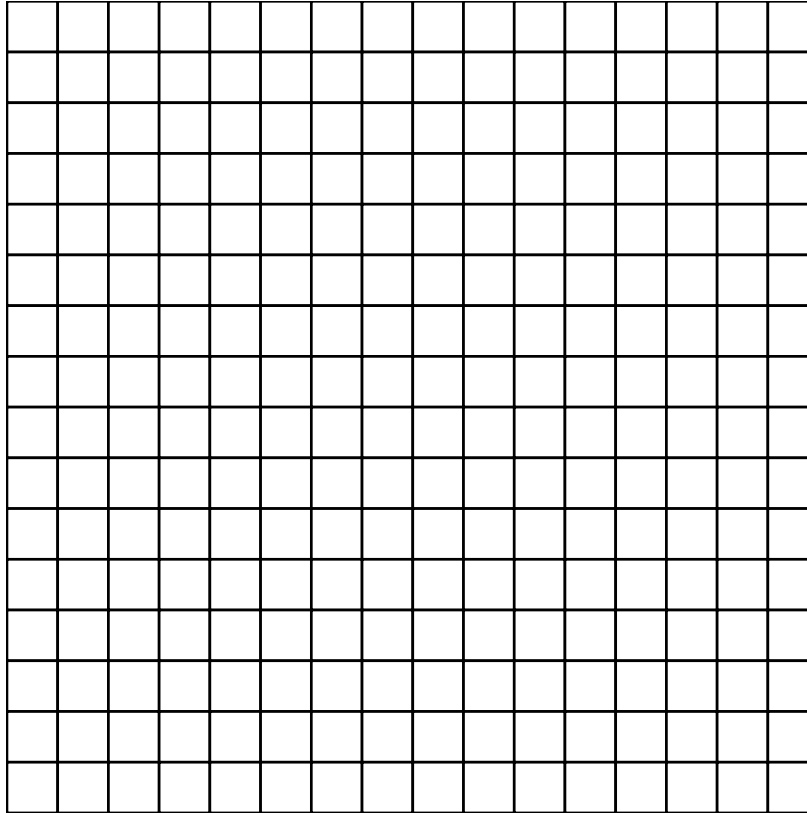
...:SOLUTION:...: Solvable in 1 moves (blocks positions: {(14, 9): <Color: blue>, (15, 8): <Color: blue>, (15, 9): <Color: blue>}

INITIAL STATE: (MOVE 1)

Perform: move_right at position: (14, 9):

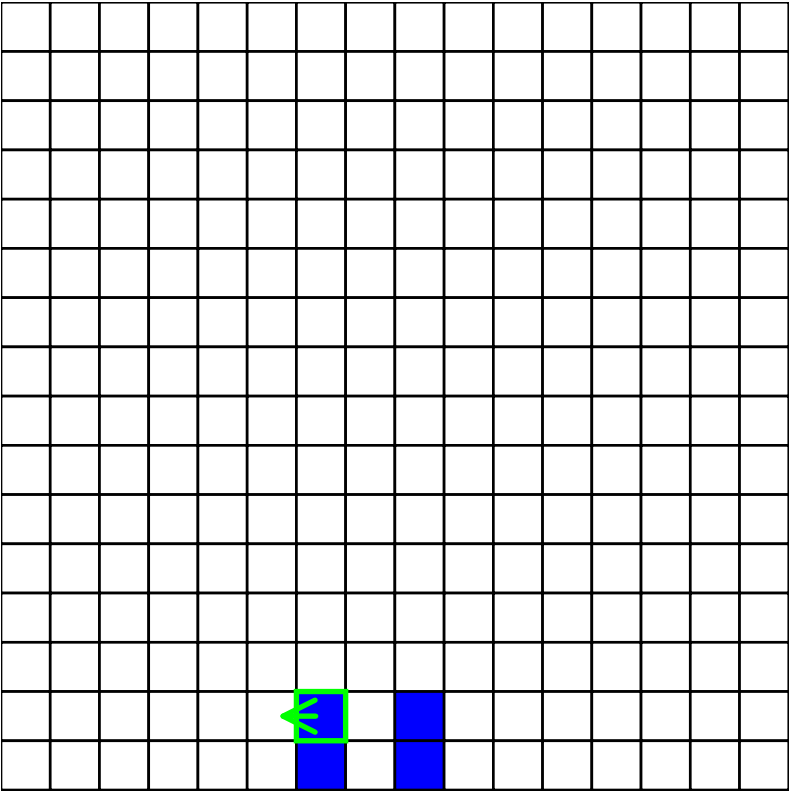


FINAL STATE

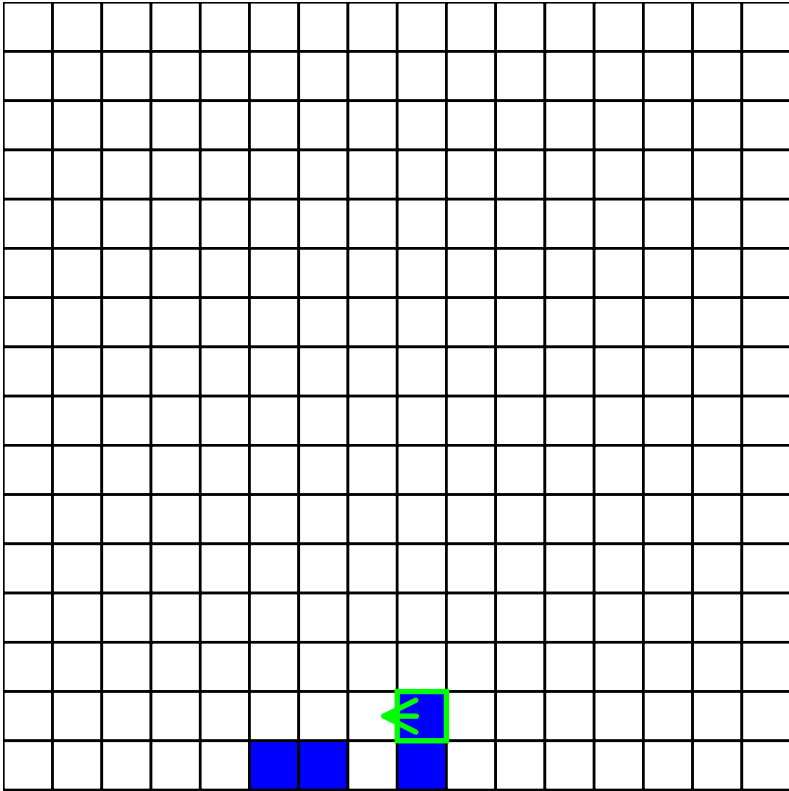


...:SOLUTION:...: Solvable in 2 moves (blocks positions: {(14, 6): <Color: blue>, (14, 8): <Color: blue>, (15, 6): <Color: blue>, (15, 8): <Color: blue>})

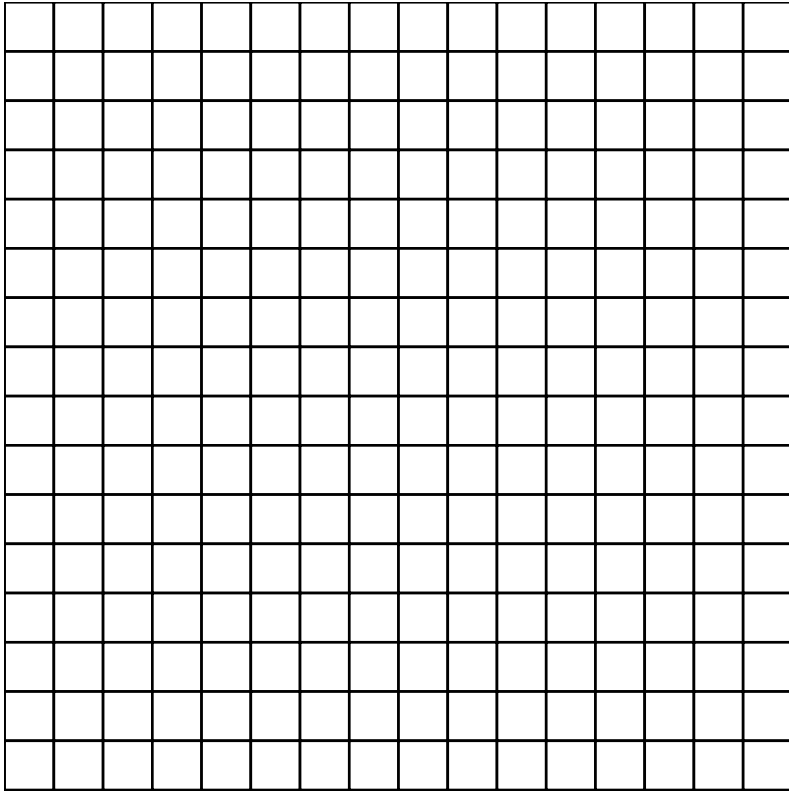
INITIAL STATE: (MOVE 1)
Perform: move_left at position: (14, 6):



(MOVE 2)
Perform: move_left at position: (14, 8):



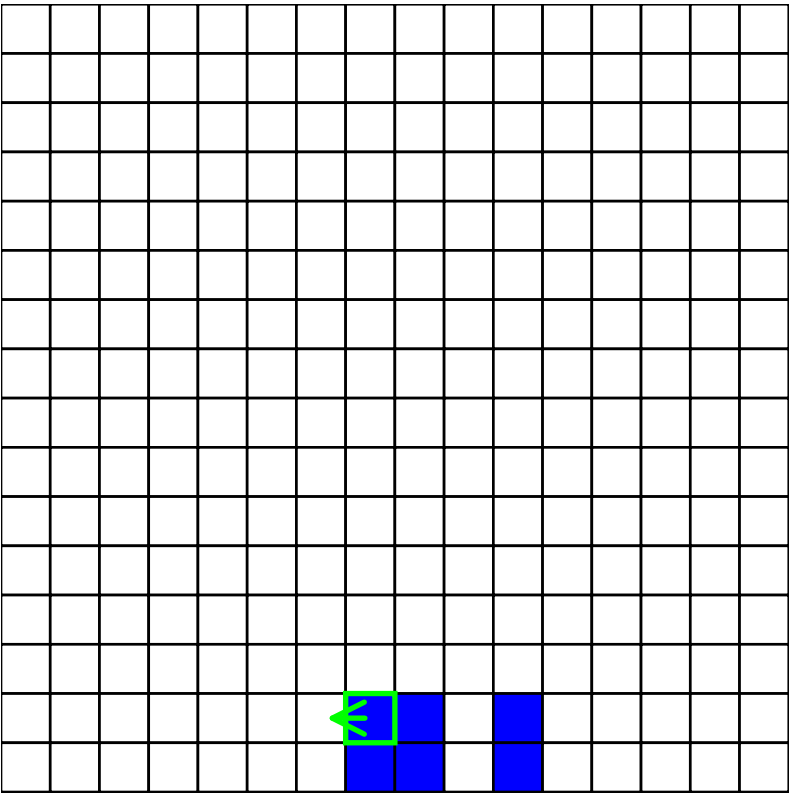
FINAL STATE



...:SOLUTION:...: Solvable in 2 moves (blocks positions: {(14, 7): <Color: blue>, (14, 8): <Color: blue>, (14, 10): <Color: blue>, (15, 7): <Color: blue>, (15, 8): <Color: blue>, (15, 10): <Color: blue>})

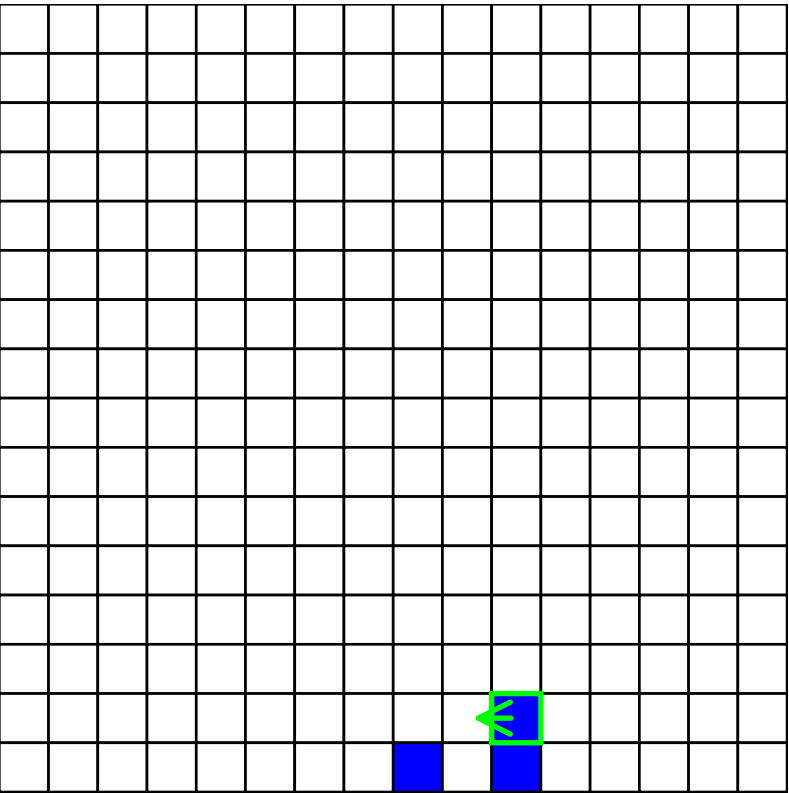
INITIAL STATE: (MOVE 1)

Perform: move_left at position: (14, 7):

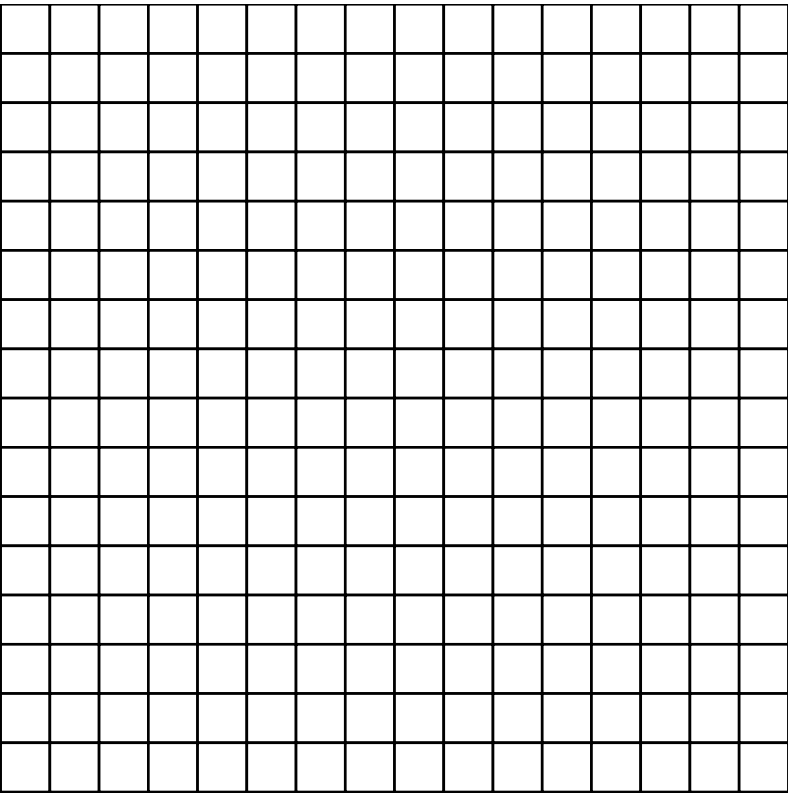


(MOVE 2)

Perform: move_left at position: (14, 10):



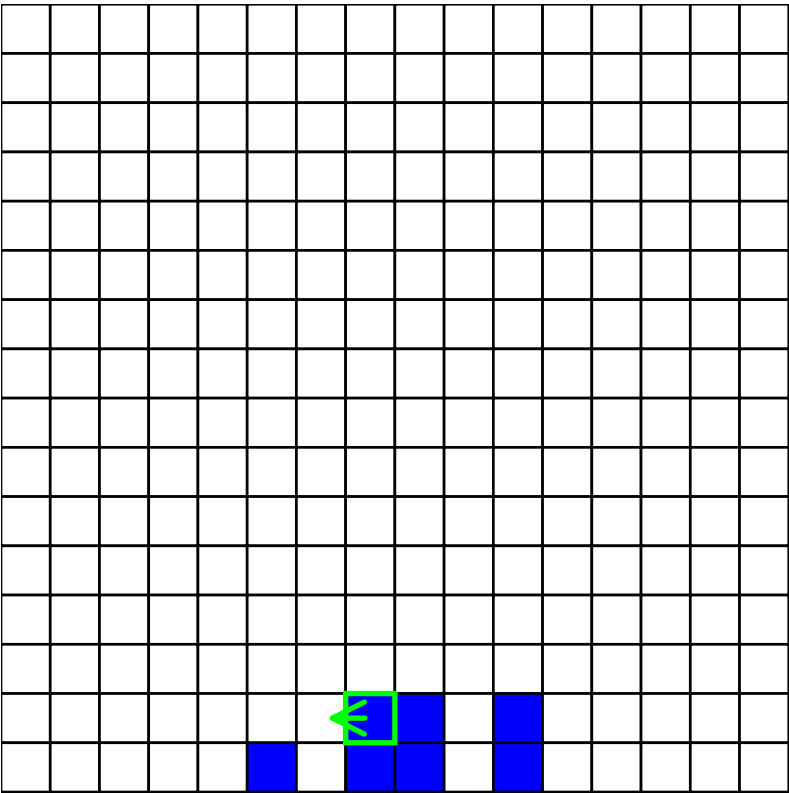
FINAL STATE



...:SOLUTION::...: Solvable in 2 moves (blocks positions: {(14, 7): <Color: blue>, (14, 8): <Color: blue>, (14, 10): <Color: blue>, (15, 5): <Color: blue>, (15, 7): <Color: blue>, (15, 8): <Color: blue>})

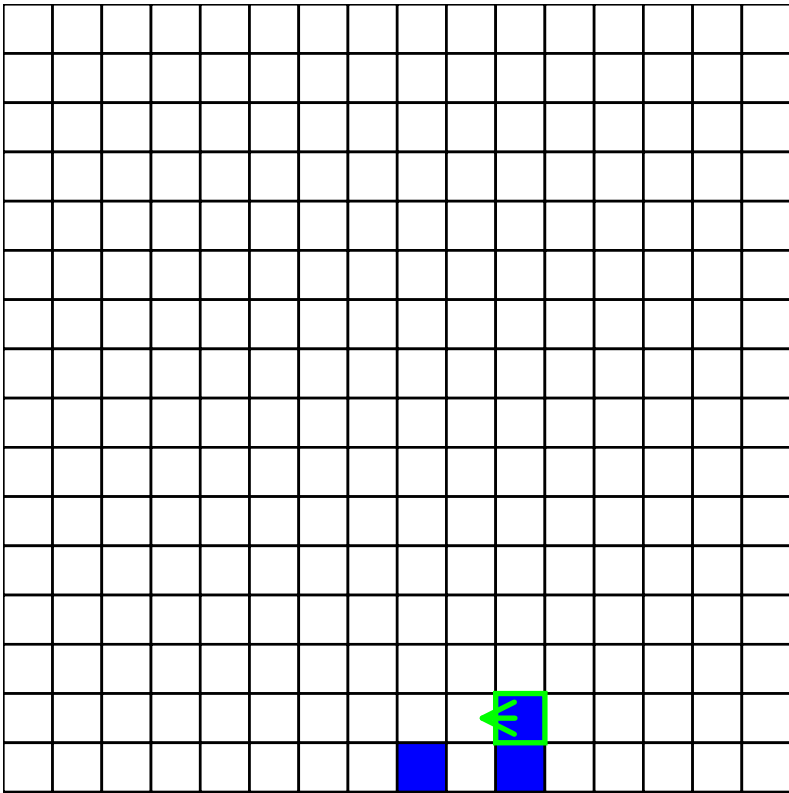
INITIAL STATE: (MOVE 1)

Perform: move_left at position: (14, 7):

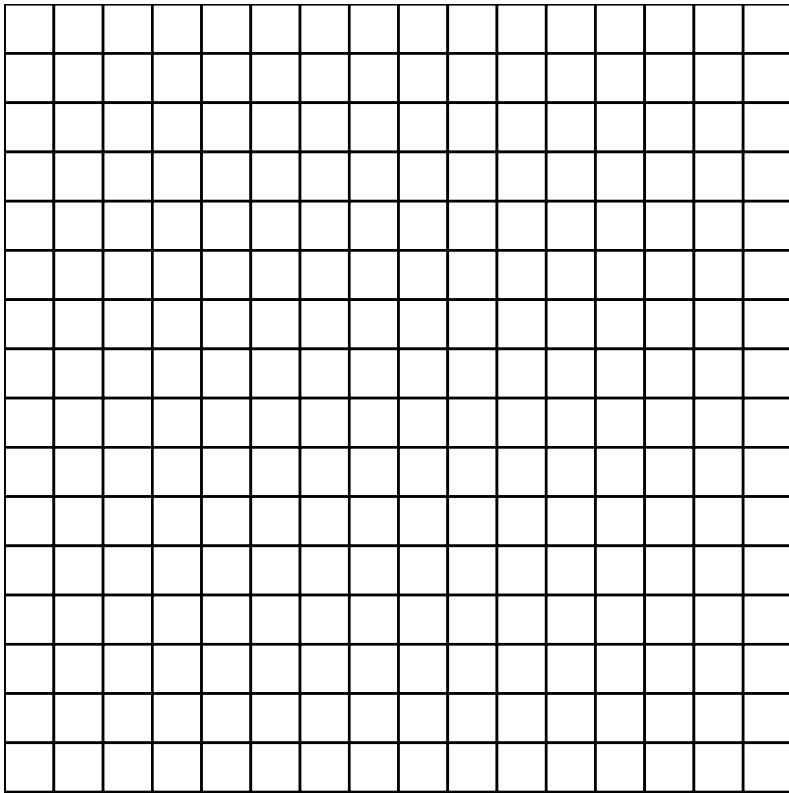


(MOVE 2)

Perform: move_left at position: (14, 10):



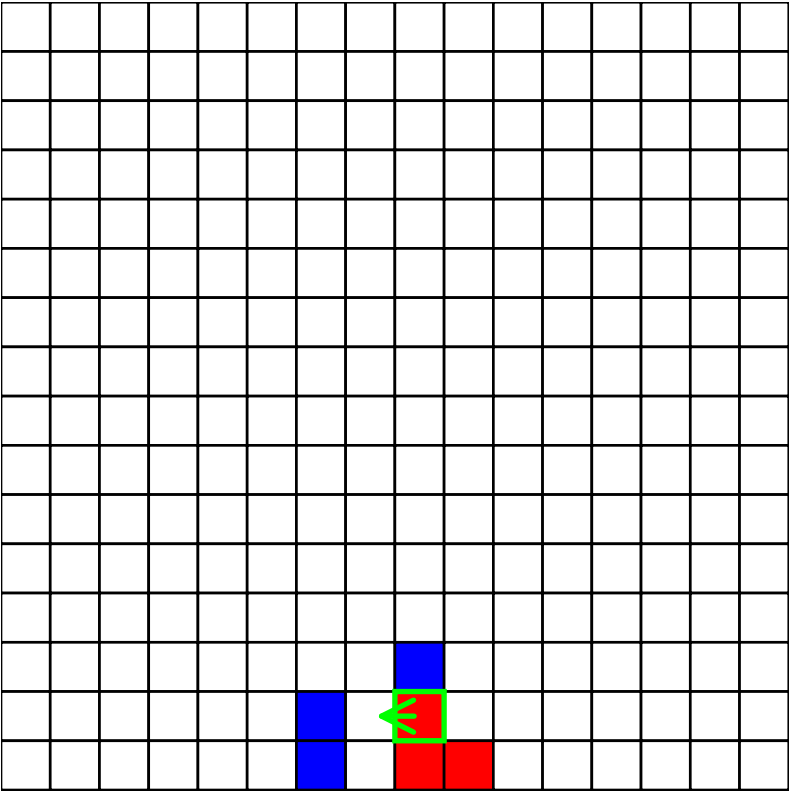
FINAL STATE



...:SOLUTION:...: Solvable in 2 moves (blocks positions: {(13, 8): <Color: blue>, (14, 6): <Color: blue>, (14, 8): <Color: red>, (15, 6): <Color: blue>, (15, 8): <Color: red>, (15, 9): <Color: red>})

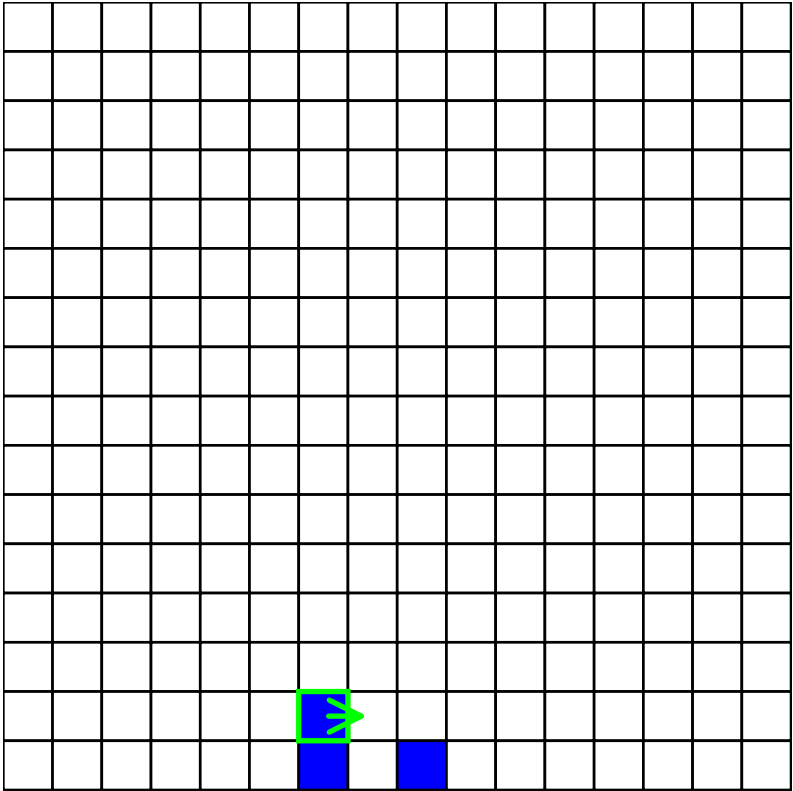
INITIAL STATE: (MOVE 1)

Perform: move_left at position: (14, 8):

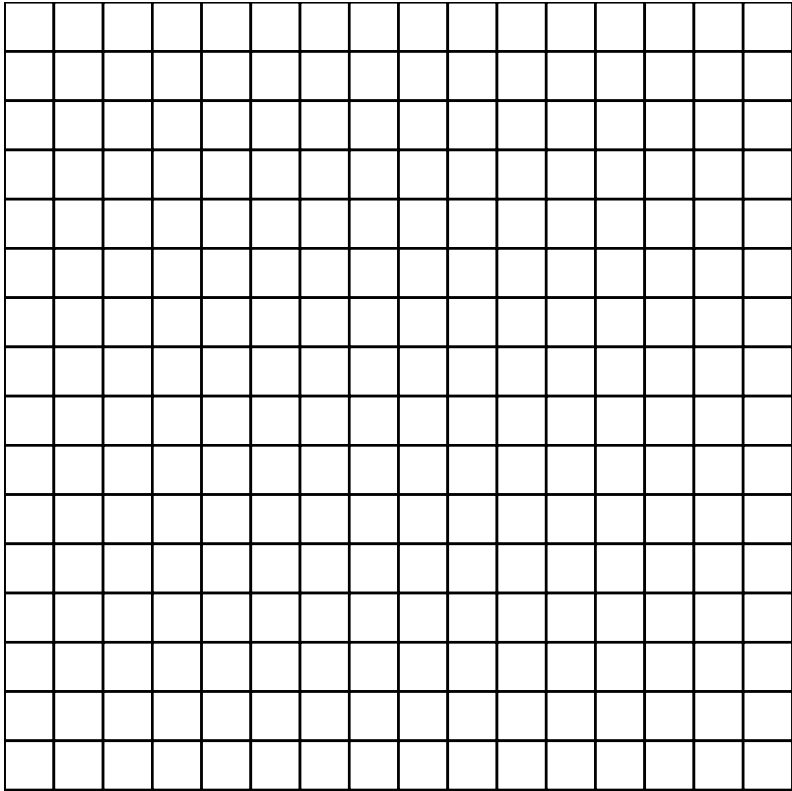


(MOVE 2)

Perform: move_right at position: (14, 6):



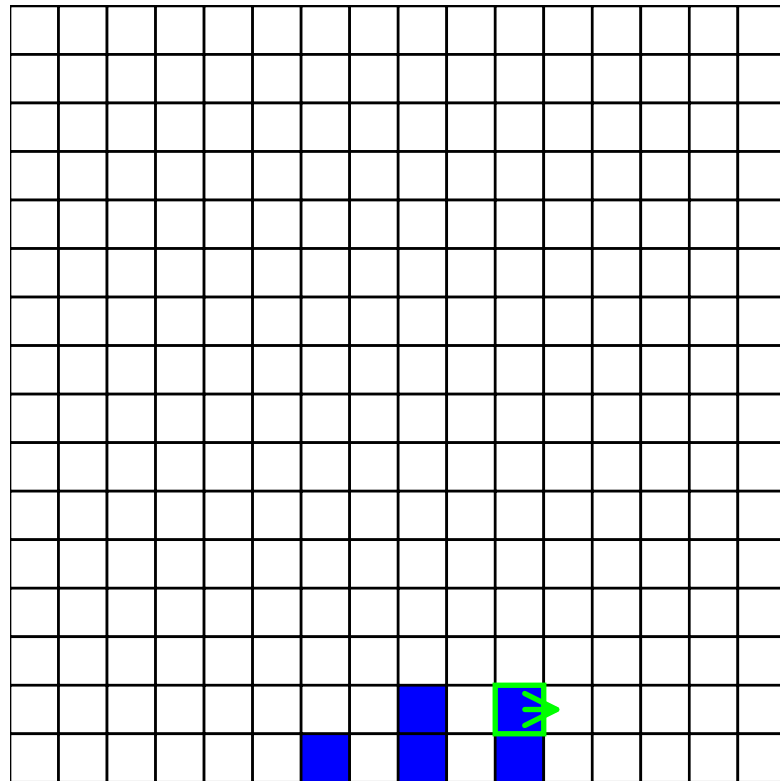
FINAL STATE



...:SOLUTION:...: Solvable in 3 moves (blocks positions: {(14, 8): <Color: blue>, (14, 10): <Color: blue>, (15, 6): <Color: blue>, (15, 8): <Color: blue>, (15, 10): <Color: blue>})

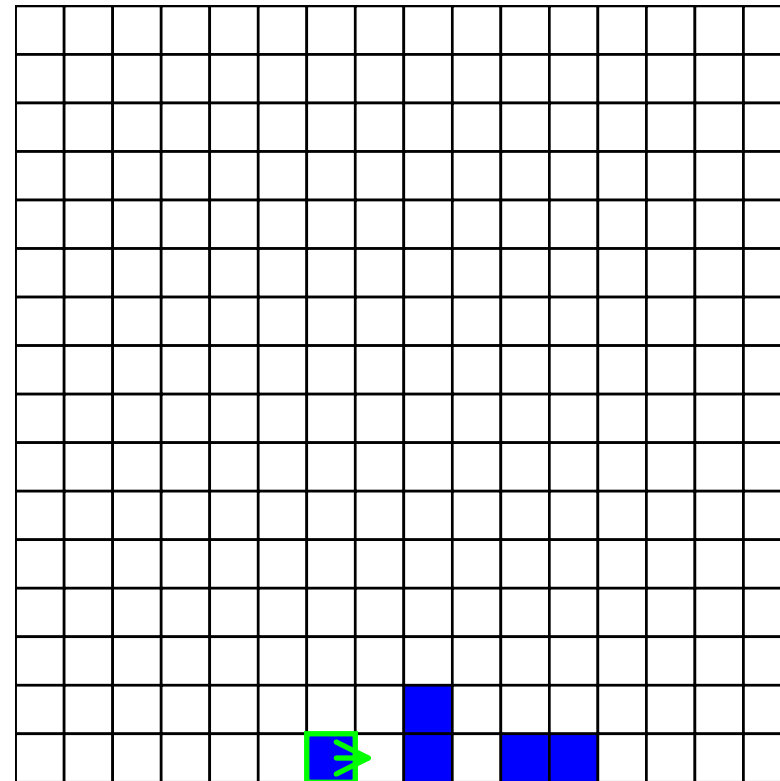
INITIAL STATE: (MOVE 1)

Perform: move_right at position: (14, 10):



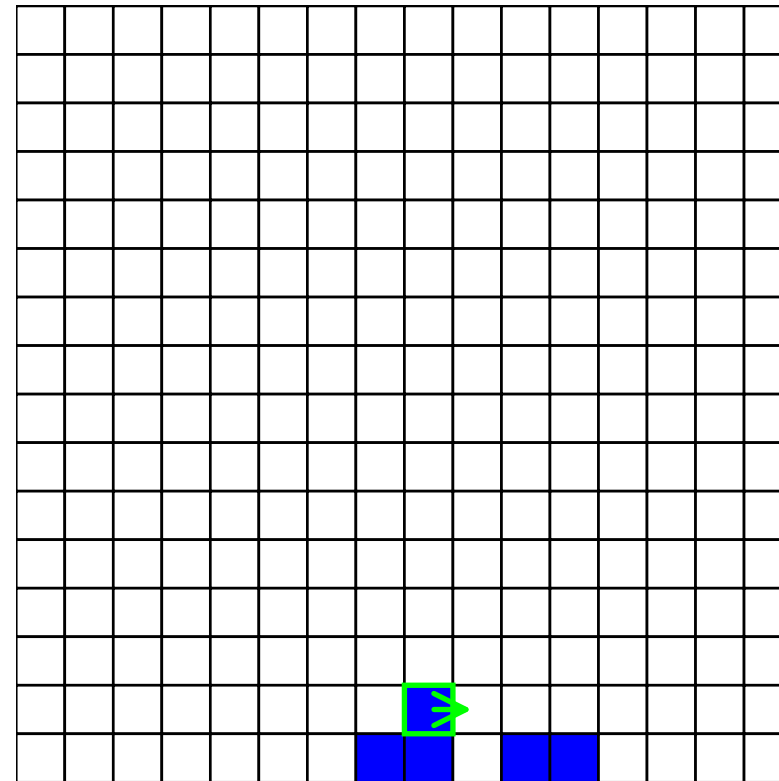
(MOVE 2)

Perform: move_right at position: (15, 6):

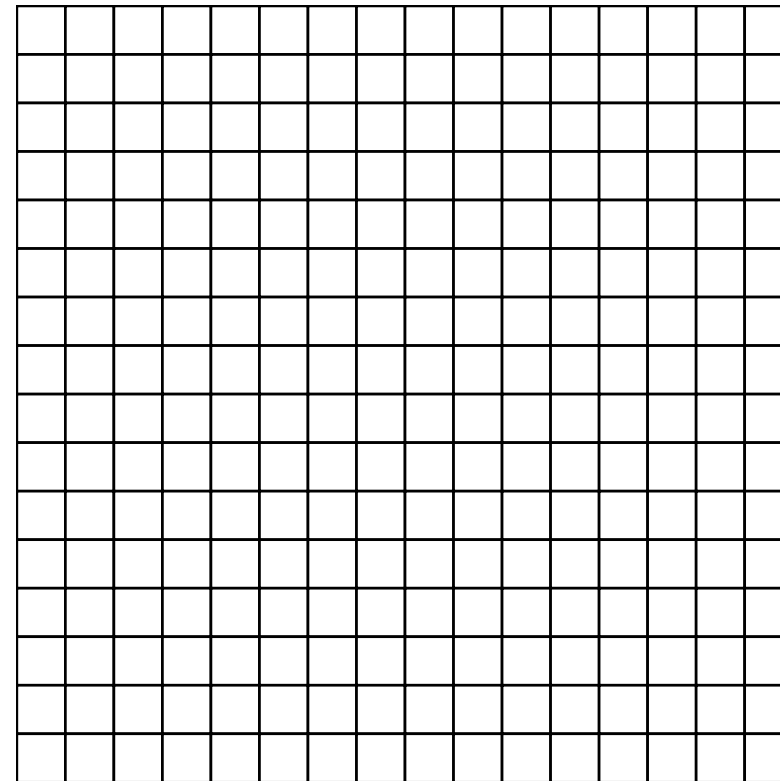


(MOVE 3)

Perform: move_right at position: (14, 8):

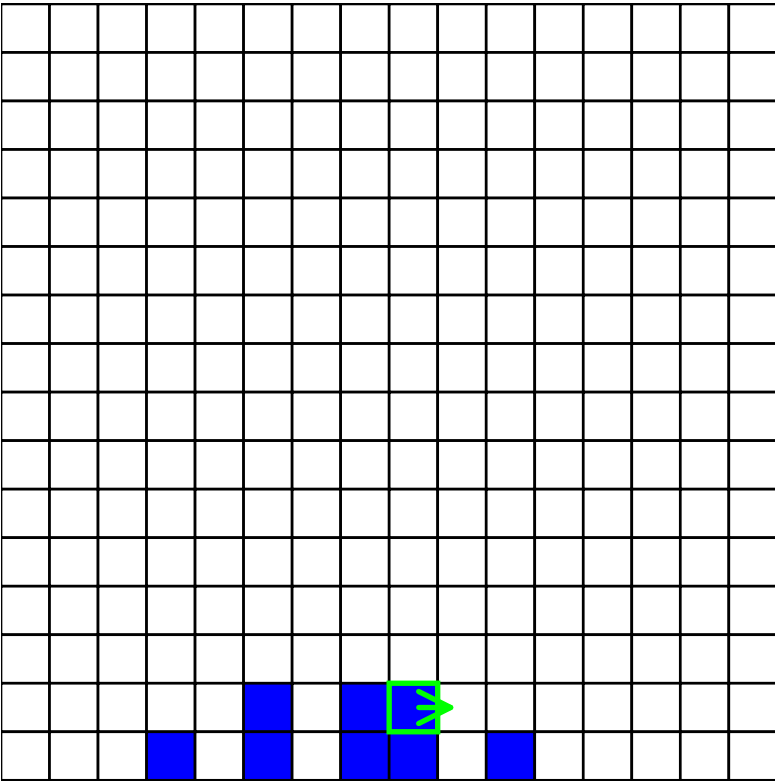


FINAL STATE

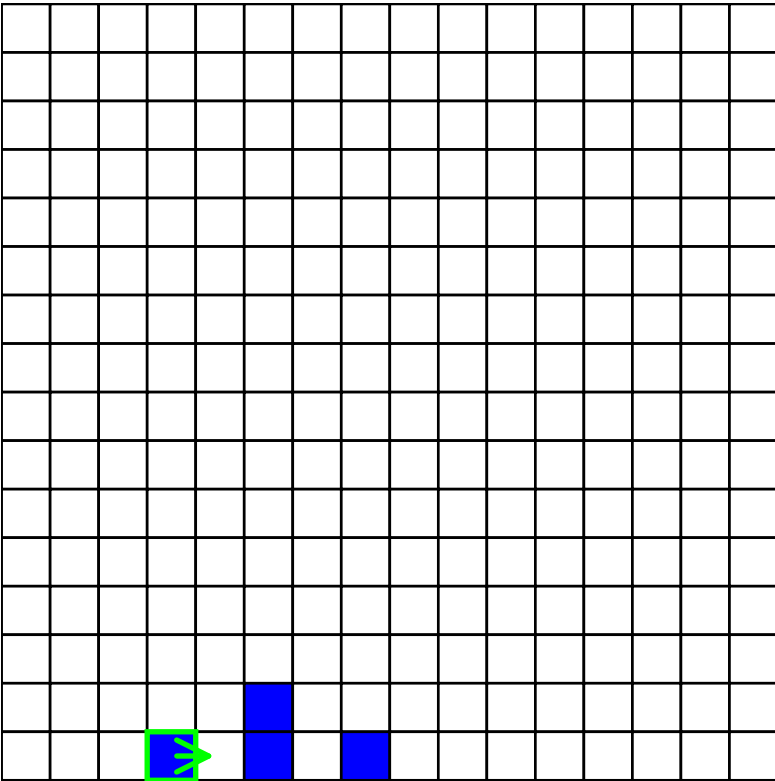


...:SOLUTION::...: Solvable in 3 moves (blocks positions: {(14, 5): <Color: blue>, (14, 7): <Color: blue>, (14, 8): <Color: blue>, (15, 3): <Color: blue>, (15, 5): <Color: blue>, (15, 7): <Color: blue>, (15, 8): <Color: blue>, (15, 10): <Color: blue>})

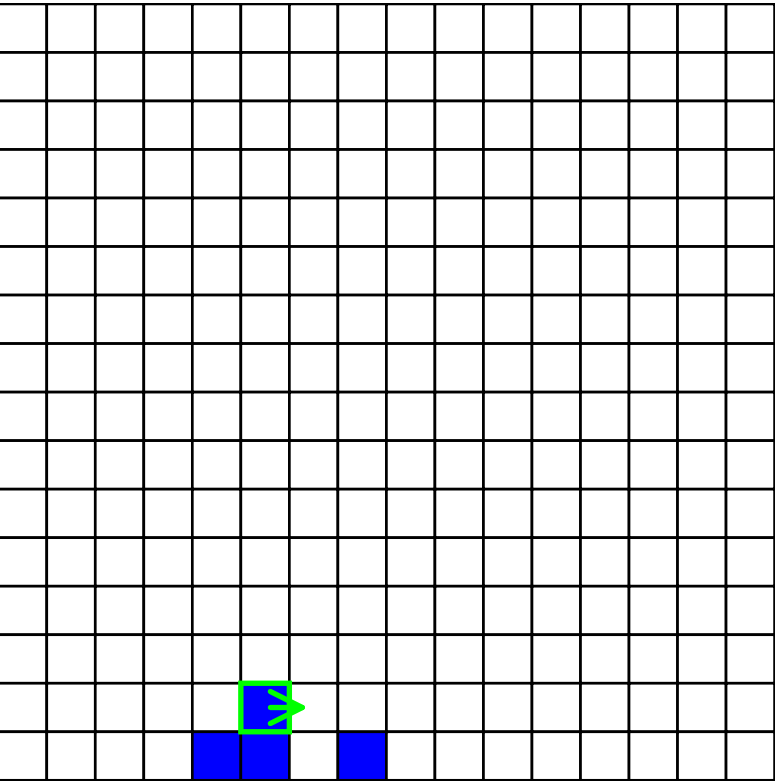
INITIAL STATE: (MOVE 1)
Perform: move_right at position: (14, 8):



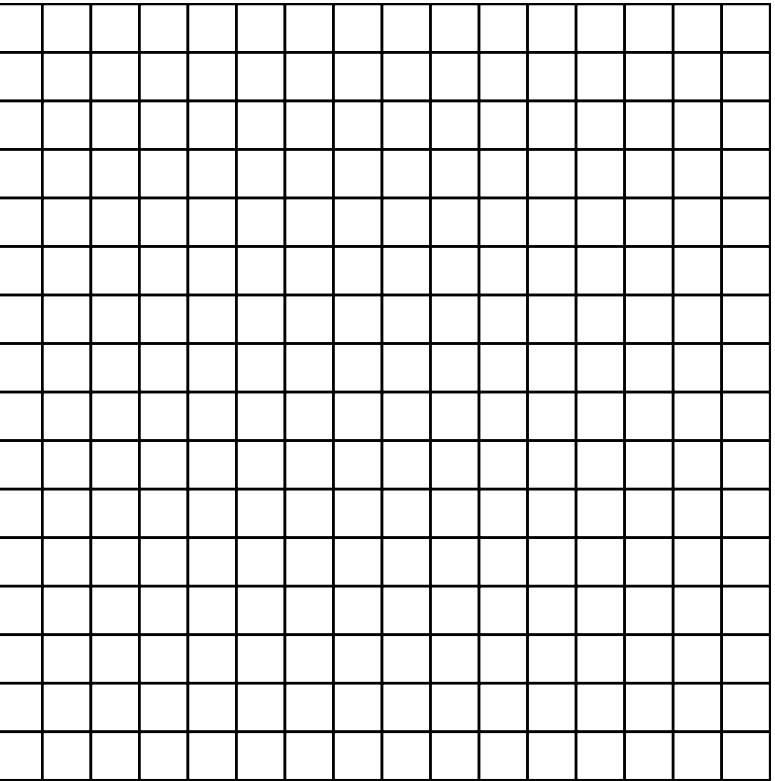
(MOVE 2)
Perform: move_right at position: (15, 3):



(MOVE 3)
Perform: move_right at position: (14, 5):

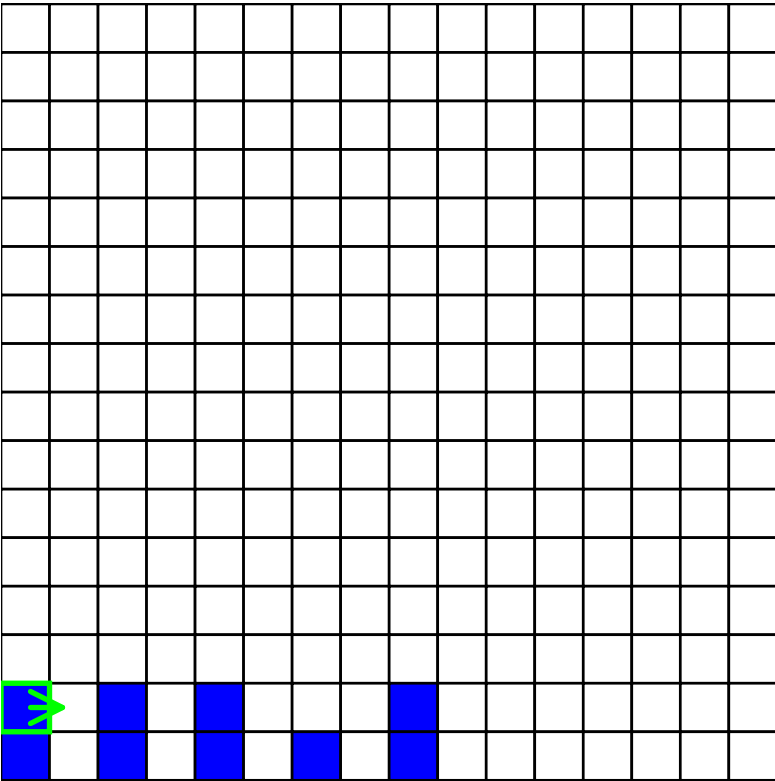


FINAL STATE

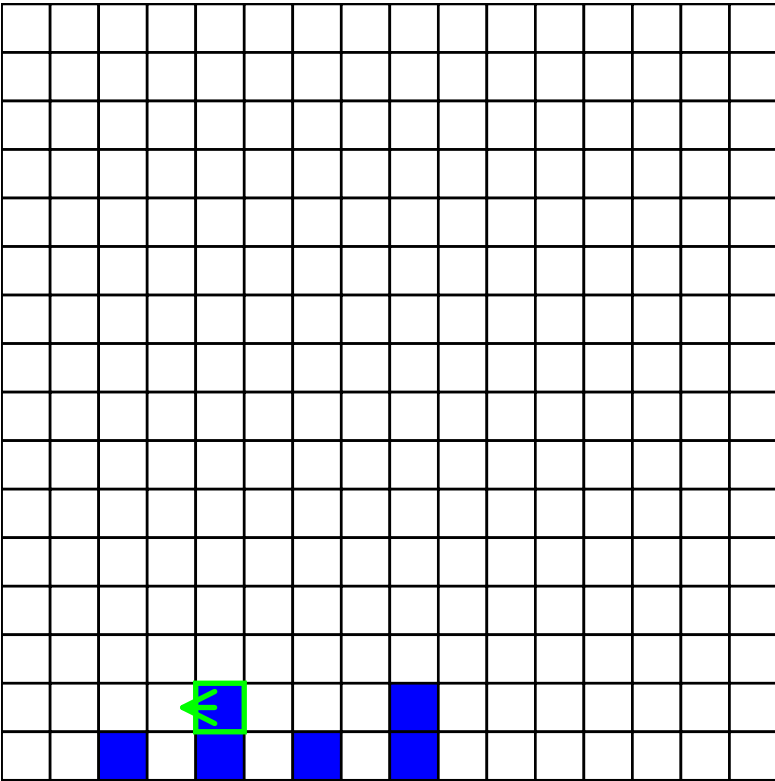


...:SOLUTION::...: Solvable in 3 moves (blocks positions: {(14, 0): <Color: blue>, (14, 2): <Color: blue>, (14, 4): <Color: blue>, (14, 8): <Color: blue>, (15, 0): <Color: blue>, (15, 2): <Color: blue>, (15, 4): <Color: blue>, (15, 6): <Color: blue>, (15, 8):

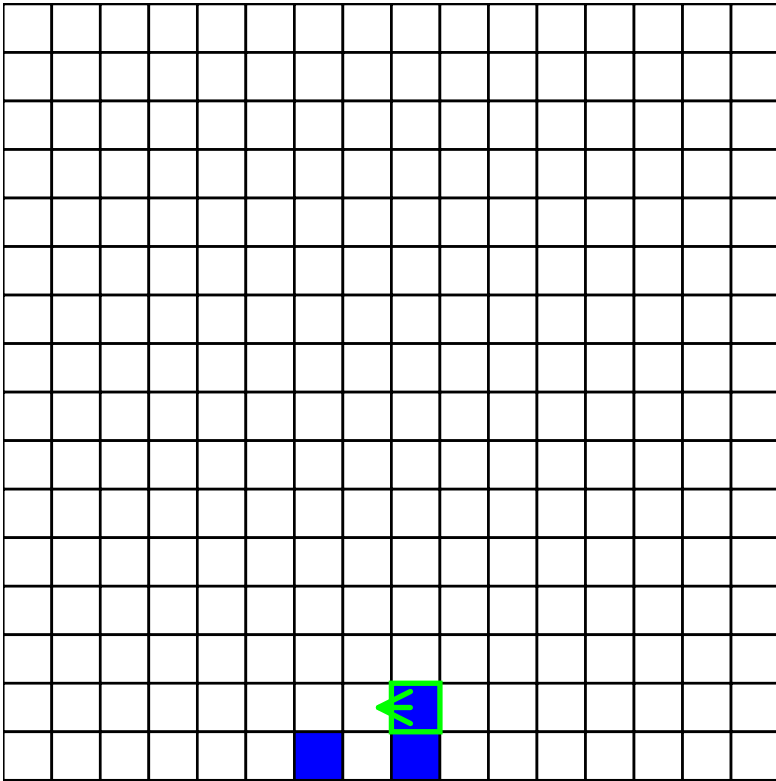
INITIAL STATE: (MOVE 1)
Perform: move_right at position: (14, 0):



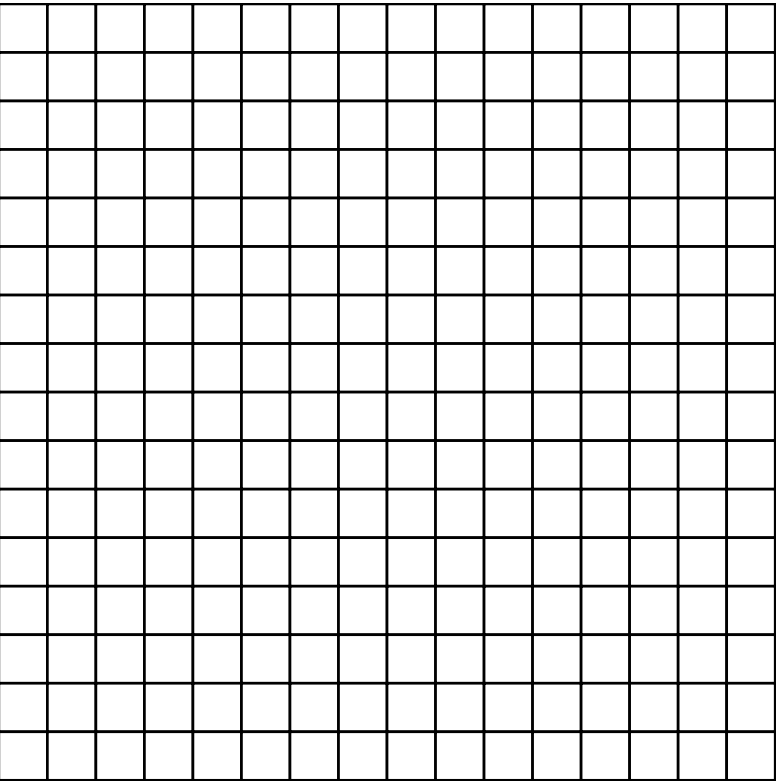
(MOVE 2)
Perform: move_left at position: (14, 4):



(MOVE 3)
Perform: move_left at position: (14, 8):



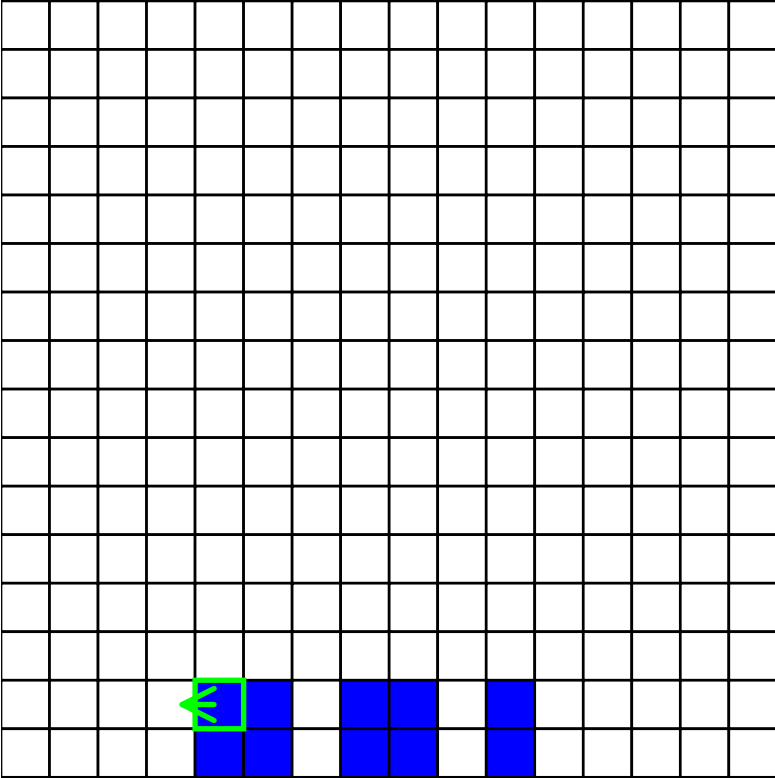
FINAL STATE



...:SOLUTION::...: Solvable in 3 moves (blocks positions: {(14, 4): <Color: blue>, (14, 5): <Color: blue>, (14, 7): <Color: blue>, (14, 8): <Color: blue>, (14, 10): <Color: blue>, (15, 4): <Color: blue>, (15, 5): <Color: blue>, (15, 7): <Color: blue>, (15, 8): <Color: blue>})

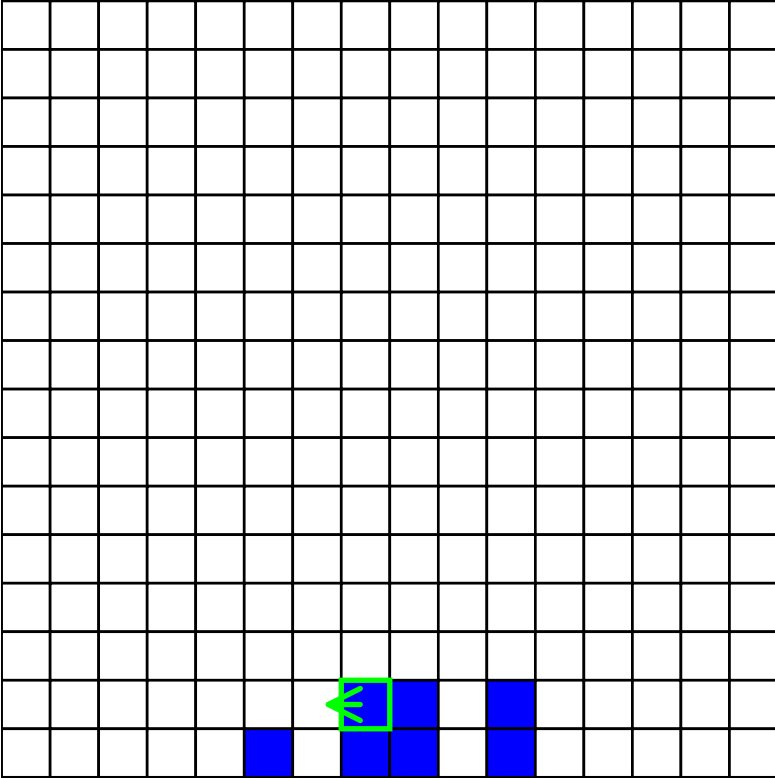
INITIAL STATE: (MOVE 1)

Perform: move_left at position: (14, 4):



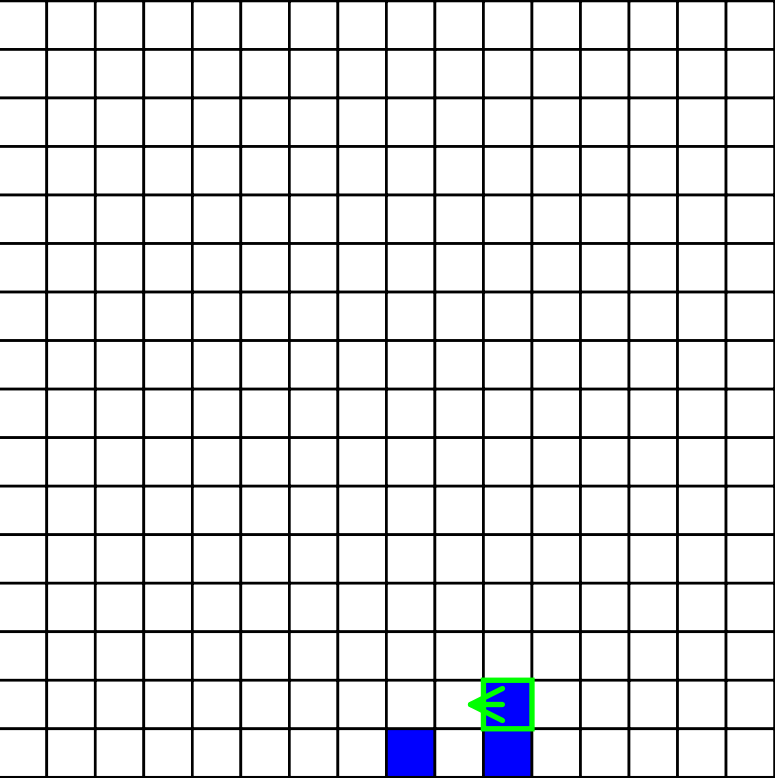
(MOVE 2)

Perform: move_left at position: (14, 7):

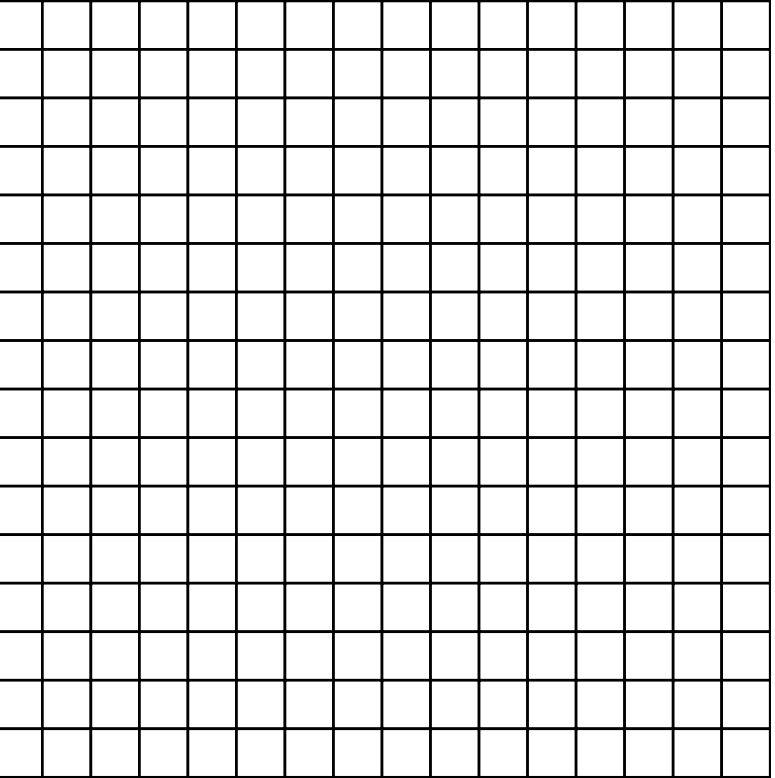


(MOVE 3)

Perform: move_left at position: (14, 10):



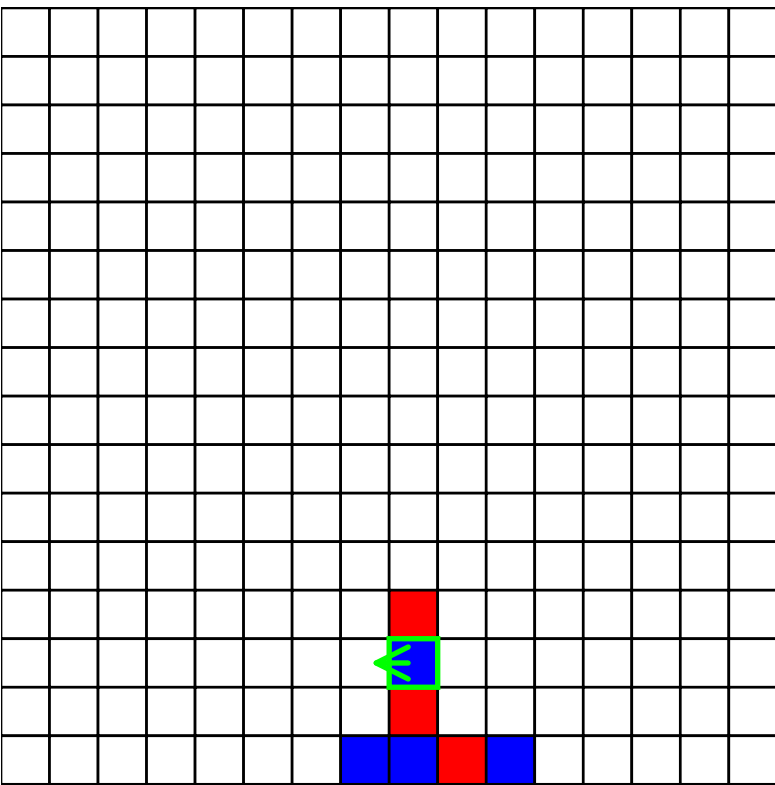
FINAL STATE



...:SOLUTION::...: Solvable in 3 moves (blocks positions: {(12, 8): <Color: red>, (13, 8): <Color: blue>, (14, 8): <Color: red>, (15, 7): <Color: blue>, (15, 8): <Color: blue>, (15, 9): <Color: red>, (15, 10): <Color: blue>})

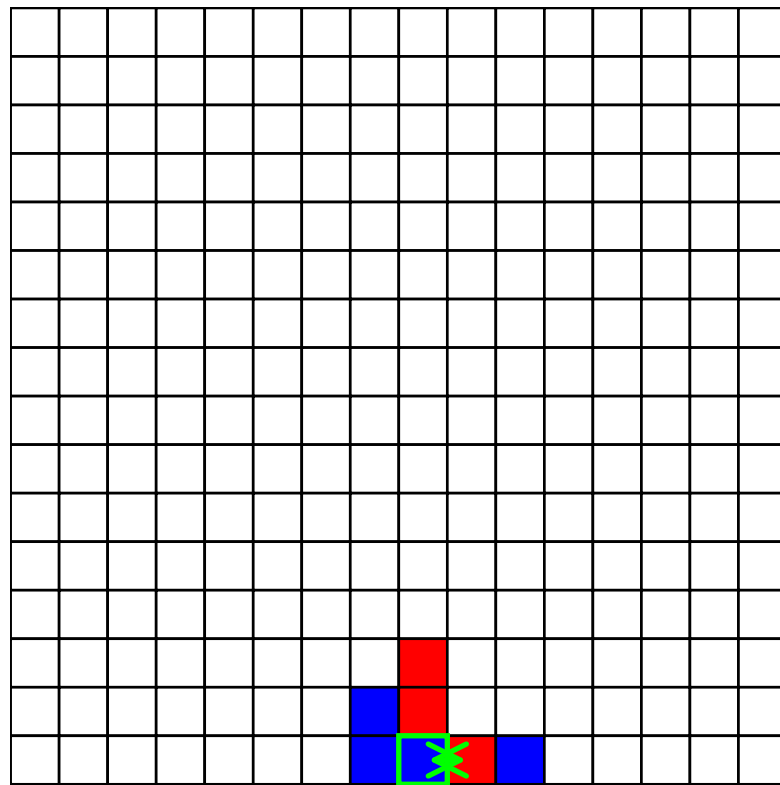
INITIAL STATE: (MOVE 1)

Perform: move_left at position: (13, 8):



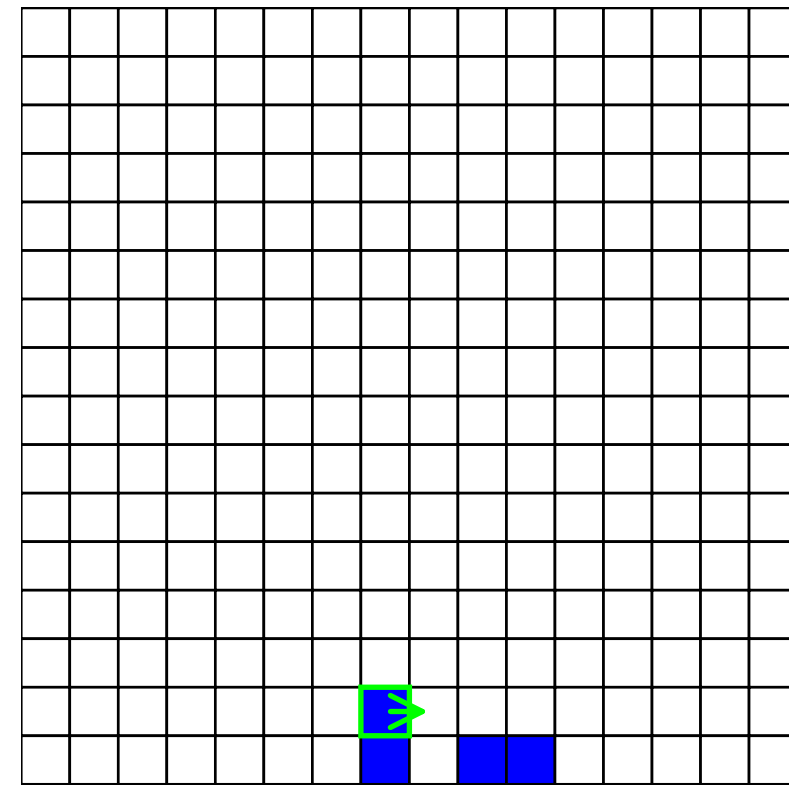
(MOVE 2)

Perform: exchange_right at position: (15, 8):

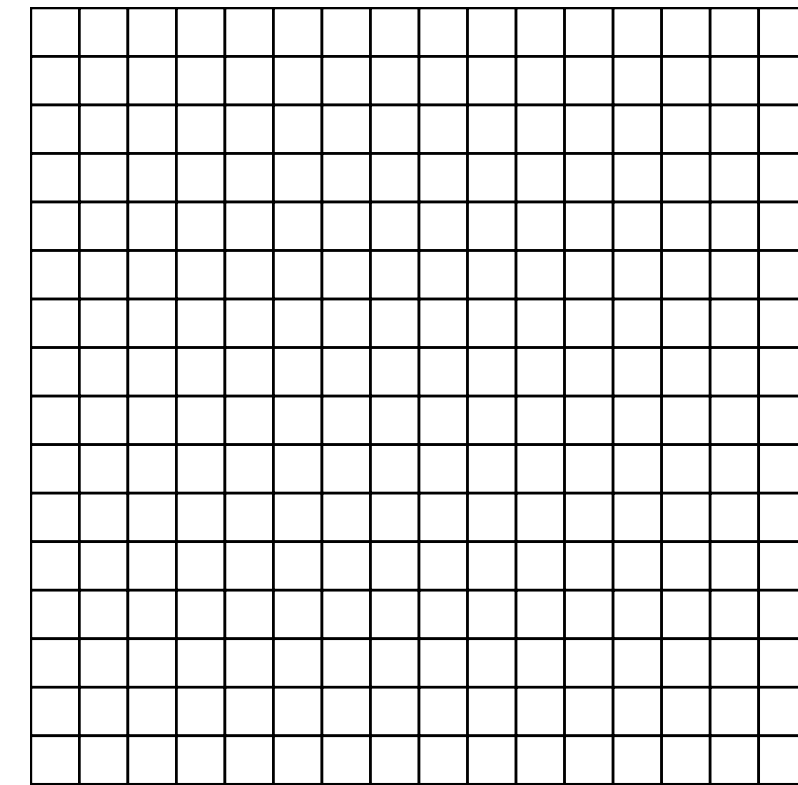


(MOVE 3)

Perform: move_right at position: (14, 7):



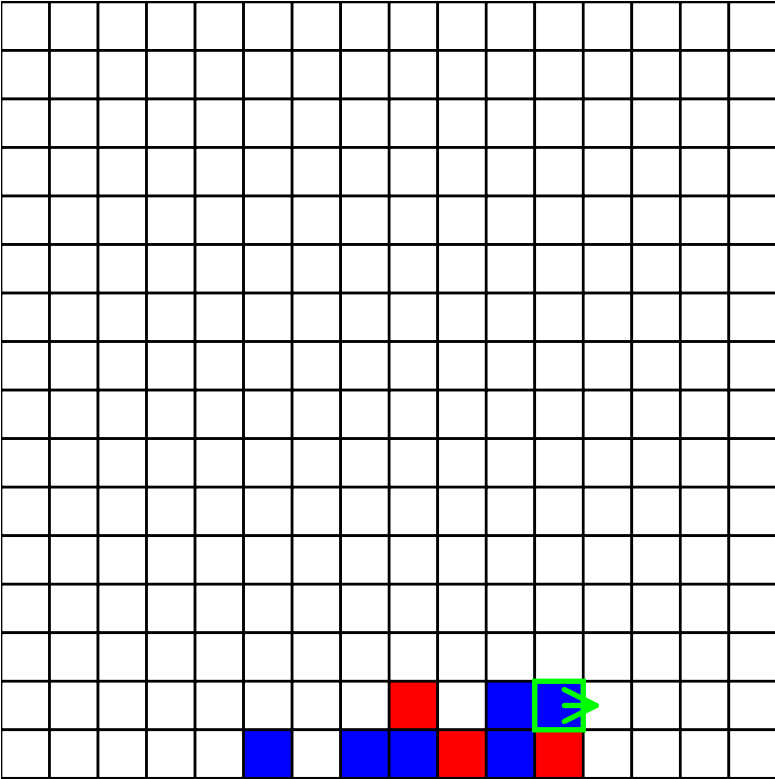
FINAL STATE



...:SOLUTION::...: Solvable in 3 moves (blocks positions: {(14, 8): <Color: red>, (14, 10): <Color: blue>, (14, 11): <Color: blue>, (15, 5): <Color: blue>, (15, 7): <Color: blue>, (15, 8): <Color: blue>, (15, 9): <Color: red>, (15, 10): <Color: blue>, (15, 11): <Color: red>})

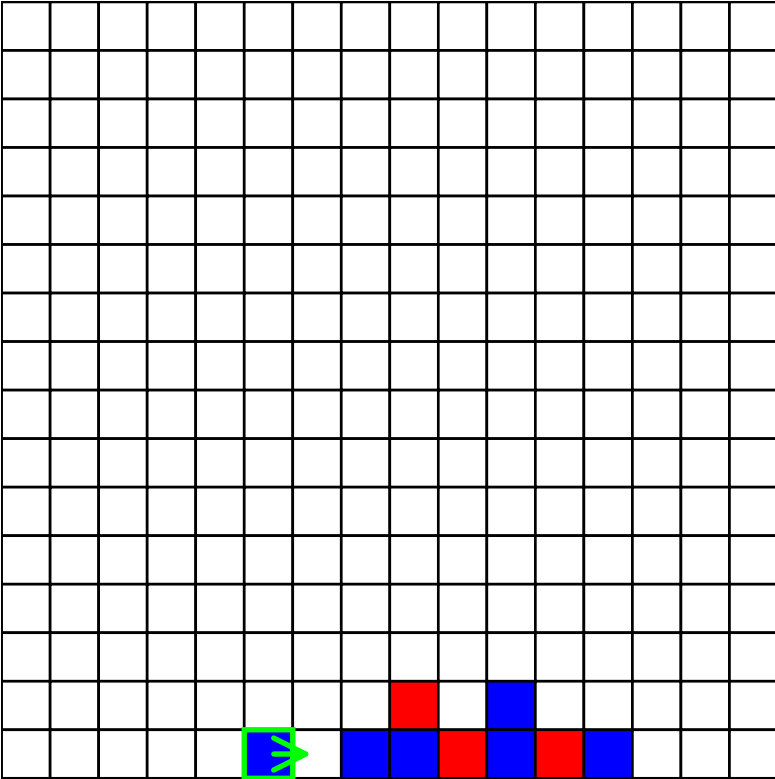
INITIAL STATE: (MOVE 1)

Perform: move_right at position: (14, 11):



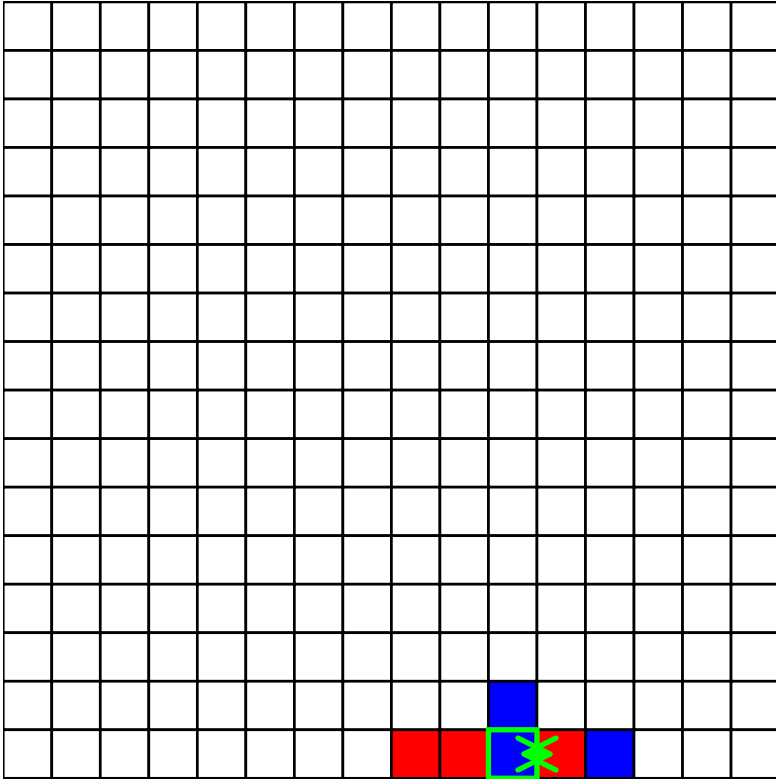
(MOVE 2)

Perform: move_right at position: (15, 5):

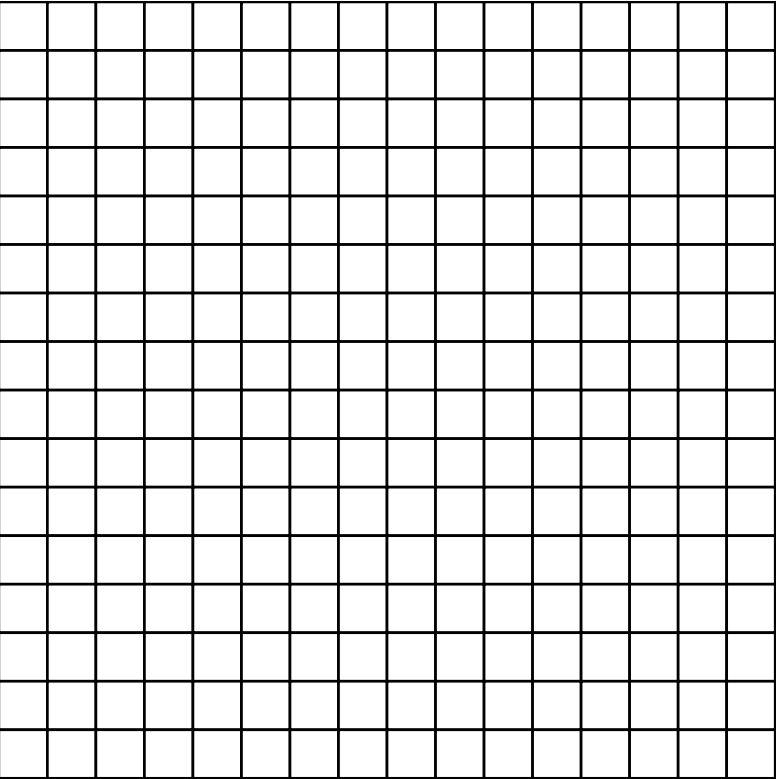


(MOVE 3)

Perform: exchange_right at position: (15, 10):



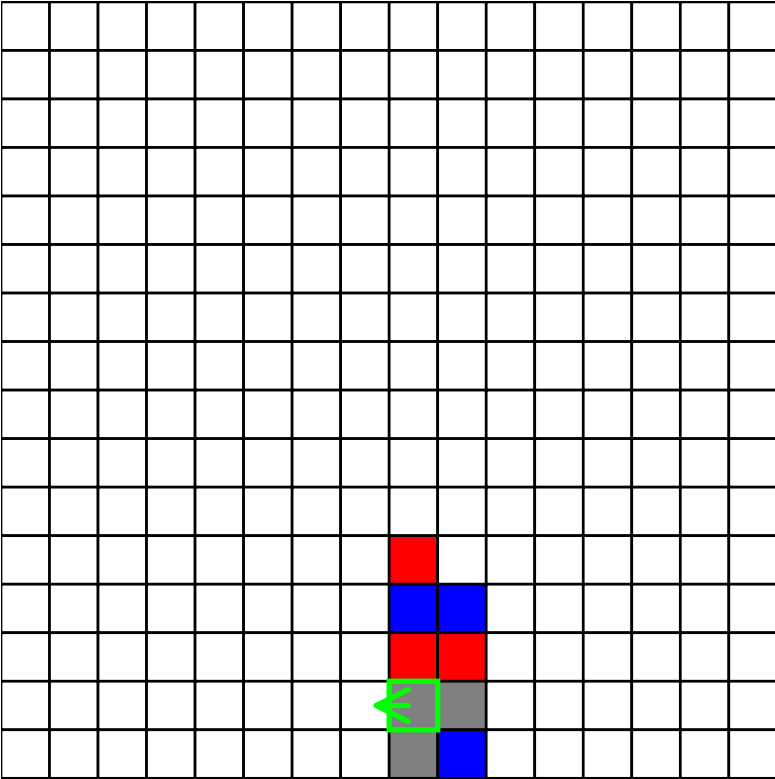
FINAL STATE



...:SOLUTION::...: Solvable in 3 moves (blocks positions: {(11, 8): <Color: red>, (12, 8): <Color: blue>, (12, 9): <Color: blue>, (13, 8): <Color: red>, (13, 9): <Color: red>, (14, 8): <Color: gray>, (14, 9): <Color: gray>, (15, 8): <Color: gray>, (15, 9): <Color: gray>})

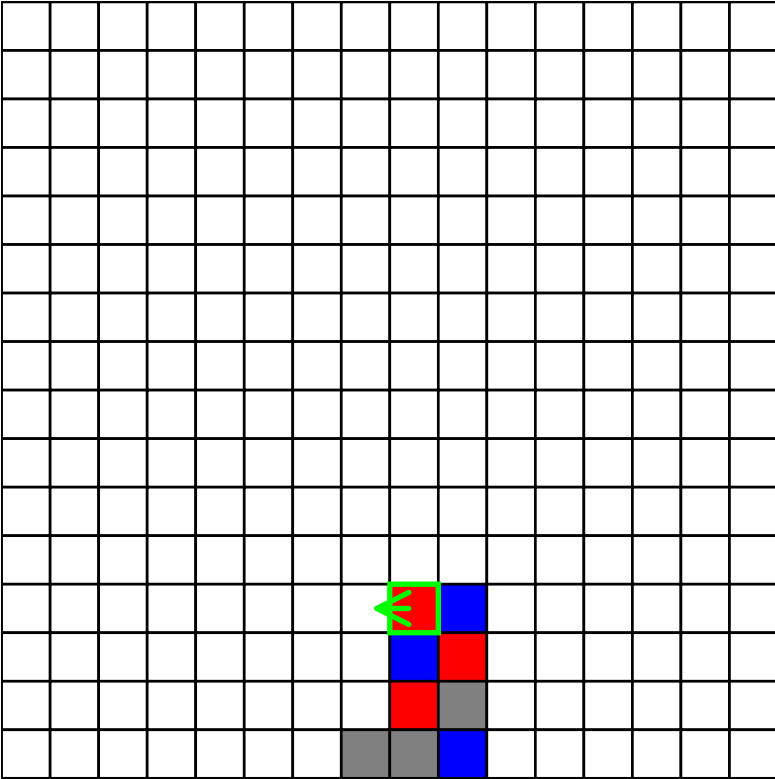
INITIAL STATE: (MOVE 1)

Perform: move_left at position: (14, 8):



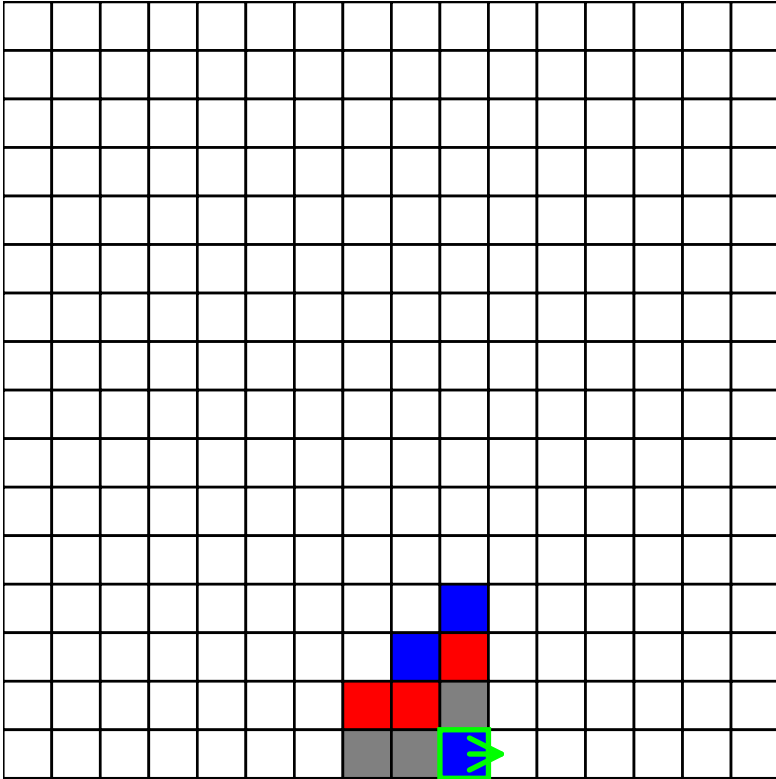
(MOVE 2)

Perform: move_left at position: (12, 8):

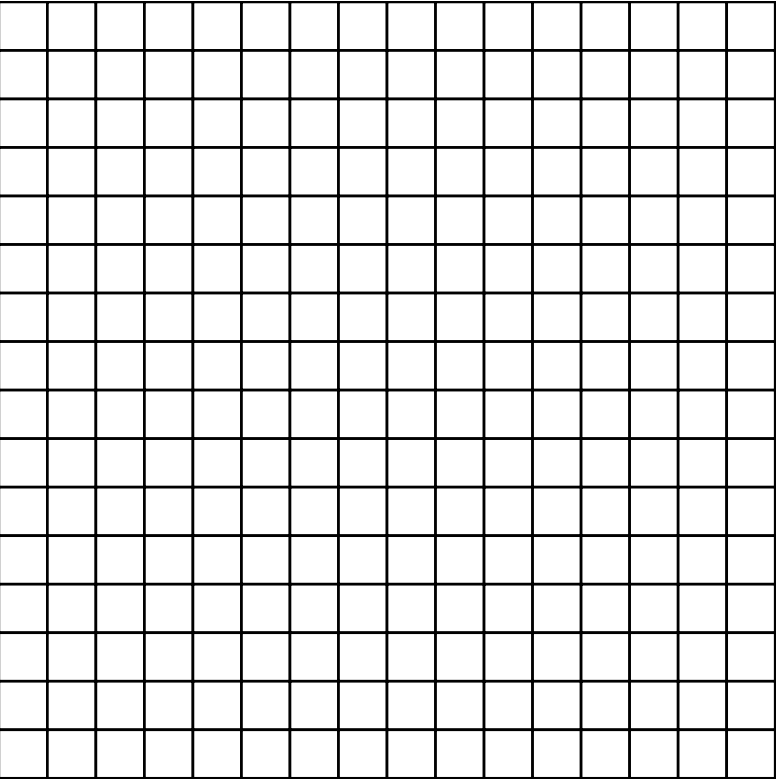


(MOVE 3)

Perform: move_right at position: (15, 9):

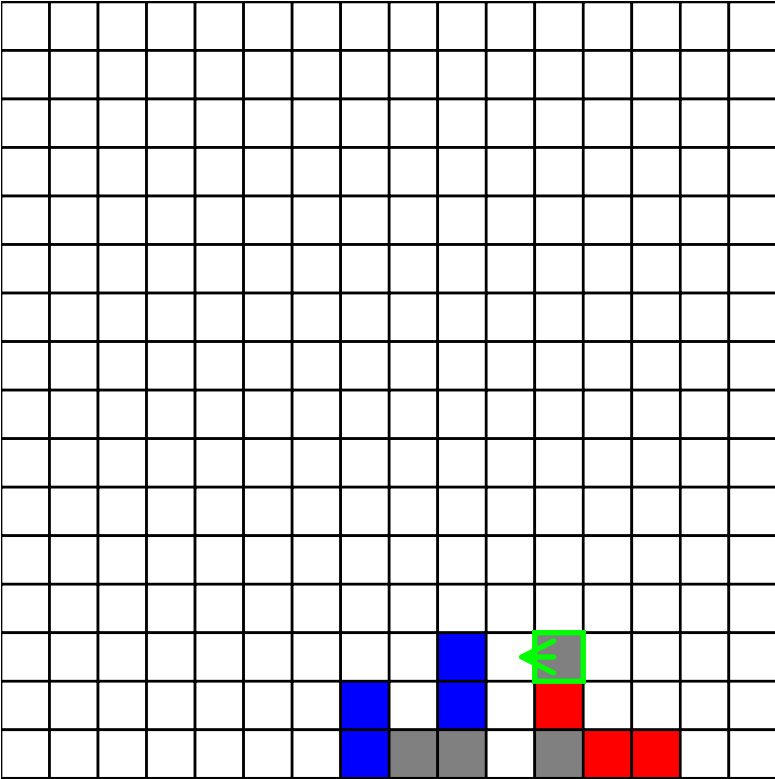


FINAL STATE

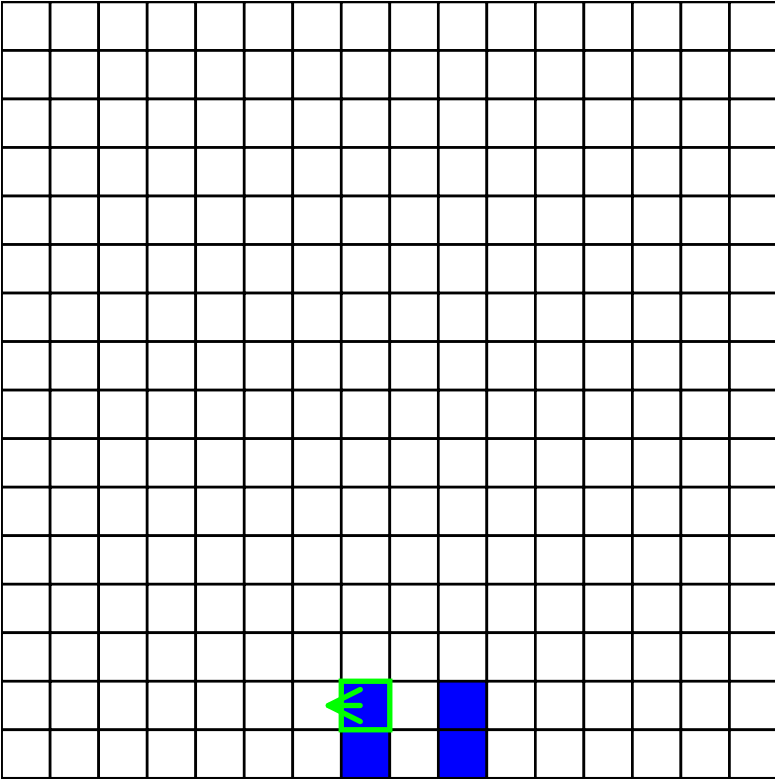


...:SOLUTION::...: Solvable in 3 moves (blocks positions: {(13, 9): <Color: blue>, (13, 11): <Color: gray>, (14, 7): <Color: blue>, (14, 9): <Color: blue>, (14, 11): <Color: red>, (15, 7): <Color: blue>, (15, 8): <Color: gray>, (15, 9): <Color: gray>, (15, 11): <Color: red>, (16, 7): <Color: blue>, (16, 9): <Color: gray>, (16, 11): <Color: red>})

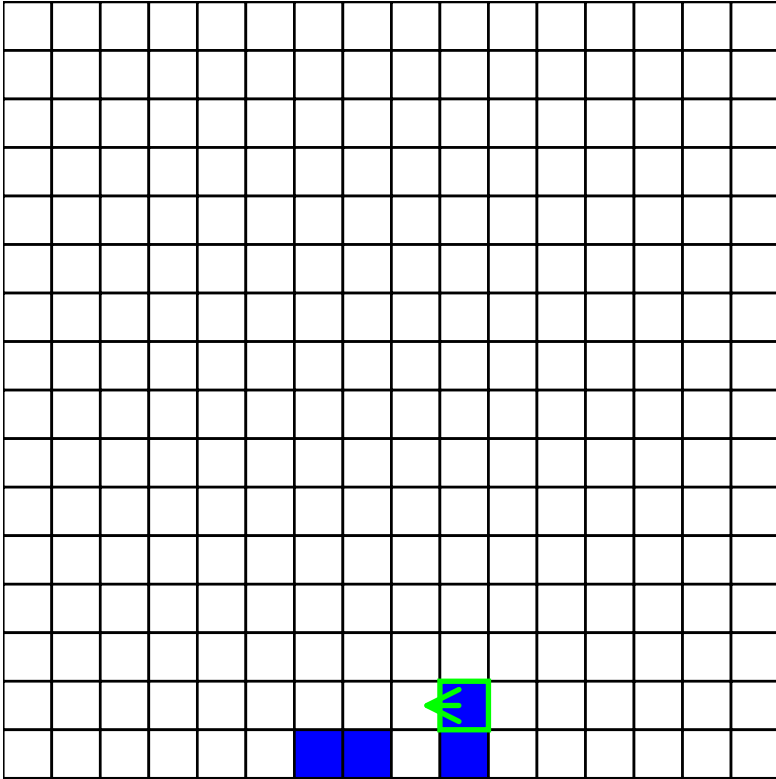
INITIAL STATE: (MOVE 1)
Perform: move_left at position: (13, 11):



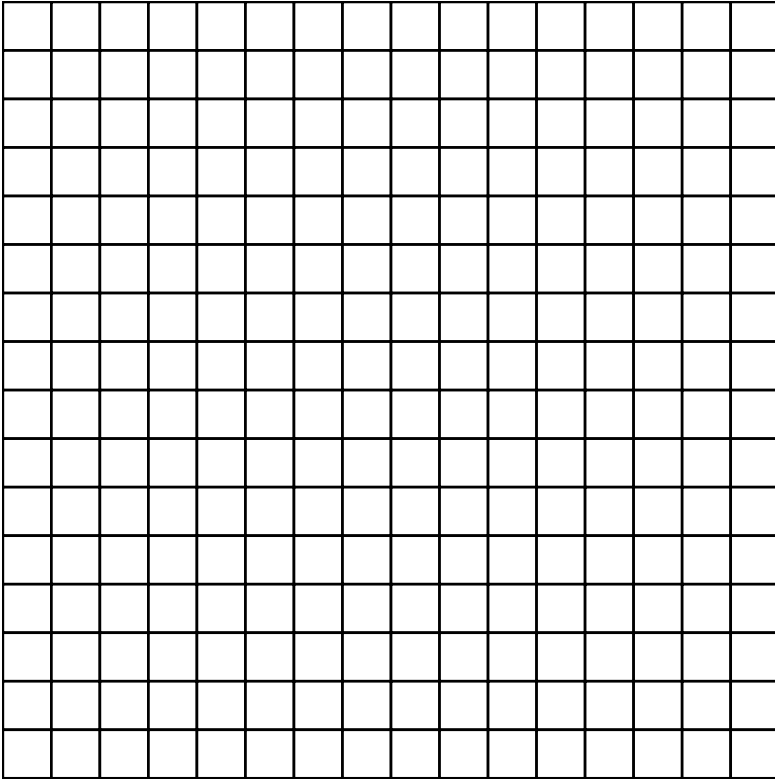
(MOVE 2)
Perform: move_left at position: (14, 7):



(MOVE 3)
Perform: move_left at position: (14, 9):



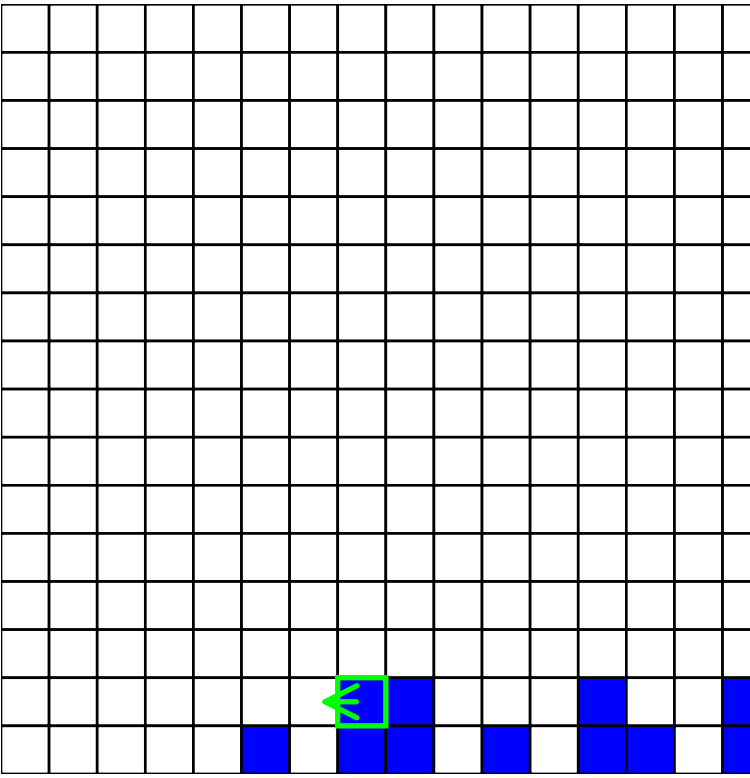
FINAL STATE



...:SOLUTION:...: Solvable in 4 moves (blocks positions: {(14, 7): <Color: blue>, (14, 8): <Color: blue>, (14, 12): <Color: blue>, (14, 15): <Color: blue>, (15, 5): <Color: blue>, (15, 7): <Color: blue>, (15, 8): <Color: blue>, (15, 10): <Color: blue>, (15, 12): <Color: blue>, (15, 13): <Color: blue>, (15, 15): <Color: blue>})

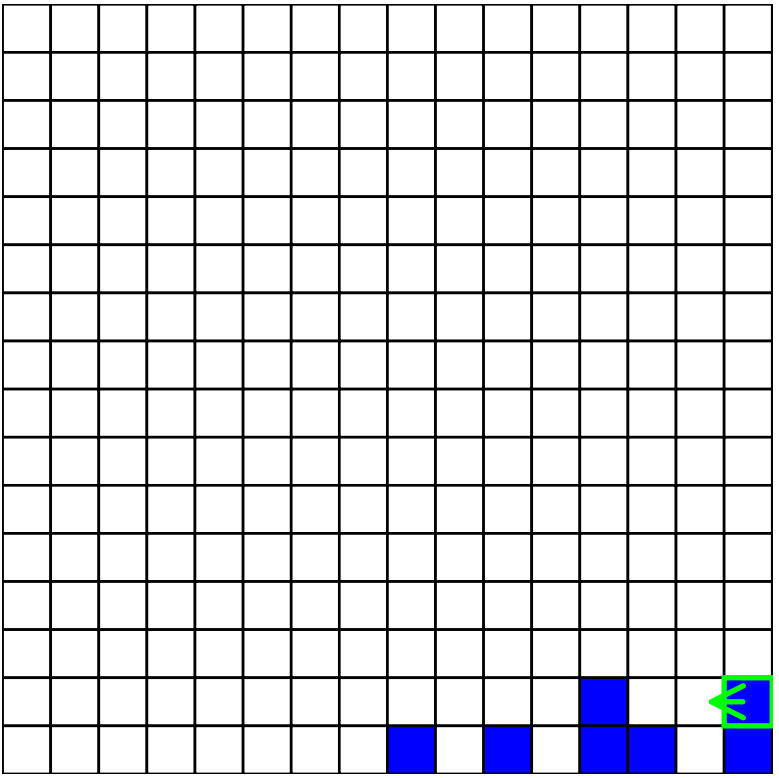
INITIAL STATE: (MOVE 1)

Perform: move_left at position: (14, 7):



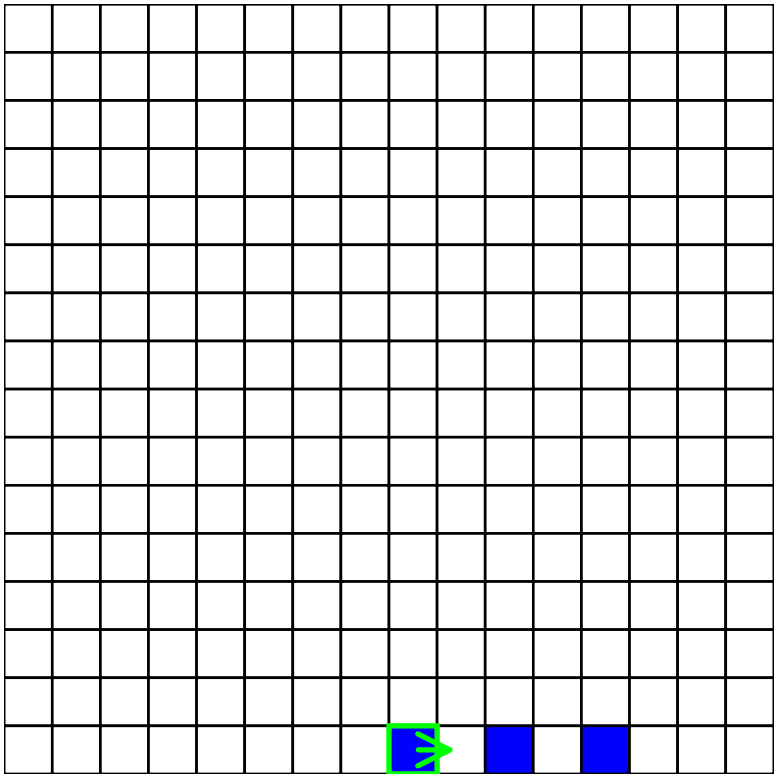
(MOVE 2)

Perform: move_left at position: (14, 15):



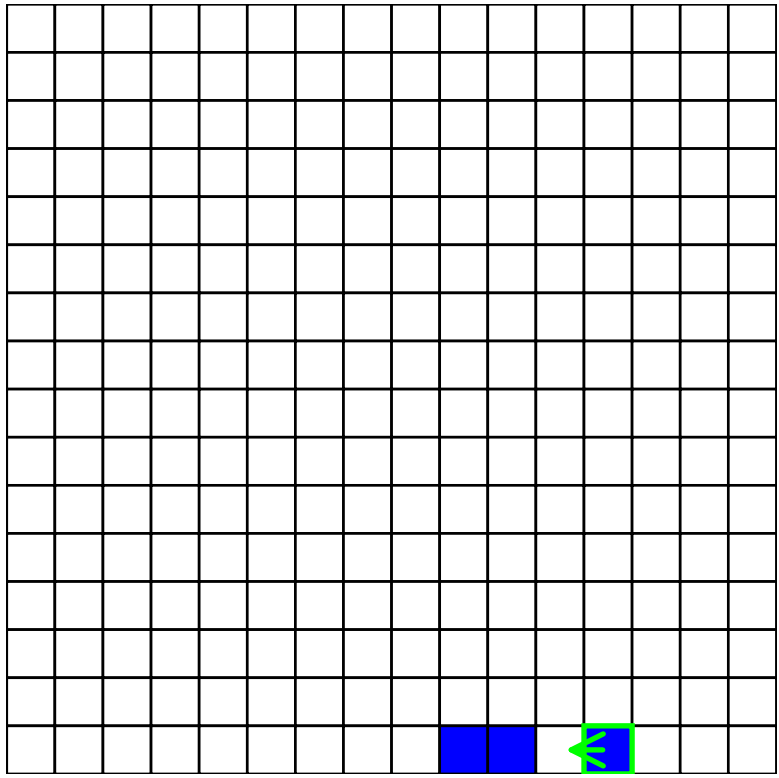
(MOVE 3)

Perform: move_right at position: (15, 8):

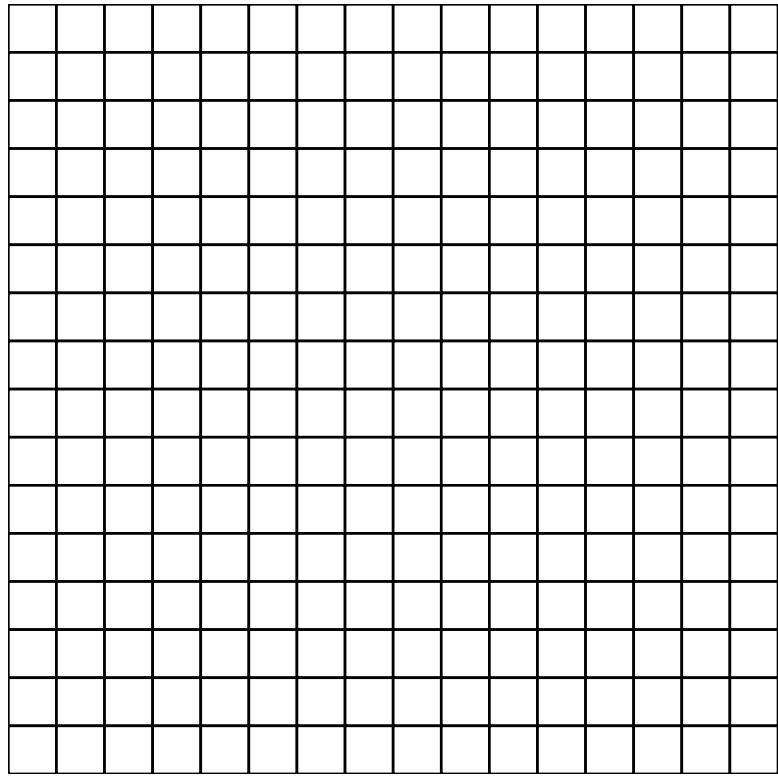


(MOVE 4)

Perform: move_left at position: (15, 12):



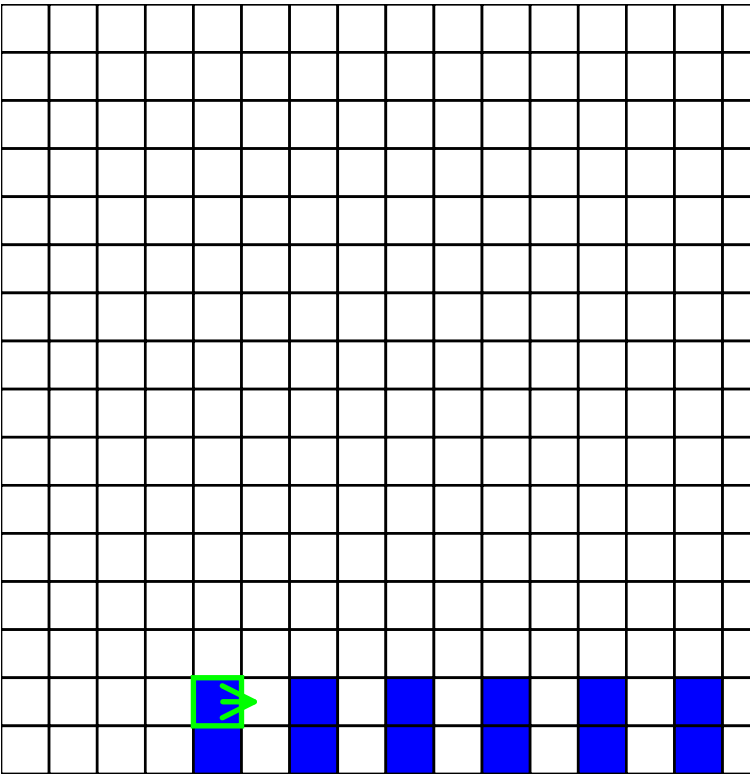
FINAL STATE



...:SOLUTION:...: Solvable in 4 moves (blocks positions: {(14, 4): <Color: blue>, (14, 6): <Color: blue>, (14, 8): <Color: blue>, (14, 10): <Color: blue>, (14, 12): <Color: blue>, (14, 14): <Color: blue>, (15, 4): <Color: blue>, (15, 6): <Color: blue>, (15, 8): <Color: blue>, (15, 10): <Color: blue>, (15, 12): <Color: blue>})

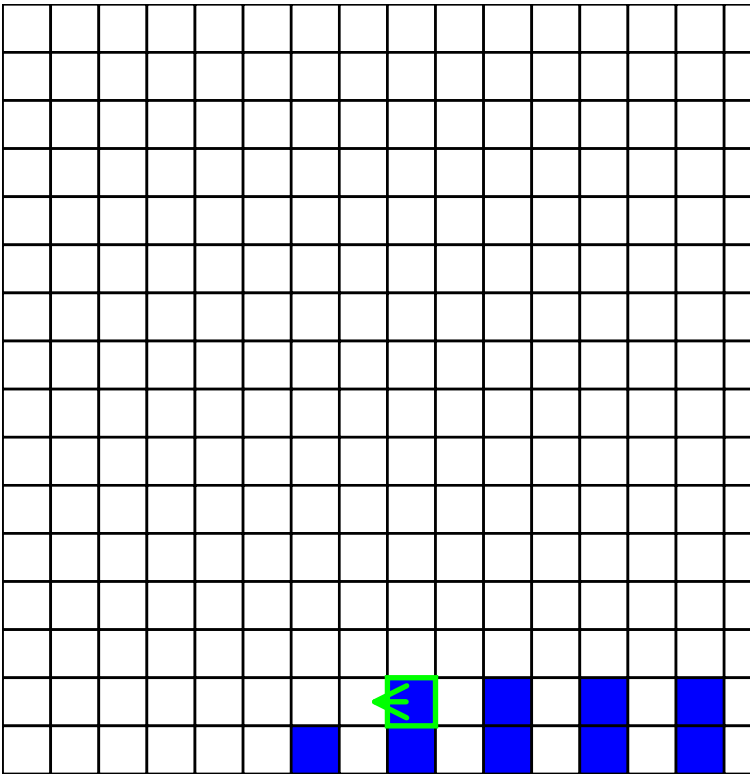
INITIAL STATE: (MOVE 1)

Perform: move_right at position: (14, 4):



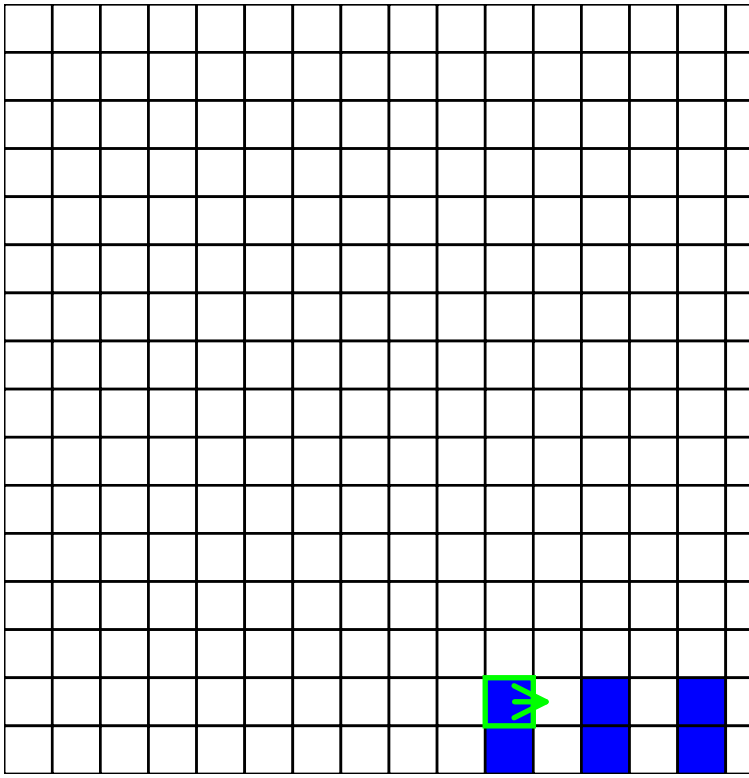
(MOVE 2)

Perform: move_left at position: (14, 8):



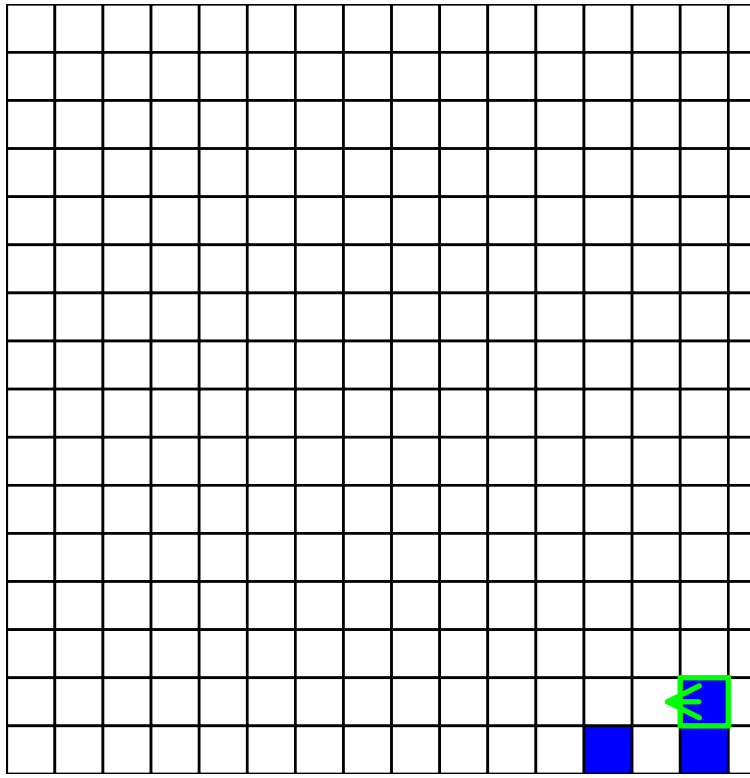
(MOVE 3)

Perform: move_right at position: (14, 10):

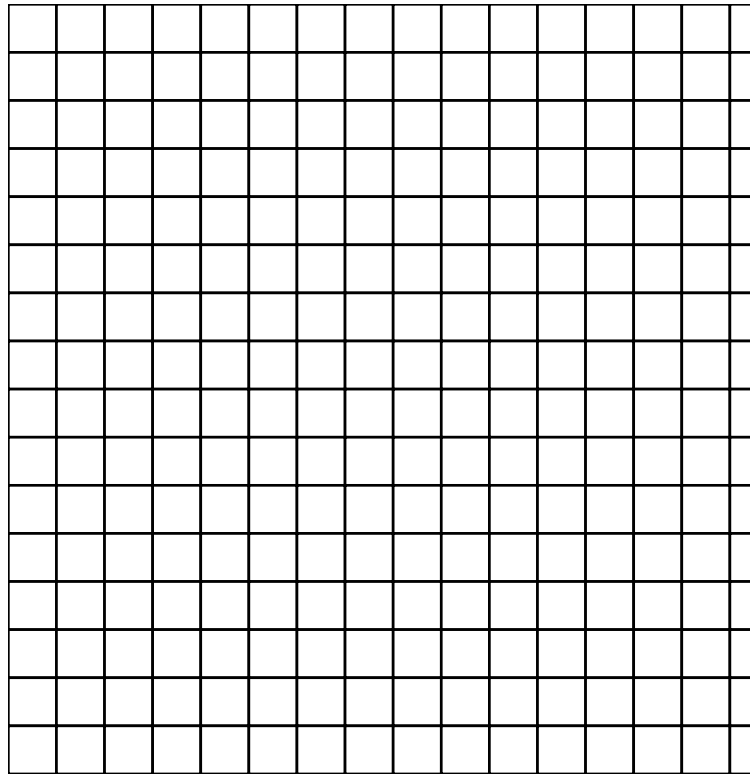


(MOVE 4)

Perform: move_left at position: (14, 14):



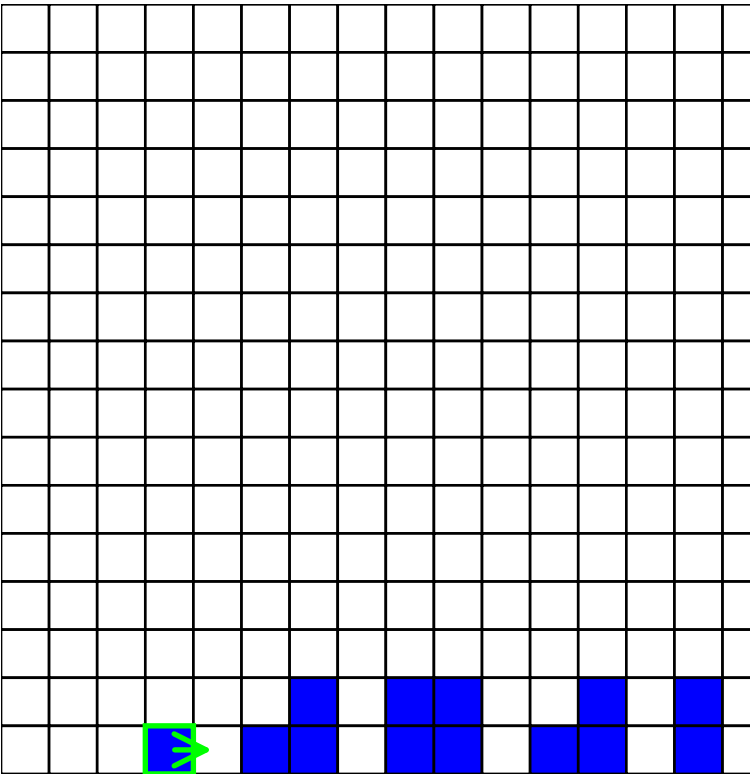
FINAL STATE



...:SOLUTION::...: Solvable in 4 moves (blocks positions: {(14, 6): <Color: blue>, (14, 8): <Color: blue>, (14, 9): <Color: blue>, (14, 12): <Color: blue>, (14, 14): <Color: blue>, (15, 3): <Color: blue>, (15, 5): <Color: blue>, (15, 6): <Color: blue>, (15, 8): <Color: blue>, (15, 9): <Color: blue>, (15, 11): <Color: blue>}

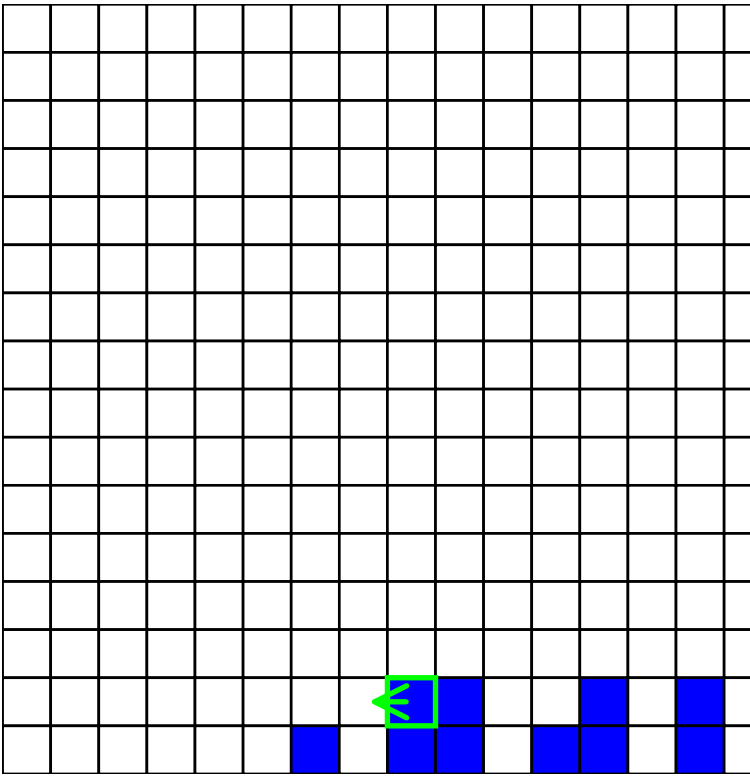
INITIAL STATE: (MOVE 1)

Perform: move_right at position: (15, 3):



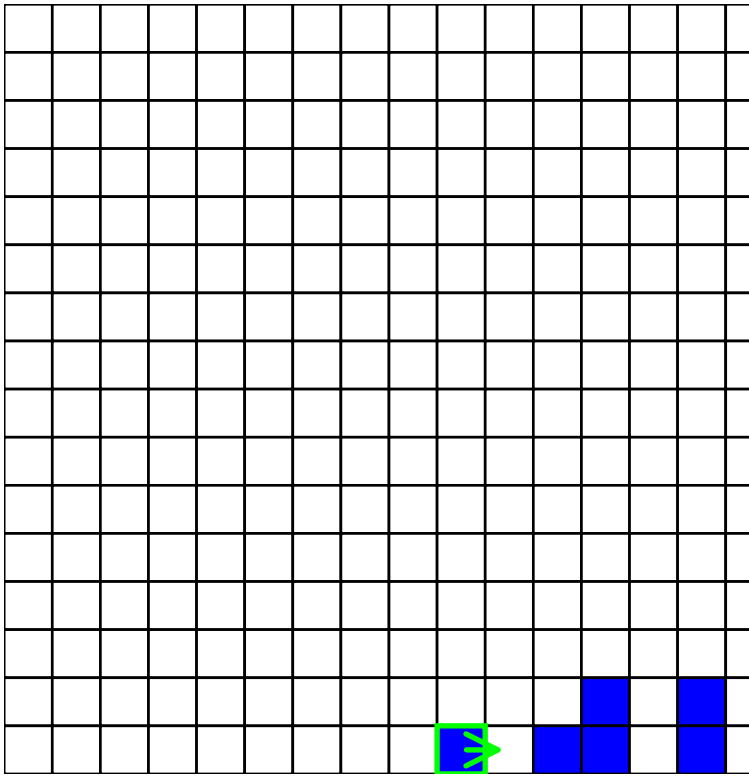
(MOVE 2)

Perform: move_left at position: (14, 8):



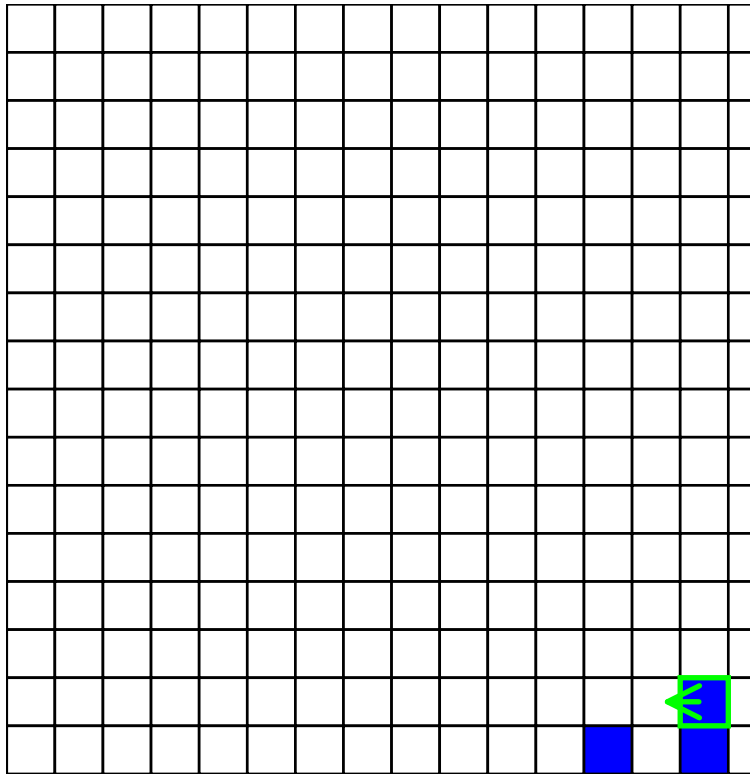
(MOVE 3)

Perform: move_right at position: (15, 9):

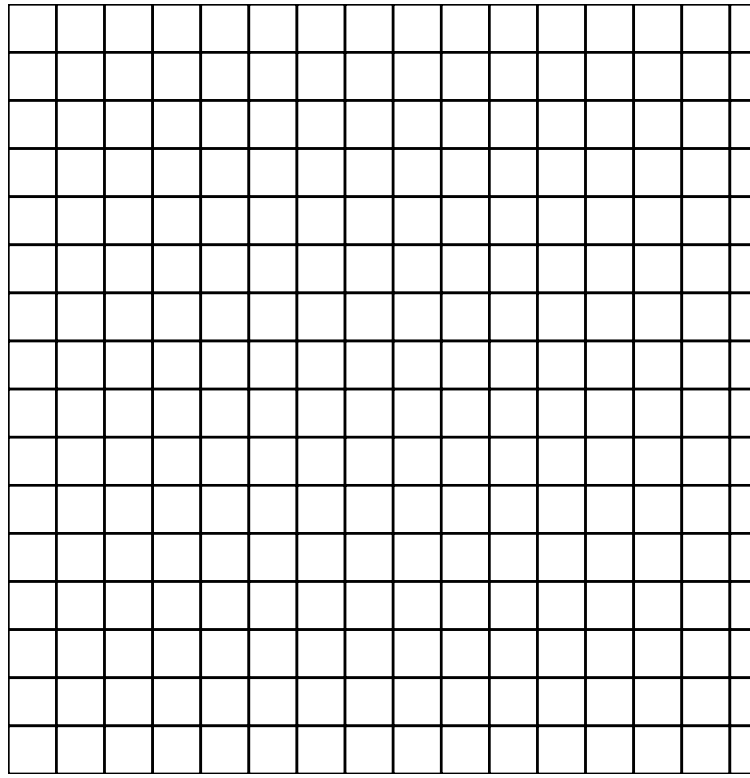


(MOVE 4)

Perform: move_left at position: (14, 14):



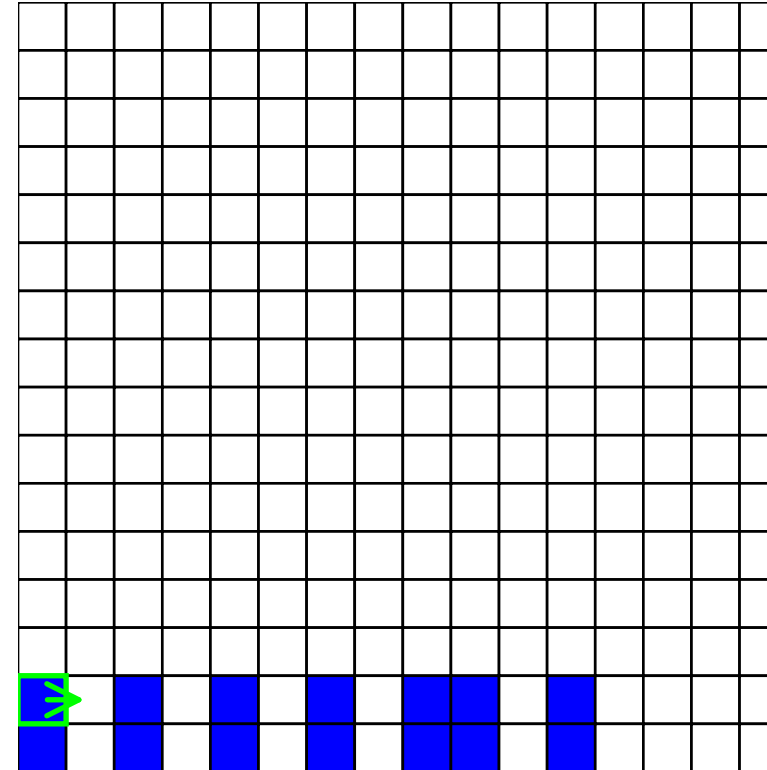
FINAL STATE



...:SOLUTION:...: Solvable in 4 moves (blocks positions: {(14, 0): <Color: blue>, (14, 2): <Color: blue>, (14, 4): <Color: blue>, (14, 6): <Color: blue>, (14, 8): <Color: blue>, (14, 9): <Color: blue>, (14, 11): <Color: blue>, (15, 0): <Color: blue>, (15, 2): <Color: blue>, (15, 4): <Color: blue>, (15, 6): <Color: blue>,

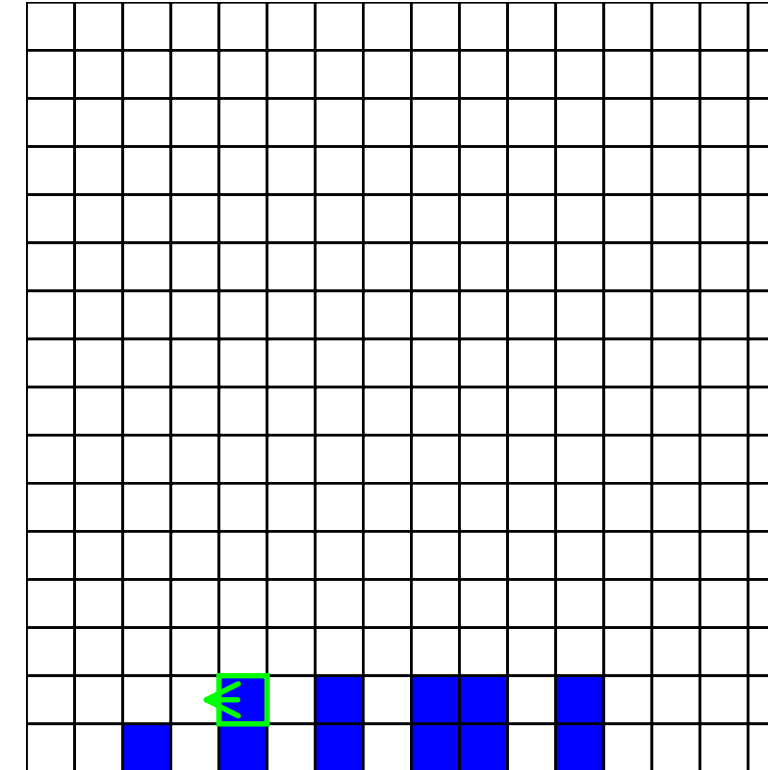
INITIAL STATE: (MOVE 1)

Perform: move_right at position: (14, 0):



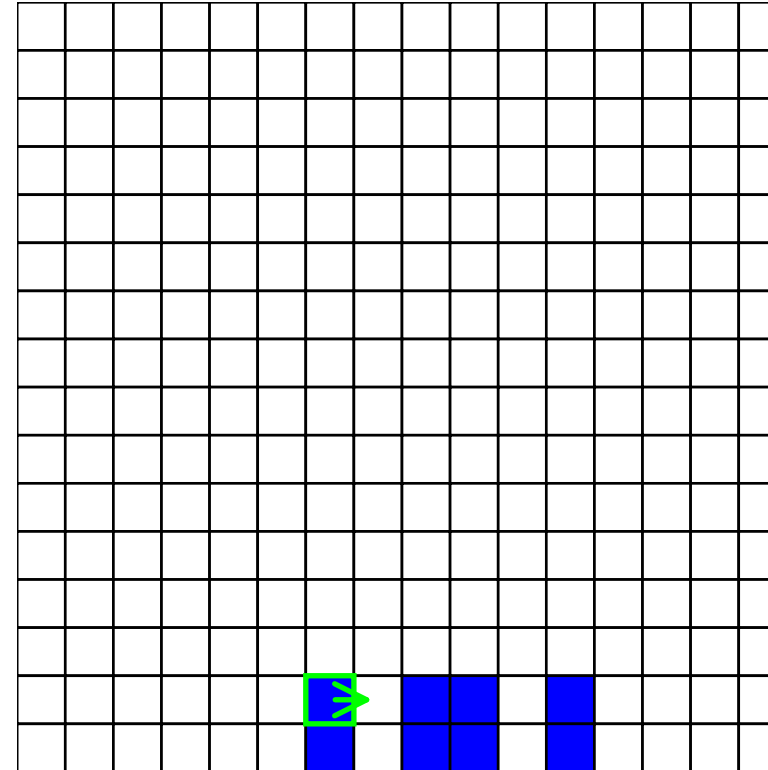
(MOVE 2)

Perform: move_left at position: (14, 4):



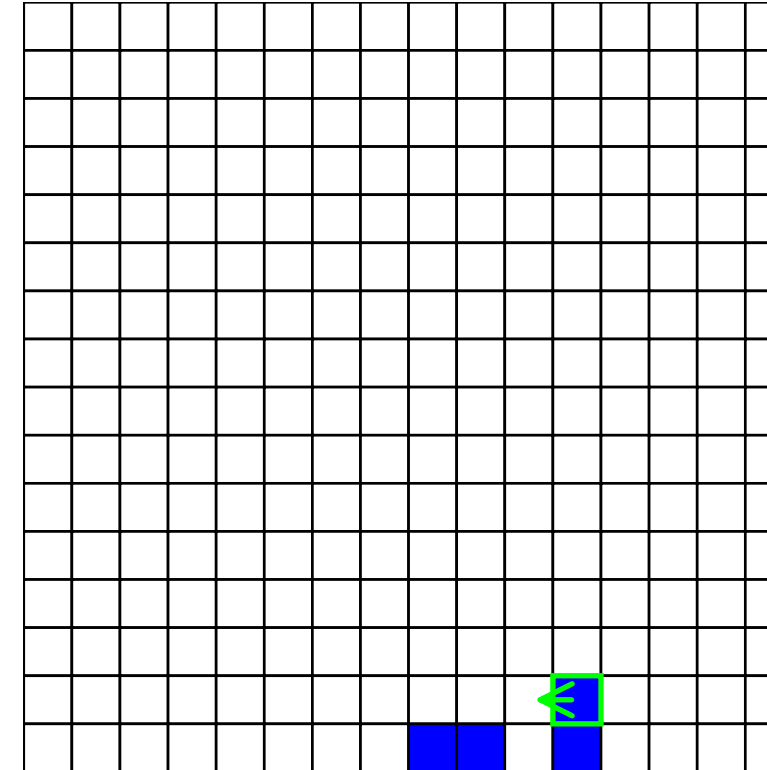
(MOVE 3)

Perform: move_right at position: (14, 6):

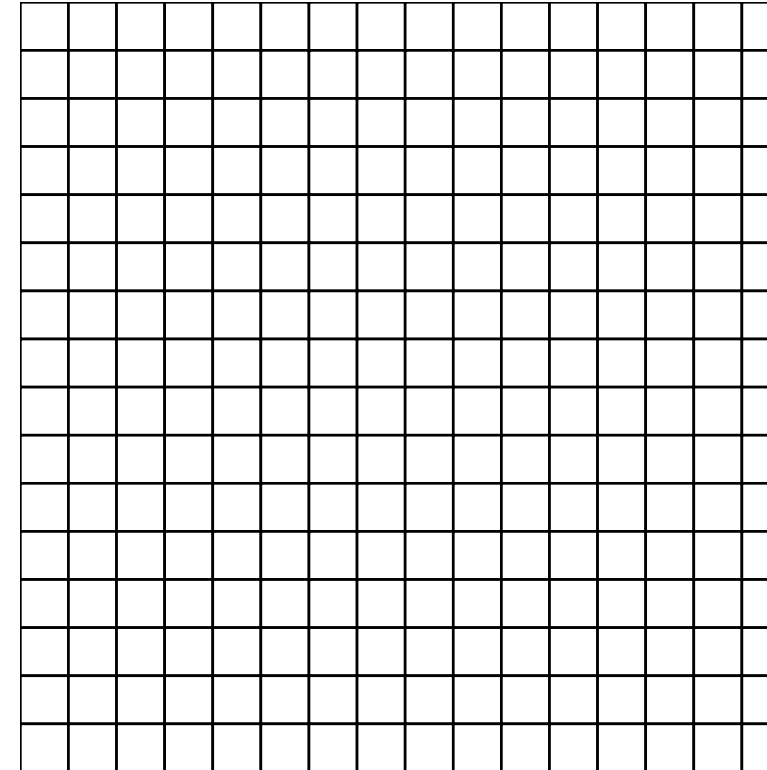


(MOVE 4)

Perform: move_left at position: (14, 11):

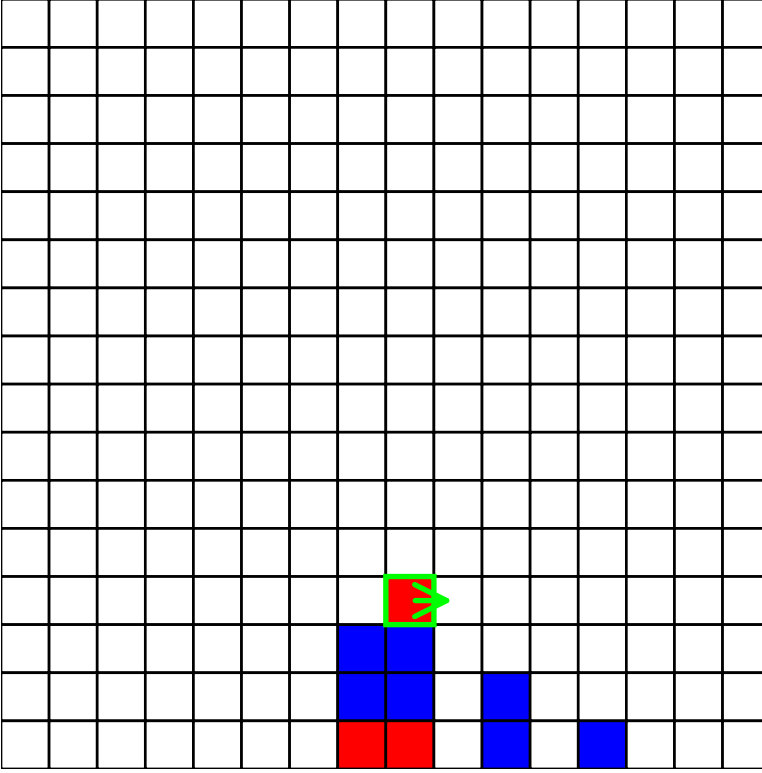


FINAL STATE

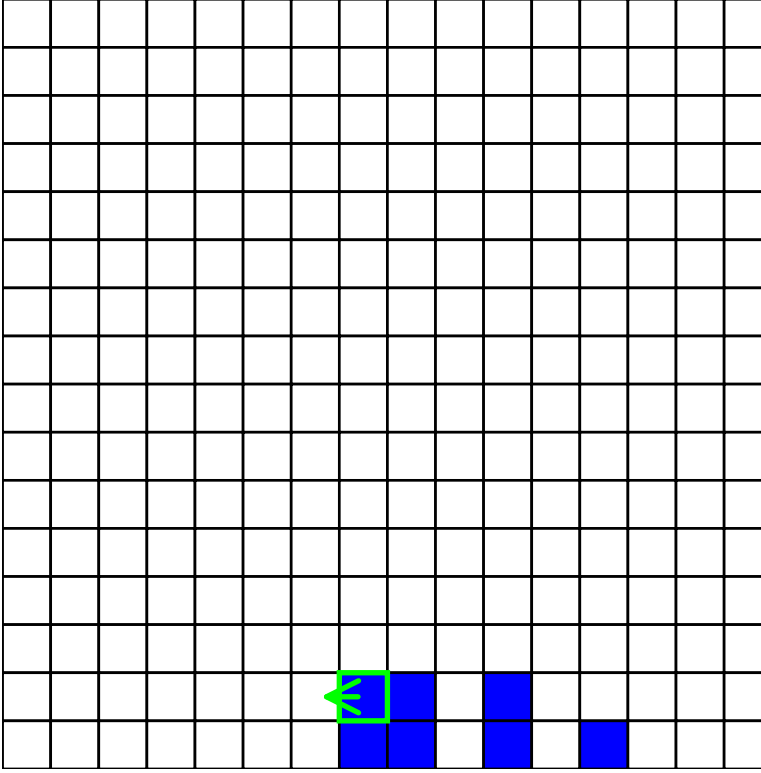


...:SOLUTION::...: Solvable in 4 moves (blocks positions: {(12, 8): <Color: red>, (13, 7): <Color: blue>, (13, 8): <Color: blue>, (14, 7): <Color: blue>, (14, 8): <Color: blue>, (14, 10): <Color: blue>, (15, 7): <Color: red>, (15, 8): <Color: red>, (15, 10): <Color: blue>, (15, 12): <Color: blue>})

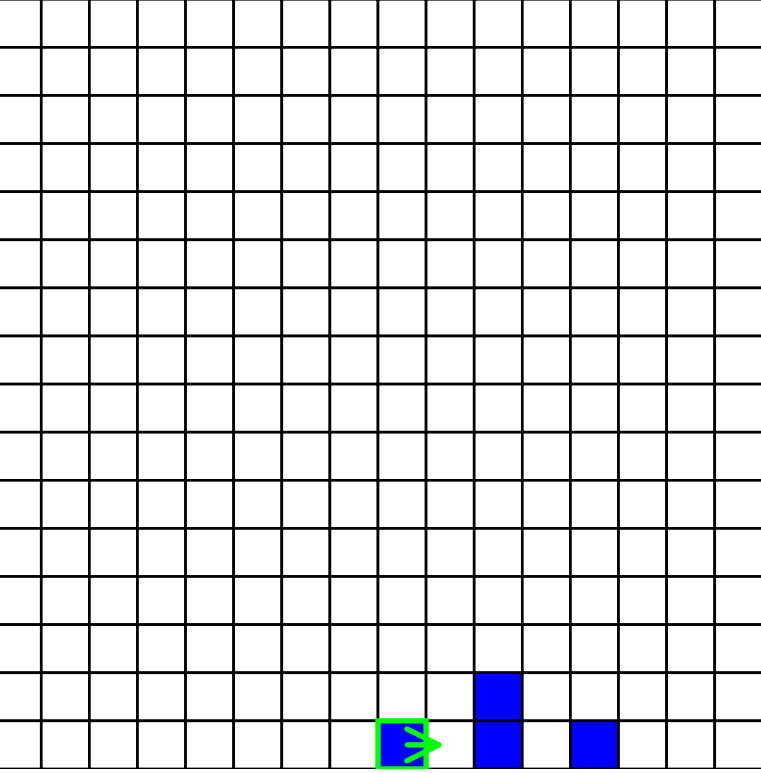
INITIAL STATE: (MOVE 1)
Perform: move_right at position: (12, 8):



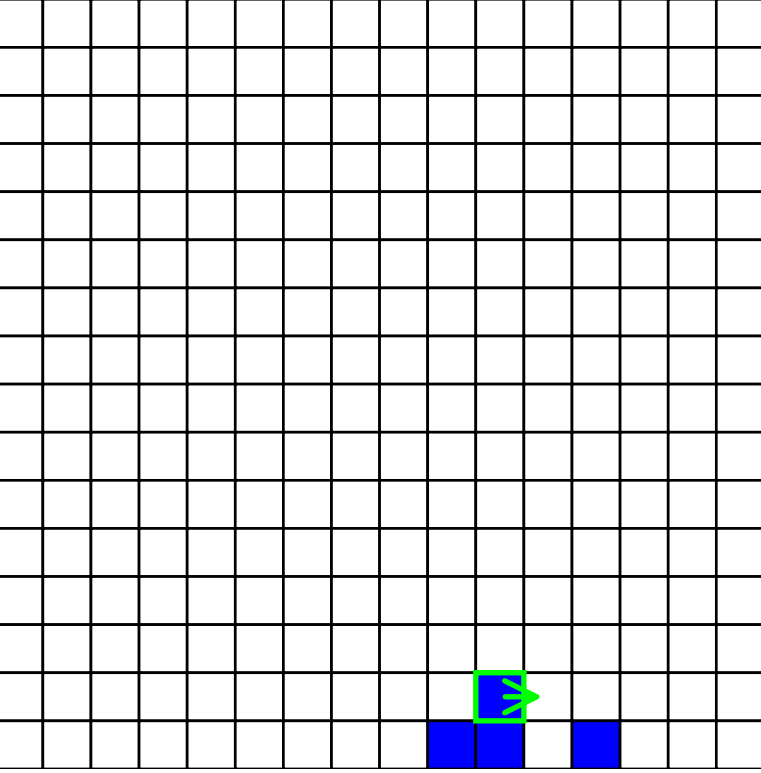
(MOVE 2)
Perform: move_left at position: (14, 7):



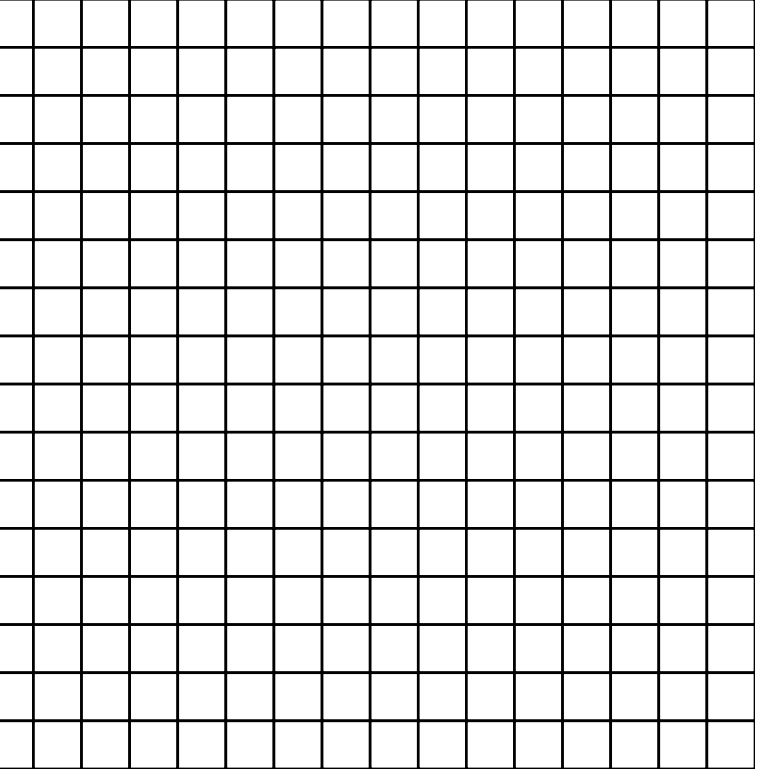
(MOVE 3)
Perform: move_right at position: (15, 8):



(MOVE 4)
Perform: move_right at position: (14, 10):



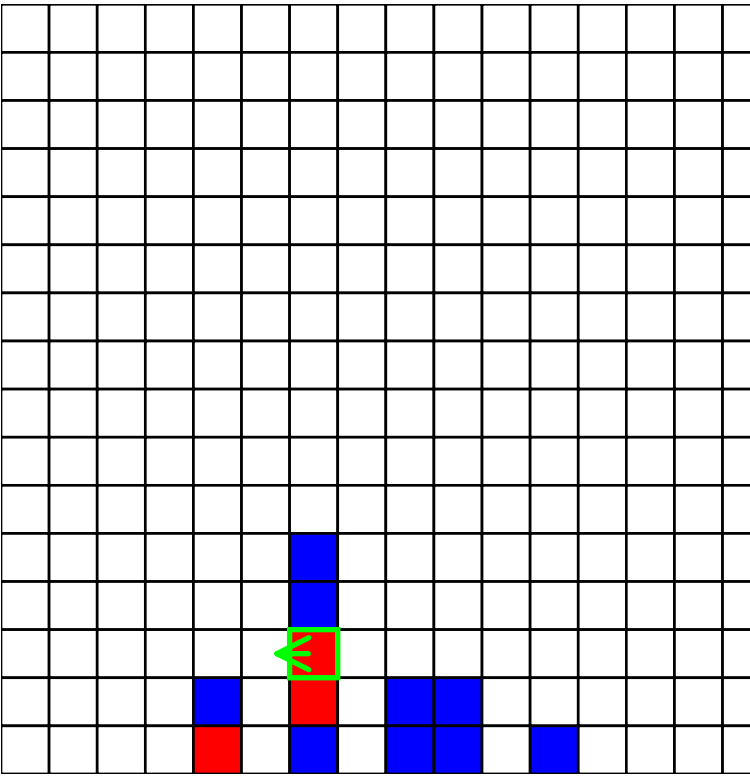
FINAL STATE



...:SOLUTION::...: Solvable in 4 moves (blocks positions: {(11, 6): <Color: blue>, (12, 6): <Color: blue>, (13, 6): <Color: red>, (14, 4): <Color: blue>, (14, 6): <Color: red>, (14, 8): <Color: blue>, (14, 9): <Color: blue>, (15, 4): <Color: red>, (15, 6): <Color: blue>, (15, 8): <Color: blue>, (15, 9): <Color: blue>, (15,

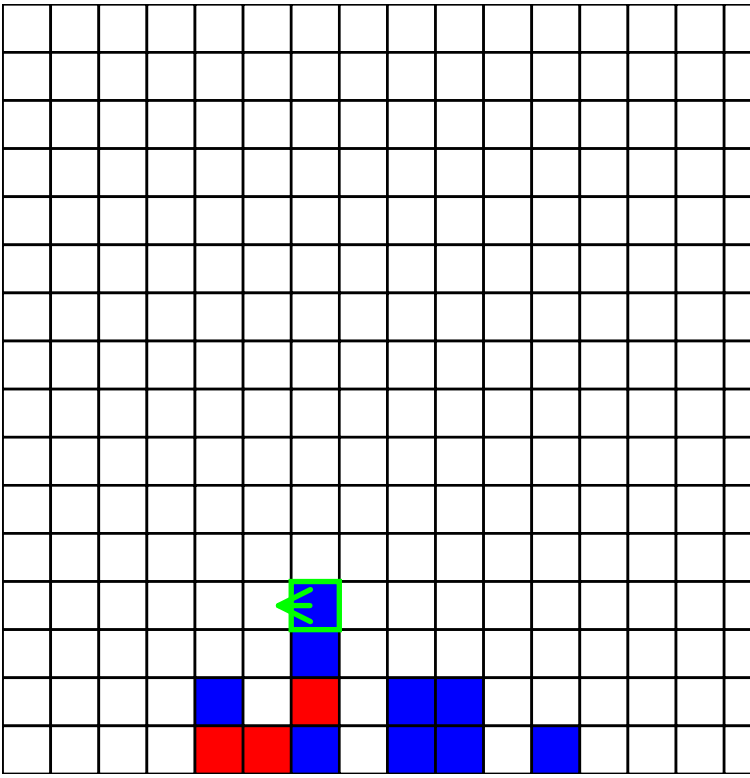
INITIAL STATE: (MOVE 1)

Perform: move_left at position: (13, 6):



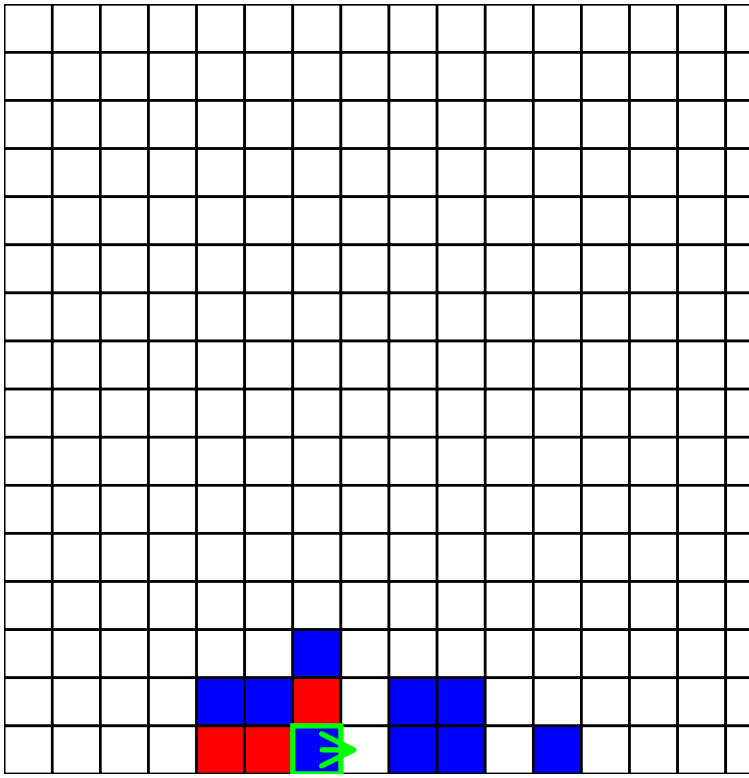
(MOVE 2)

Perform: move_left at position: (12, 6):



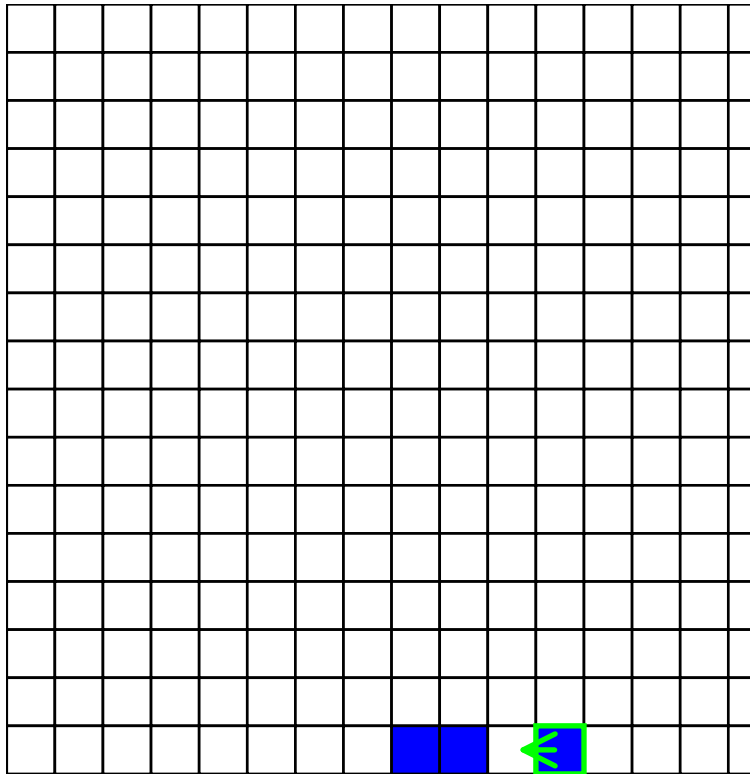
(MOVE 3)

Perform: move_right at position: (15, 6):

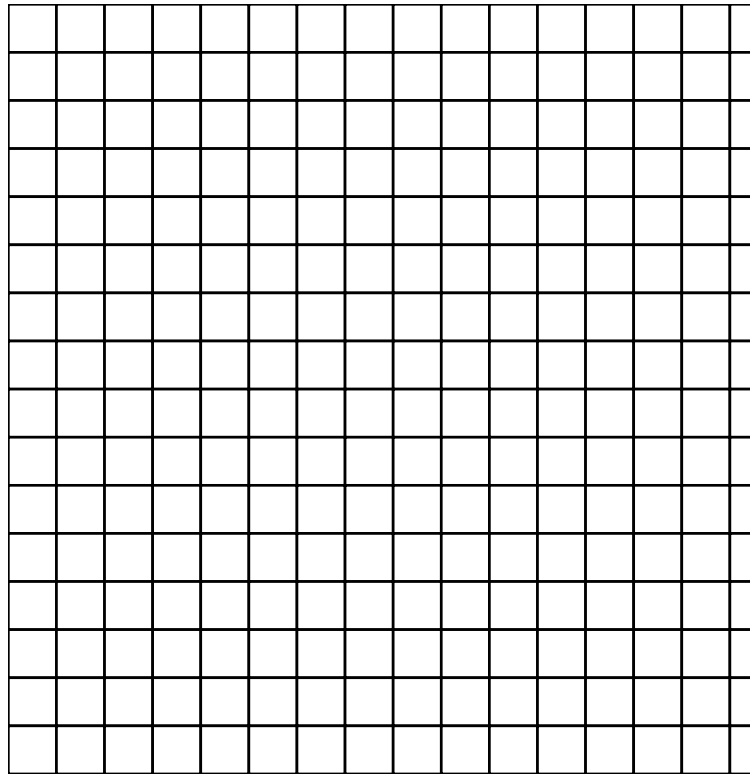


(MOVE 4)

Perform: move_left at position: (15, 11):



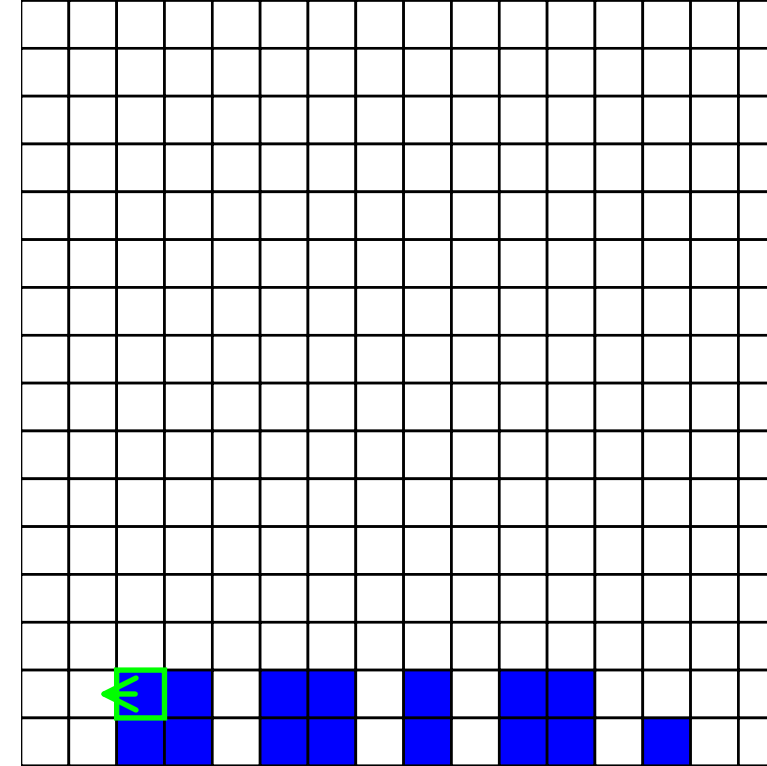
FINAL STATE



...:SOLUTION:...: Solvable in 5 moves (blocks positions: {(14, 2): <Color: blue>, (14, 3): <Color: blue>, (14, 5): <Color: blue>, (14, 6): <Color: blue>, (14, 8): <Color: blue>, (14, 10): <Color: blue>, (14, 11): <Color: blue>, (15, 2): <Color: blue>, (15, 3): <Color: blue>, (15, 5): <Color: blue>, (15, 6): <Color: blue>, (15, 8): <Color: blue>, (15, 10): <Color: blue>, (15, 11): <Color: blue>})

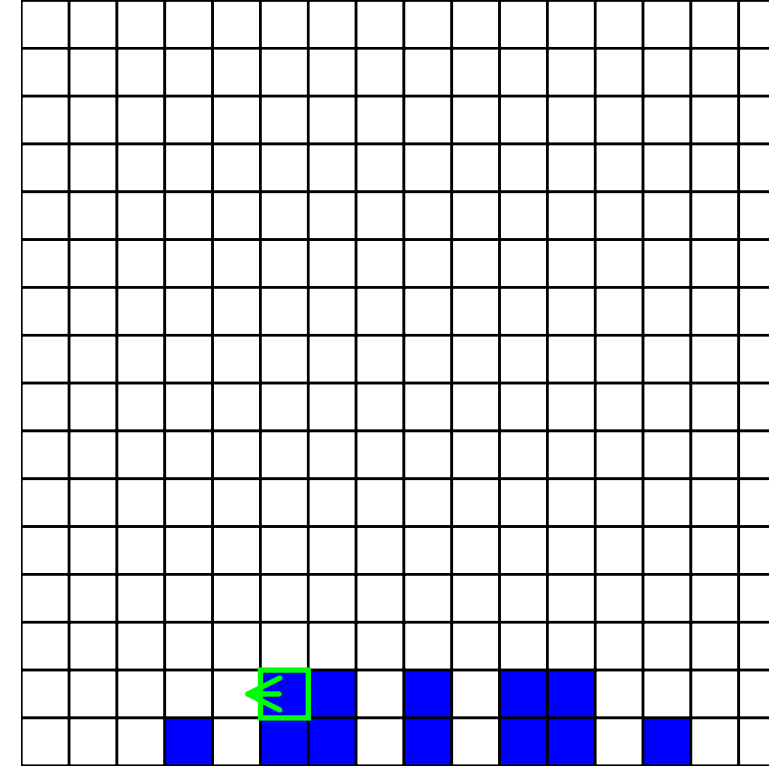
INITIAL STATE: (MOVE 1)

Perform: move_left at position: (14, 2):



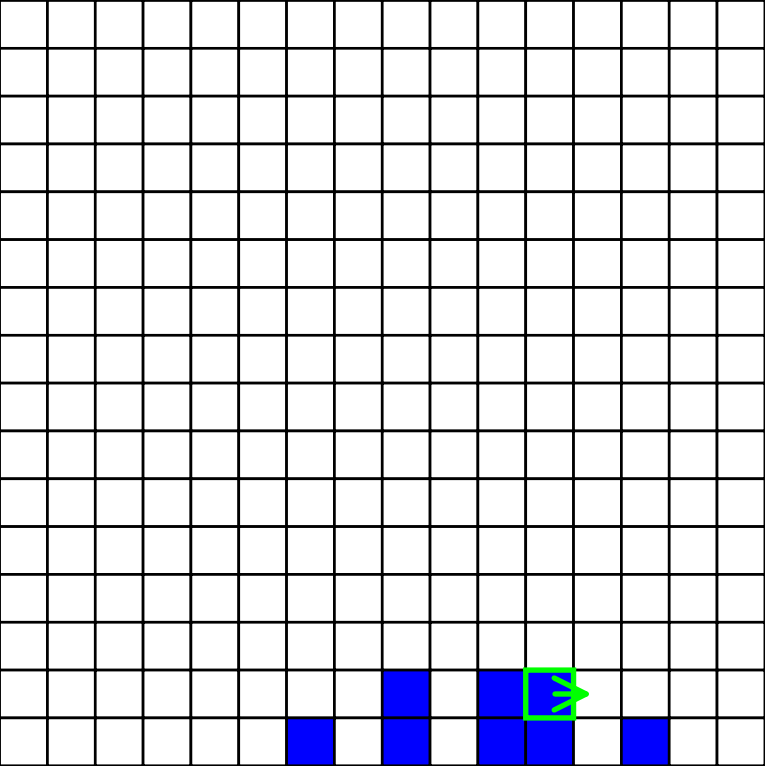
(MOVE 2)

Perform: move_left at position: (14, 5):



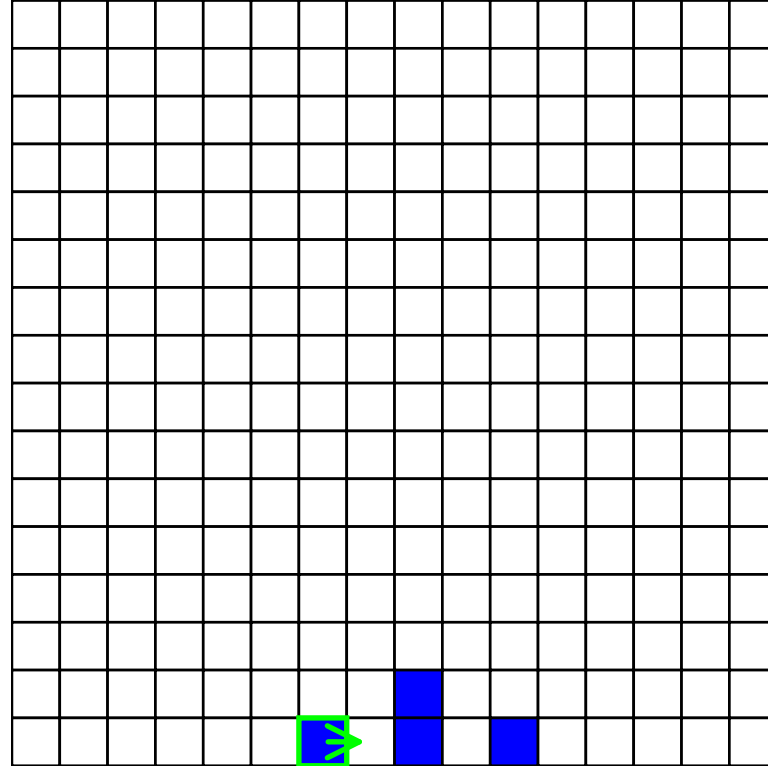
(MOVE 3)

Perform: move_right at position: (14, 11):



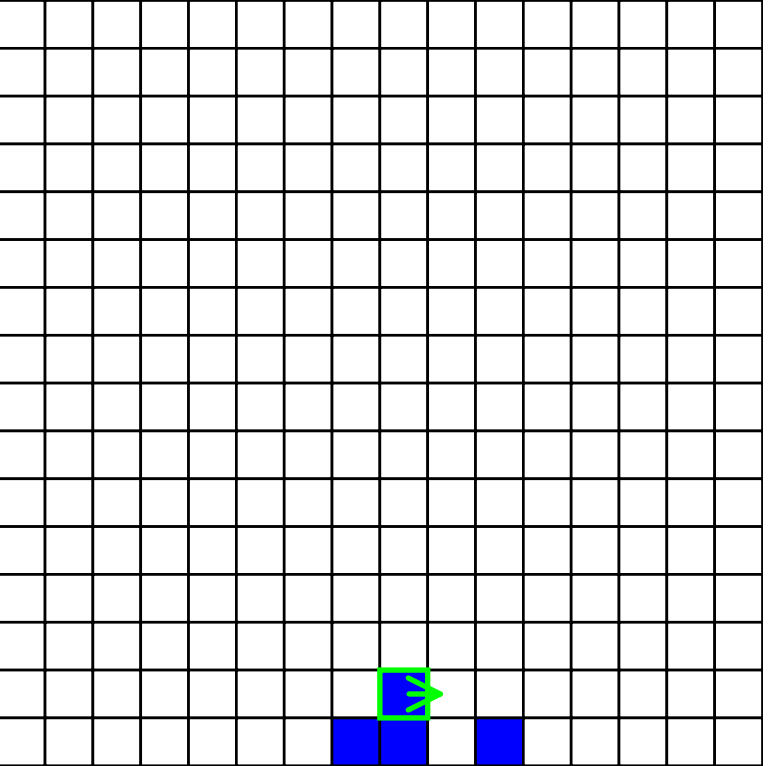
(MOVE 4)

Perform: move_right at position: (15, 6):

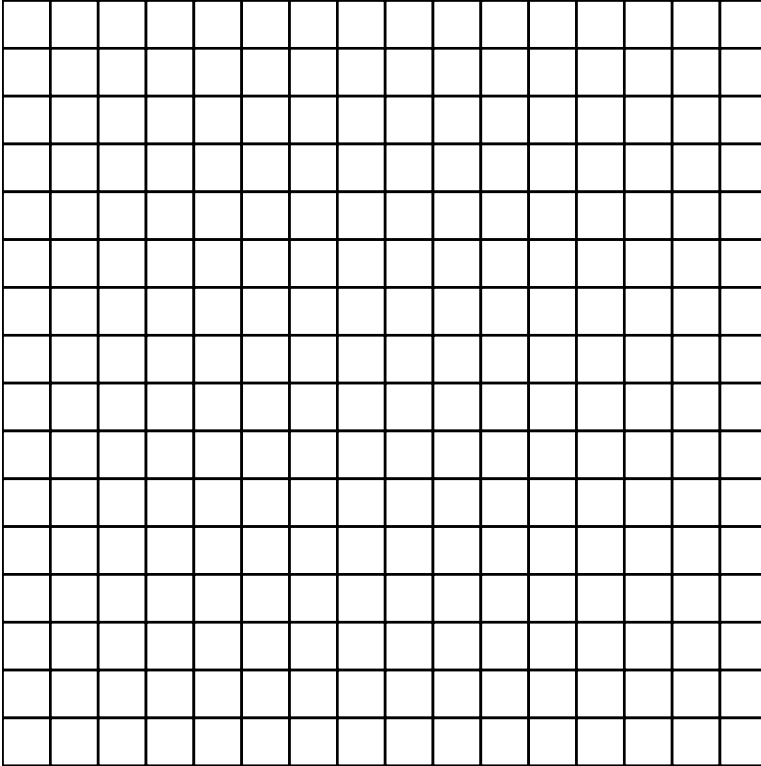


(MOVE 5)

Perform: move_right at position: (14, 8):



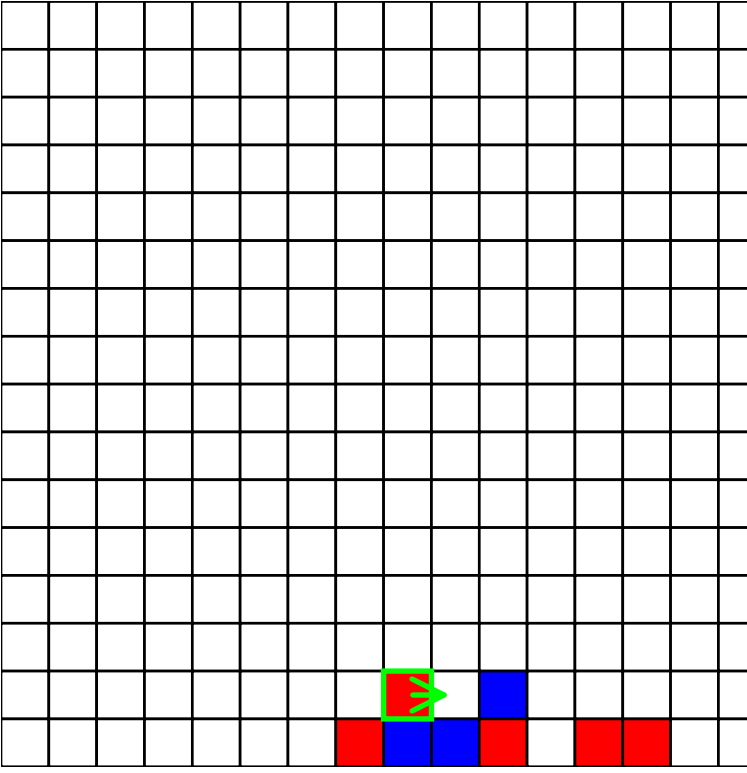
FINAL STATE



...:SOLUTION:...: Solvable in 5 moves (blocks positions: {(14, 8): <Color: red>, (14, 10): <Color: blue>, (15, 7): <Color: red>, (15, 8): <Color: blue>, (15, 9): <Color: blue>, (15, 10): <Color: red>, (15, 12): <Color: red>, (15, 13): <Color: red>})

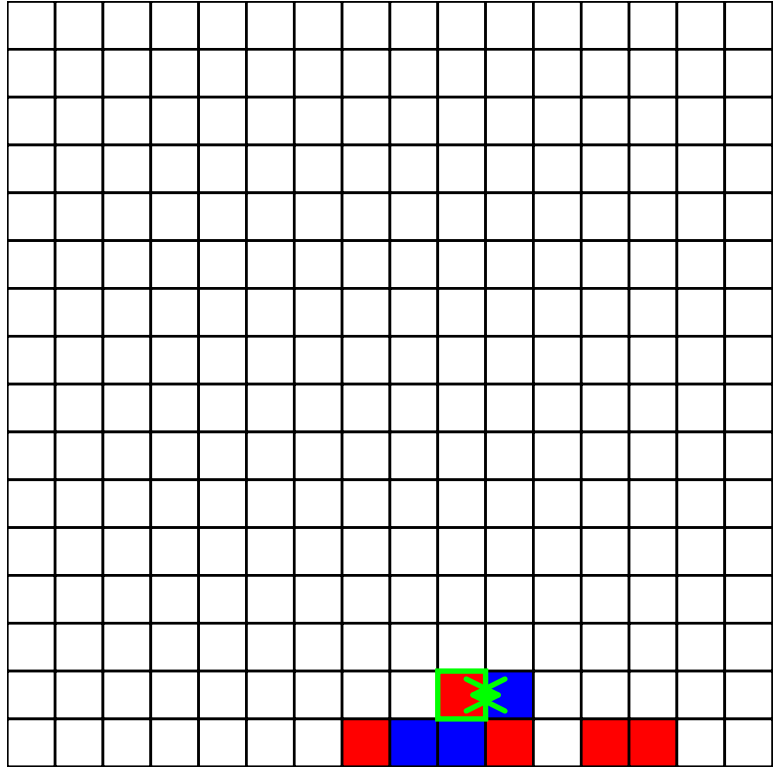
INITIAL STATE: (MOVE 1)

Perform: move_right at position: (14, 8):



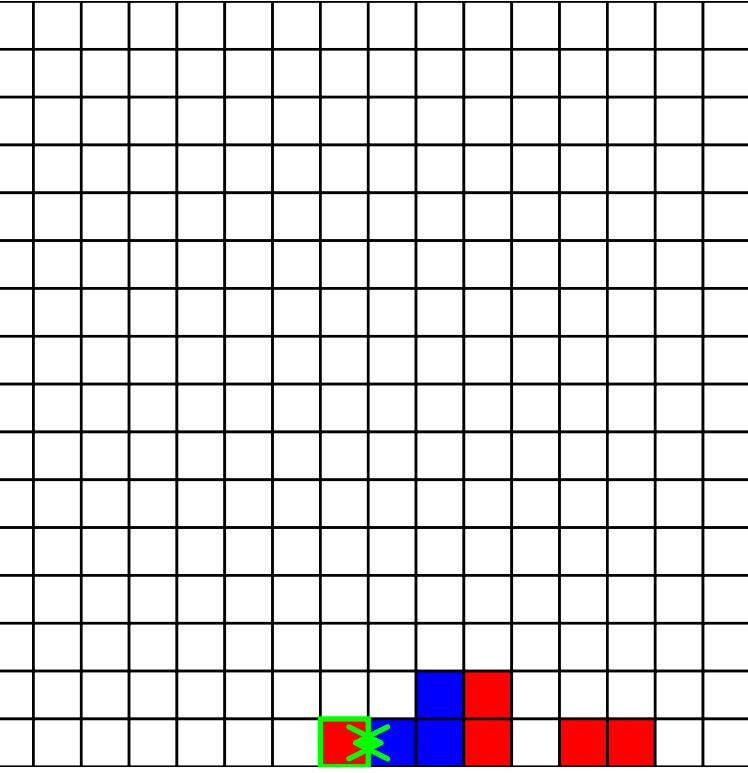
(MOVE 2)

Perform: exchange_right at position: (14, 9):



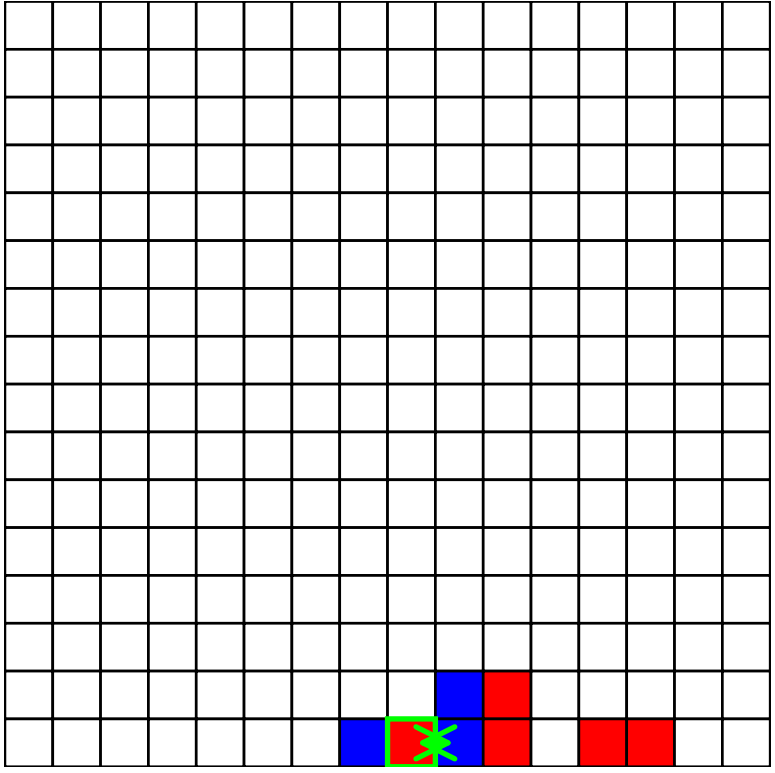
(MOVE 3)

Perform: exchange_right at position: (15, 7):



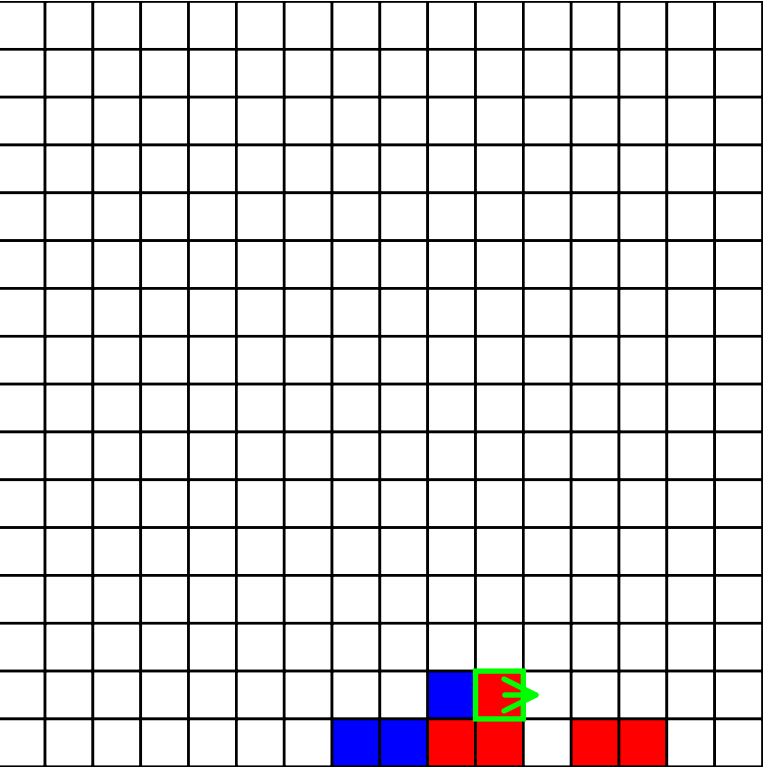
(MOVE 4)

Perform: exchange_right at position: (15, 8):

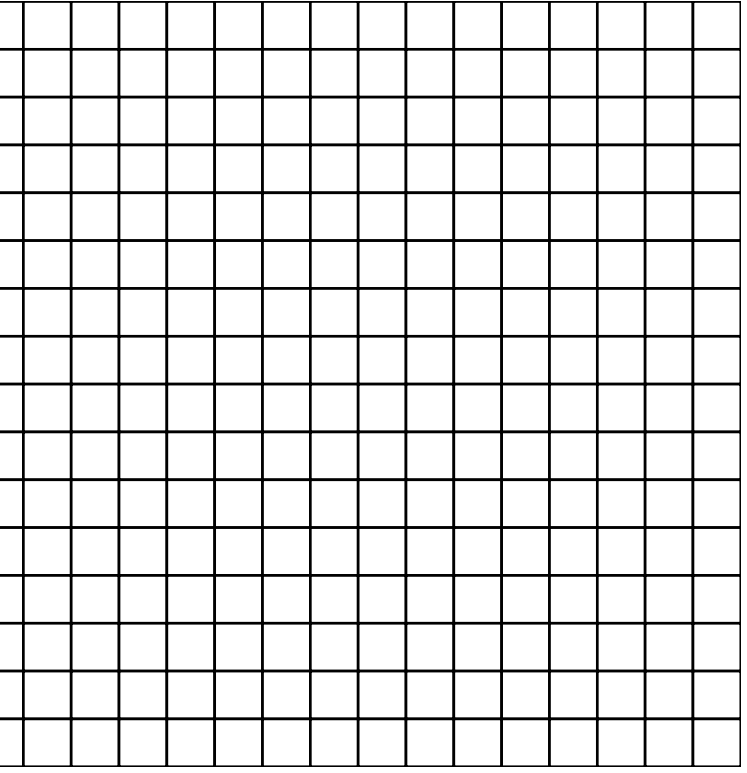


(MOVE 5)

Perform: move_right at position: (14, 10):

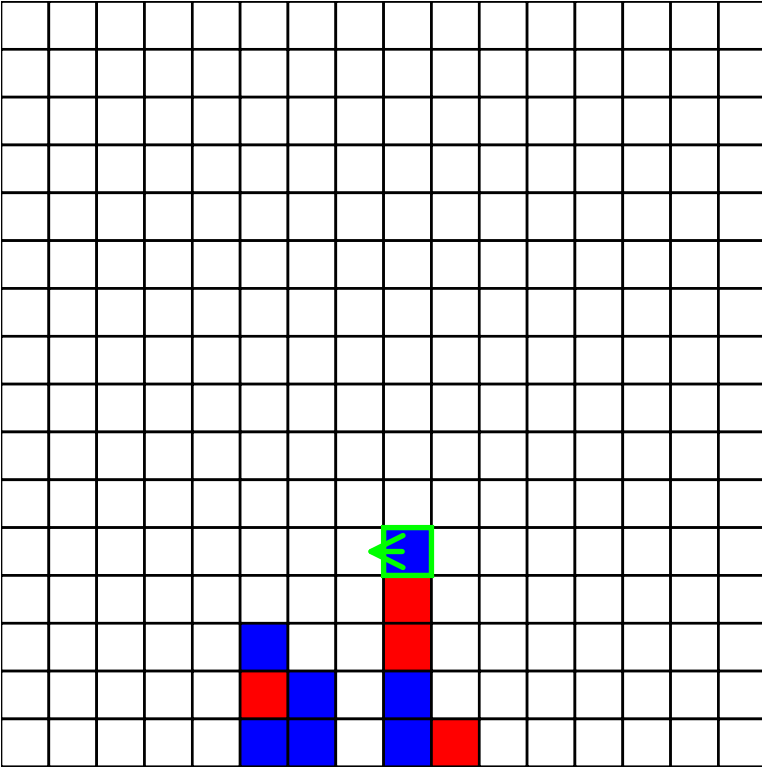


FINAL STATE

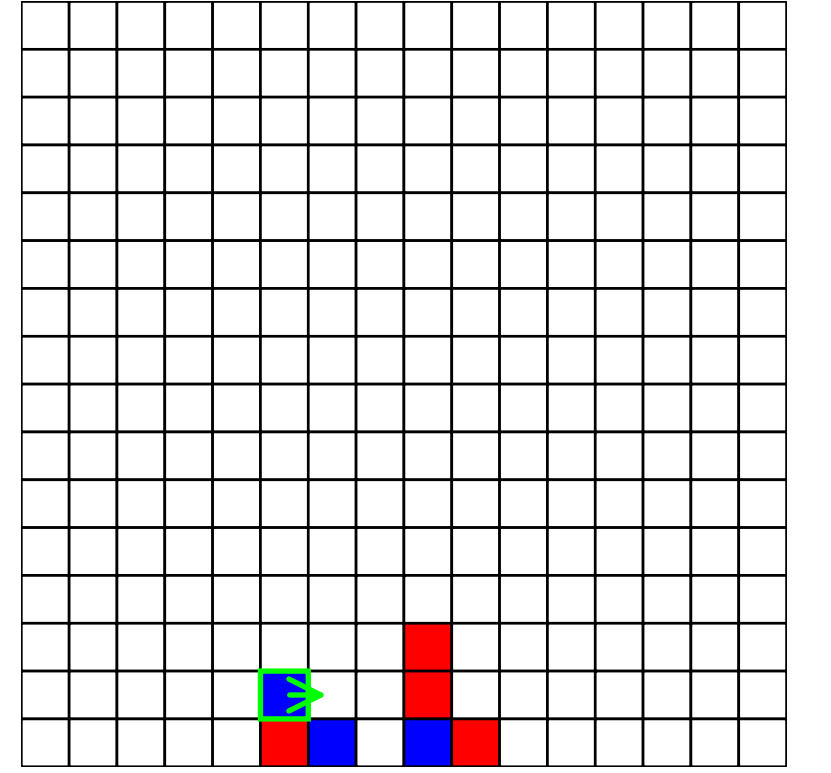


...:SOLUTION::...: Solvable in 5 moves (blocks positions: {(11, 8): <Color: blue>, (12, 8): <Color: red>, (13, 5): <Color: blue>, (13, 8): <Color: red>, (14, 5): <Color: red>, (14, 6): <Color: blue>, (14, 8): <Color: blue>, (15, 5): <Color: blue>, (15, 6): <Color: blue>, (15, 8): <Color: blue>, (15, 9): <Color: red>})

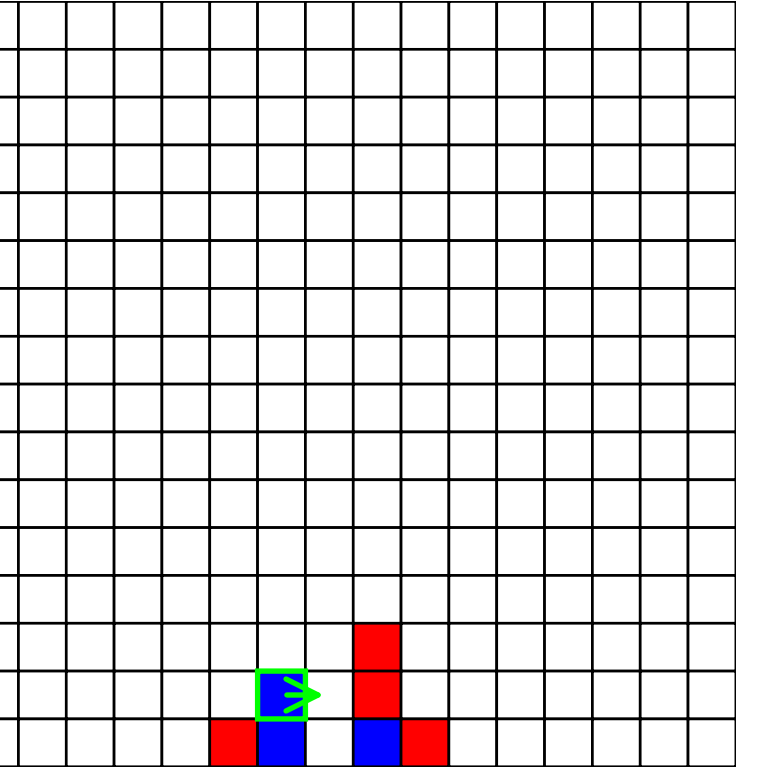
INITIAL STATE: (MOVE 1)
Perform: move_left at position: (11, 8):



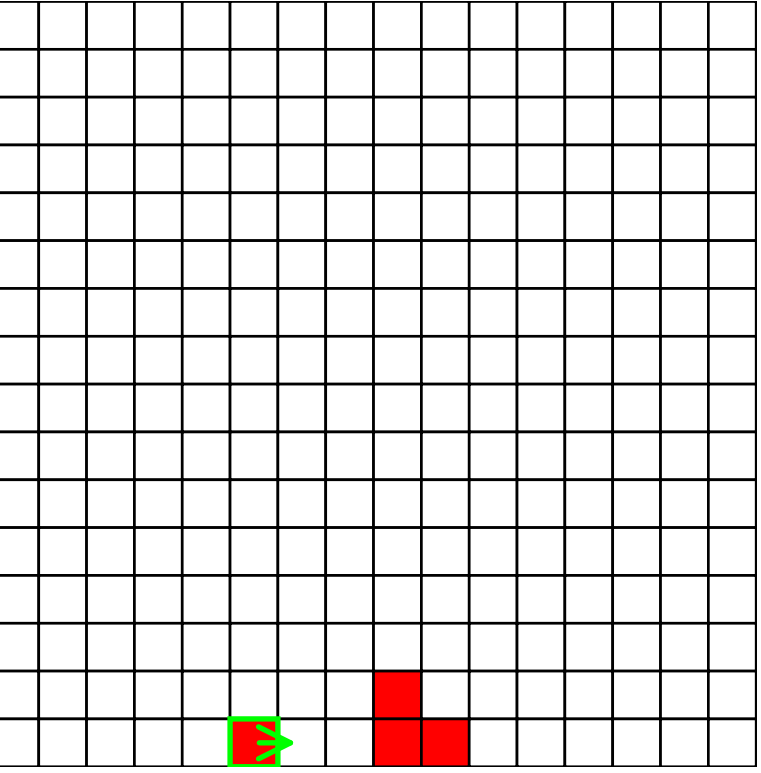
(MOVE 2)
Perform: move_right at position: (14, 5):



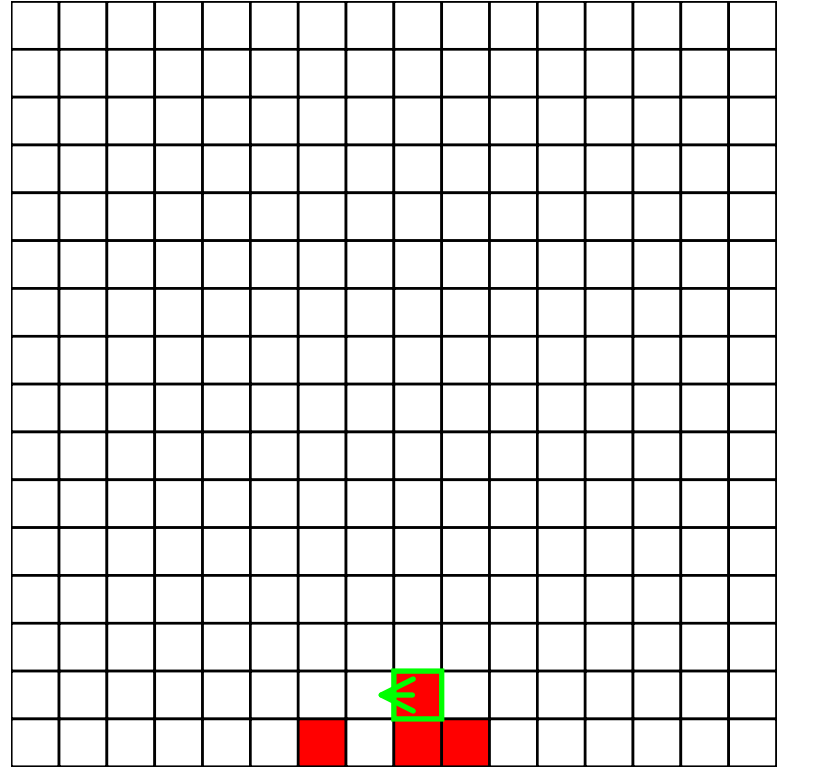
(MOVE 3)
Perform: move_right at position: (14, 6):



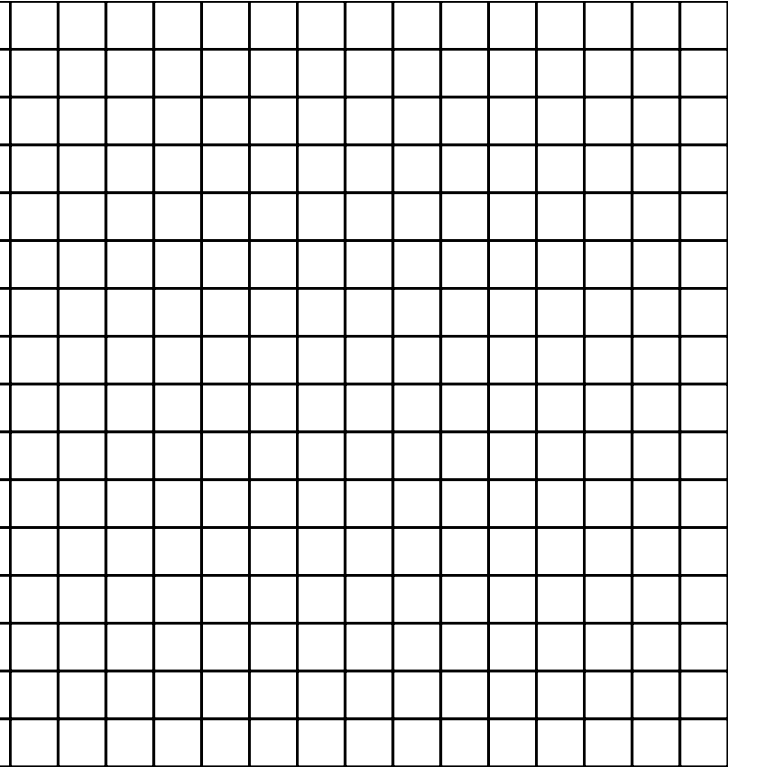
(MOVE 4)
Perform: move_right at position: (15, 5):



(MOVE 5)
Perform: move_left at position: (14, 8):



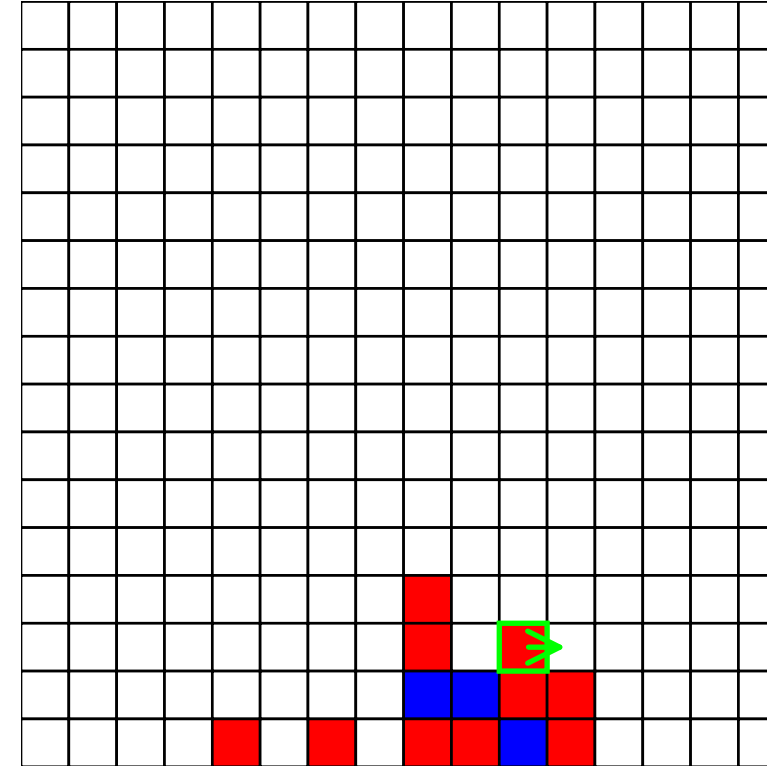
FINAL STATE



...:SOLUTION:...: Solvable in 5 moves (blocks positions: {(12, 8): <Color: red>, (13, 8): <Color: red>, (13, 10): <Color: red>, (14, 8): <Color: blue>, (14, 9): <Color: blue>, (14, 10): <Color: red>, (14, 11): <Color: red>, (15, 4): <Color: red>, (15, 6): <Color: red>, (15, 8): <Color: red>, (15, 9): <Color: red>, (15, 10): <Color: blue>, (15, 11): <Color: red>})

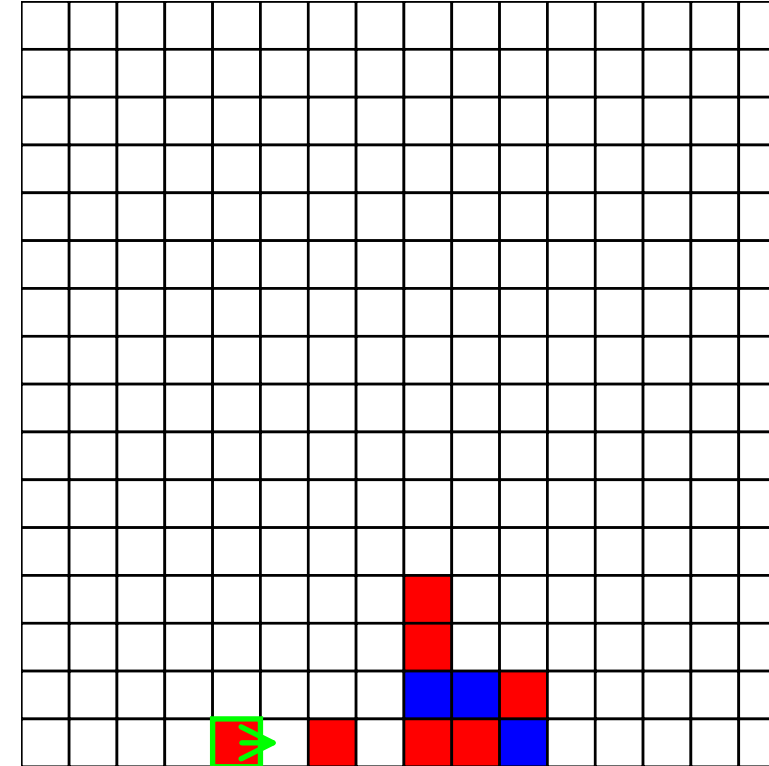
INITIAL STATE: (MOVE 1)

Perform: move_right at position: (13, 10):



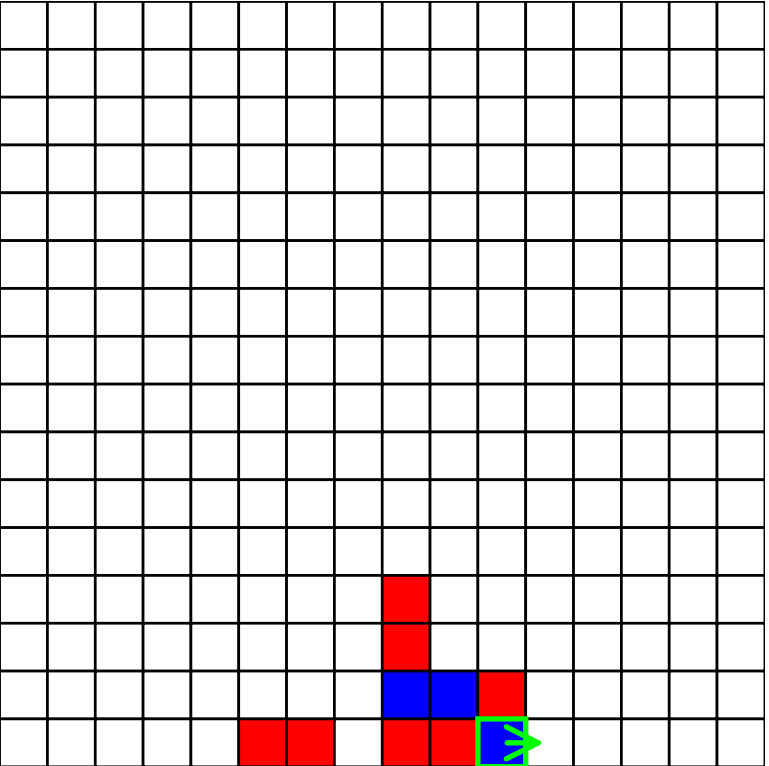
(MOVE 2)

Perform: move_right at position: (15, 4):



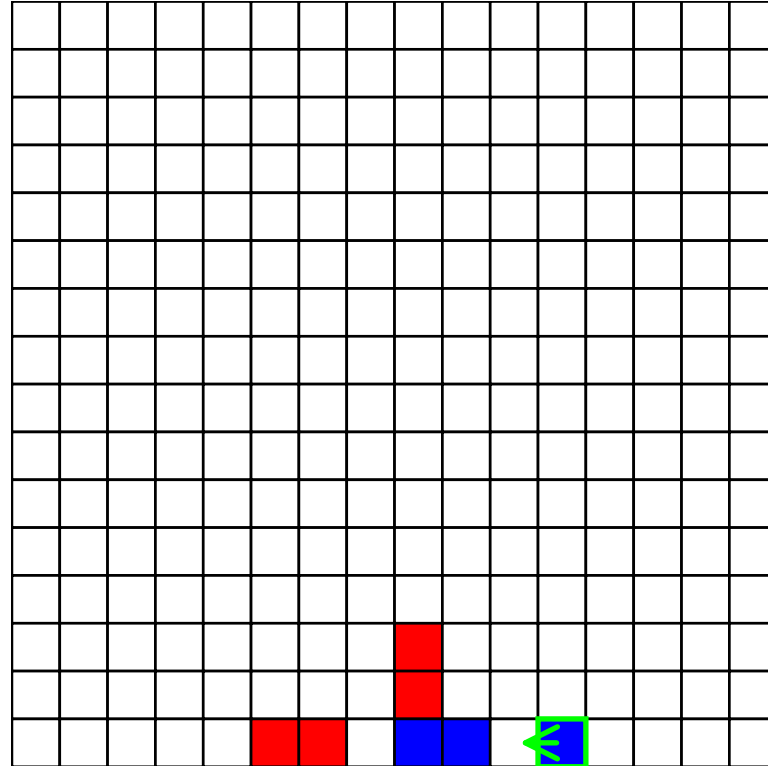
(MOVE 3)

Perform: move_right at position: (15, 10):



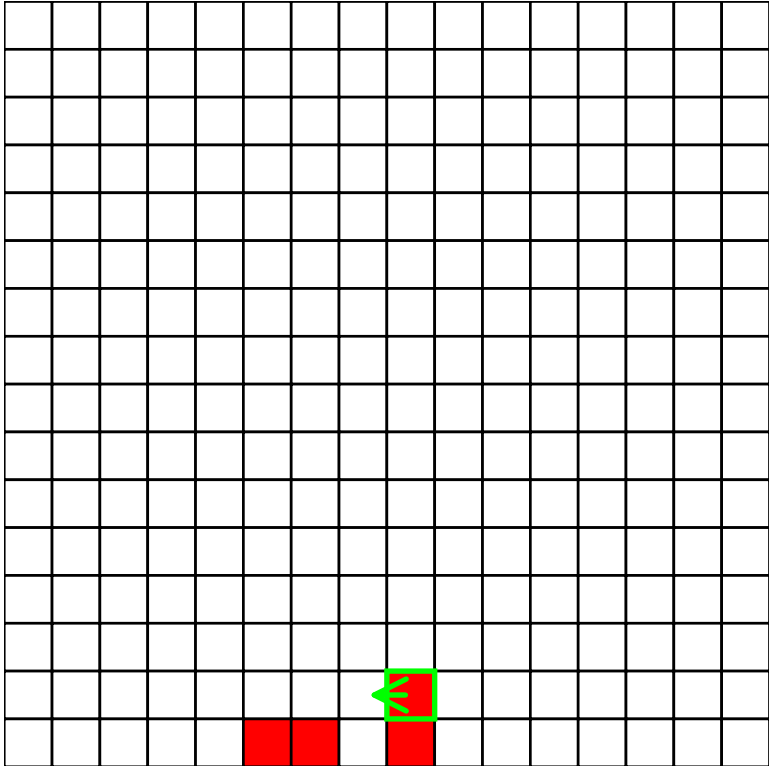
(MOVE 4)

Perform: move_left at position: (15, 11):

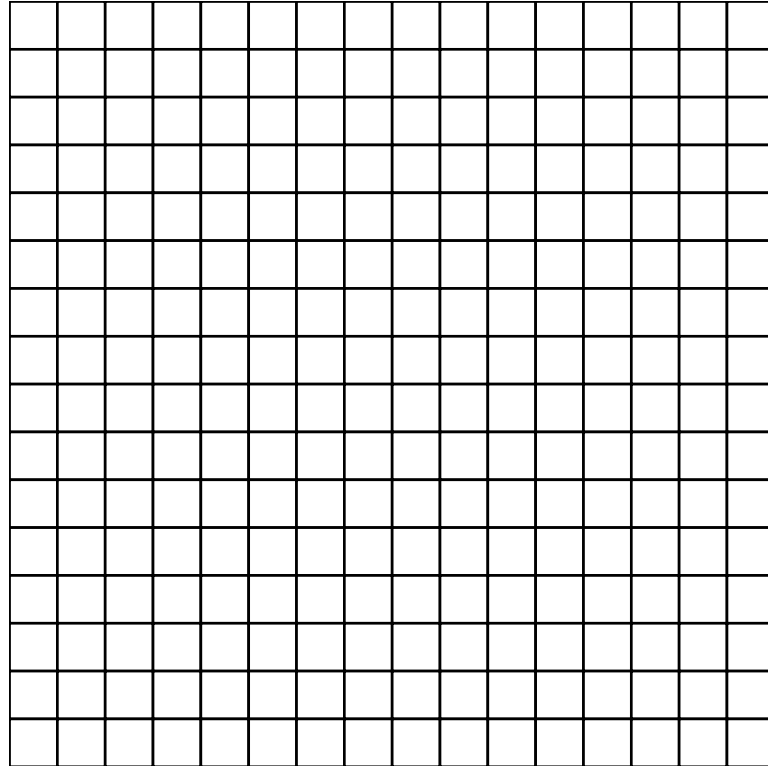


(MOVE 5)

Perform: move_left at position: (14, 8):



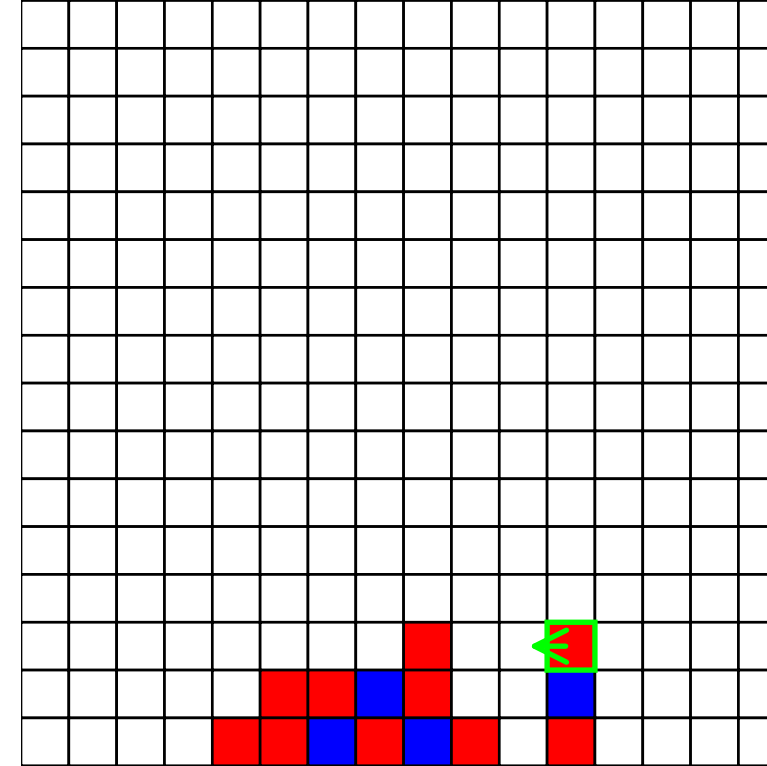
FINAL STATE



...:SOLUTION::...: Solvable in 5 moves (blocks positions: {(13, 8): <Color: red>, (13, 11): <Color: red>, (14, 5): <Color: red>, (14, 6): <Color: red>, (14, 7): <Color: blue>, (14, 8): <Color: red>, (14, 11): <Color: blue>, (15, 4): <Color: red>, (15, 5): <Color: red>, (15, 6): <Color: blue>, (15, 7): <Color: red>, (15, 8): <Color: blue>, (15, 9): <Color: red>, (15, 11): <Color: red>})

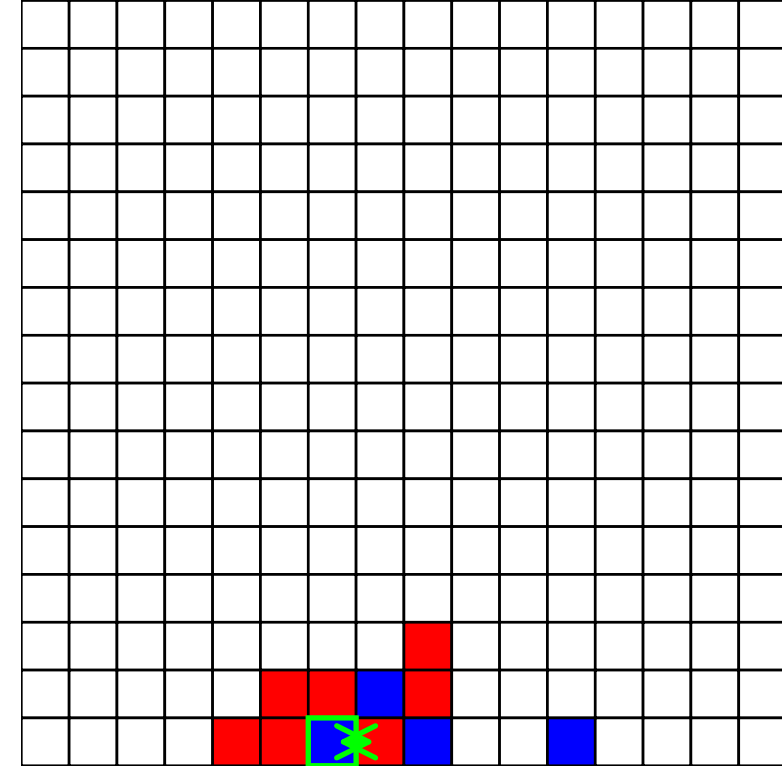
INITIAL STATE: (MOVE 1)

Perform: move_left at position: (13, 11):



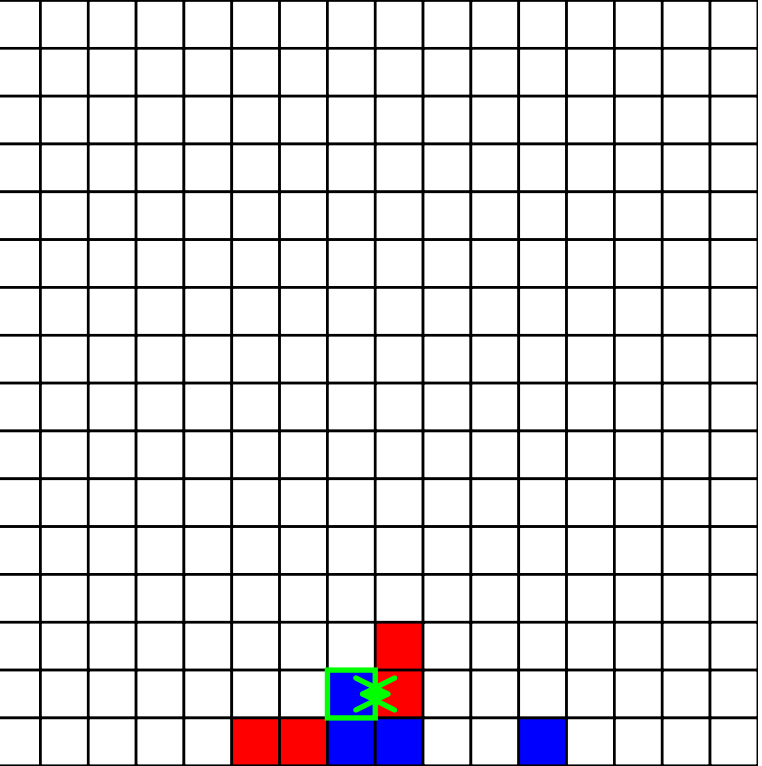
(MOVE 2)

Perform: exchange_right at position: (15, 6):



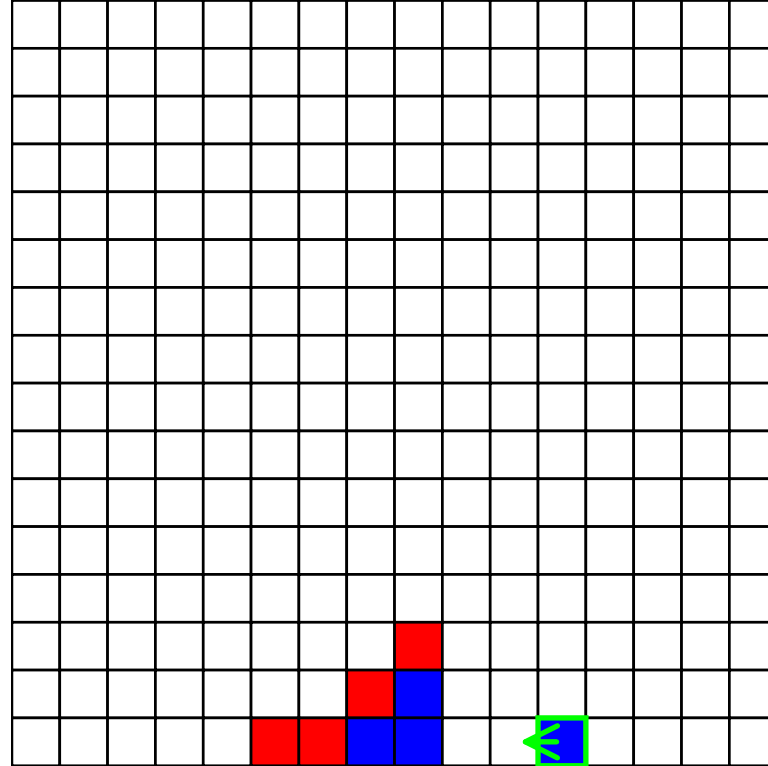
(MOVE 3)

Perform: exchange_right at position: (14, 7):



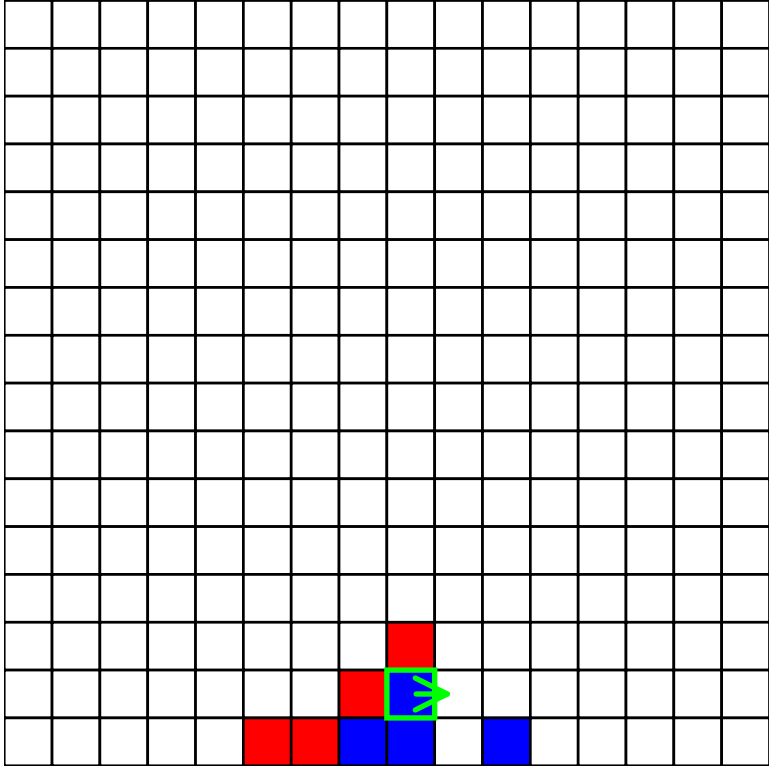
(MOVE 4)

Perform: move_left at position: (15, 11):

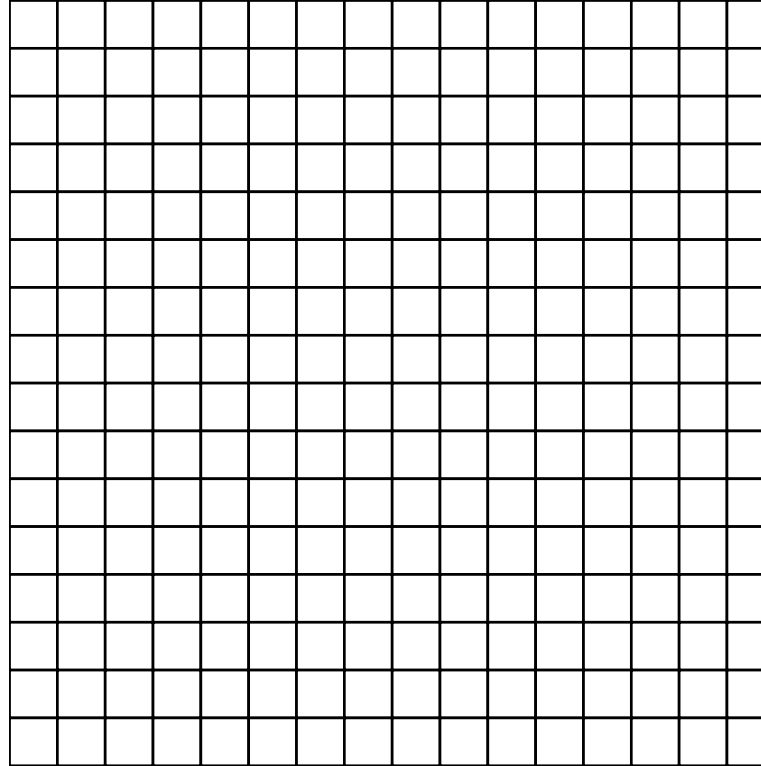


(MOVE 5)

Perform: move_right at position: (14, 8):



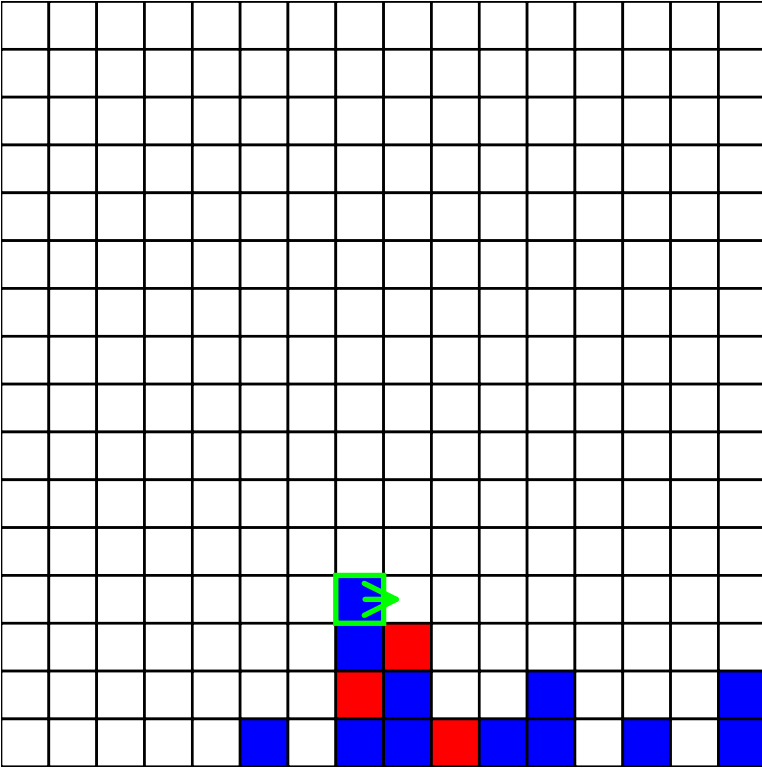
FINAL STATE



...:SOLUTION:...: Solvable in 5 moves (blocks positions: {(12, 7): <Color: blue>, (13, 7): <Color: blue>, (13, 8): <Color: red>, (14, 7): <Color: red>, (14, 8): <Color: blue>, (14, 11): <Color: blue>, (14, 15): <Color: blue>, (15, 5): <Color: blue>, (15, 7): <Color: blue>, (15, 8): <Color: blue>, (15, 9): <Color: red>, (15, 10): <Color: blue>, (15, 11): <Color: blue>, (15, 13): <Color: blue>})

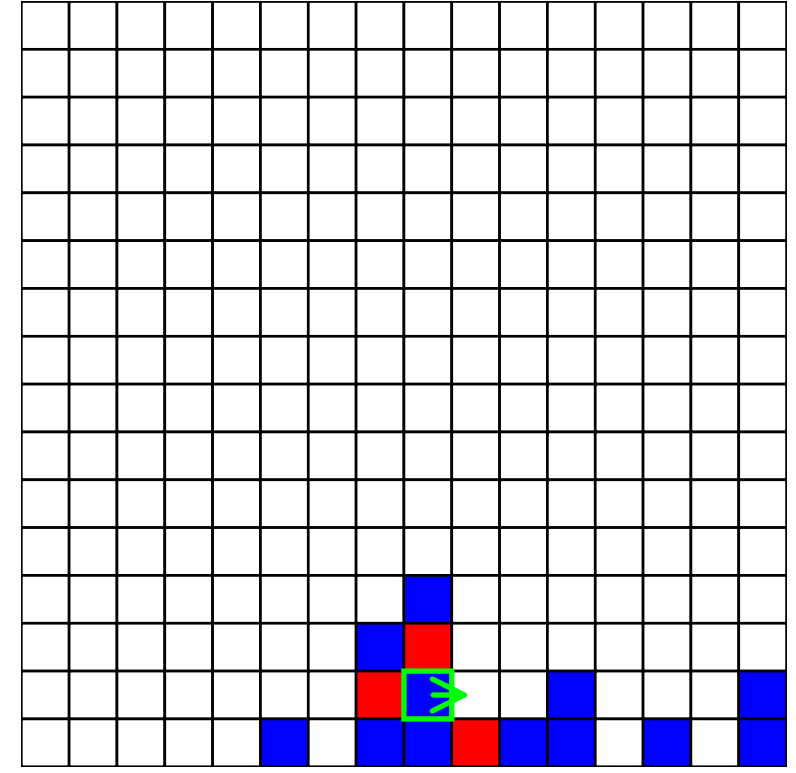
INITIAL STATE: (MOVE 1)

Perform: move_right at position: (12, 7):



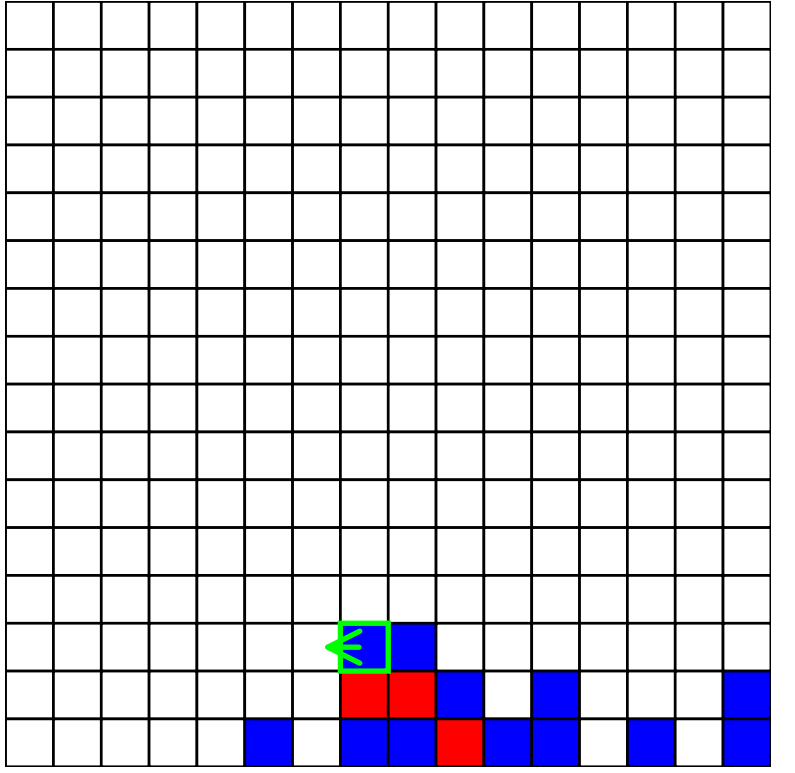
(MOVE 2)

Perform: move_right at position: (14, 8):



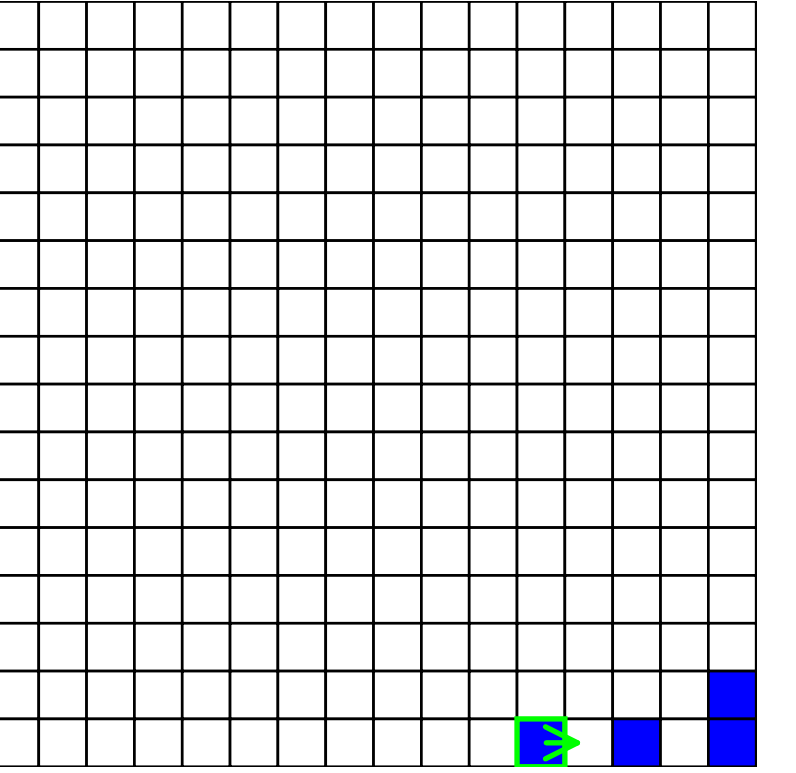
(MOVE 3)

Perform: move_left at position: (13, 7):



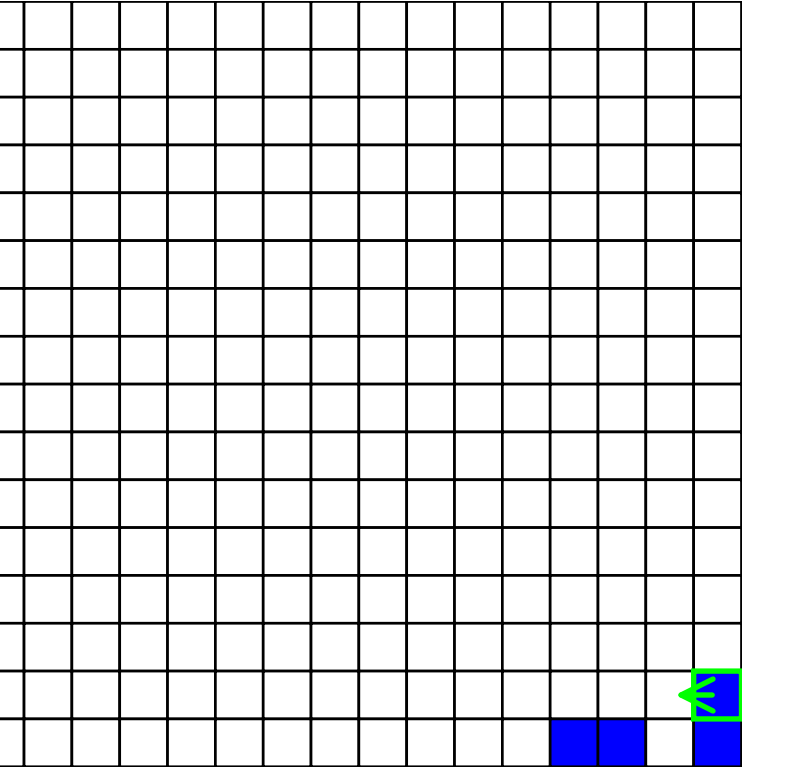
(MOVE 4)

Perform: move_right at position: (15, 11):

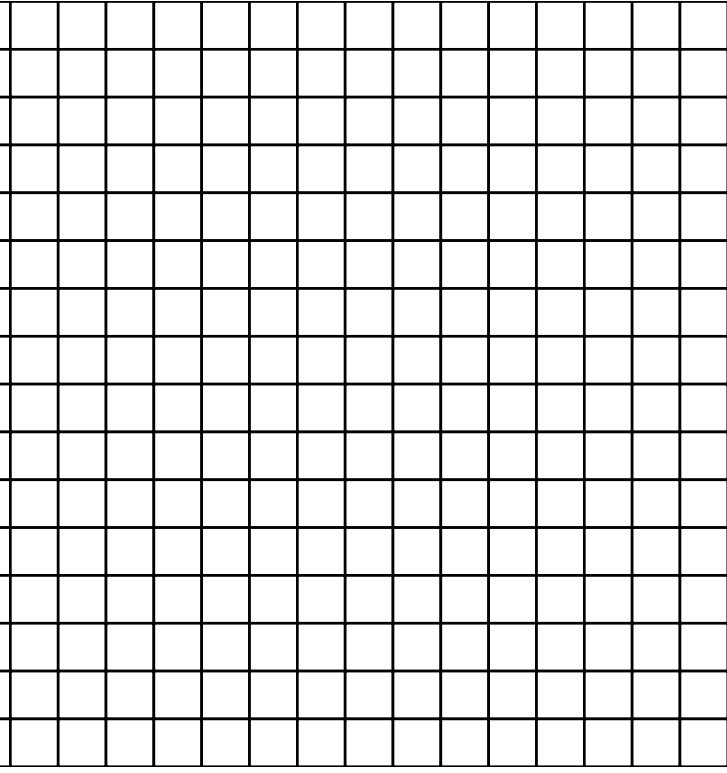


(MOVE 5)

Perform: move_left at position: (14, 15):



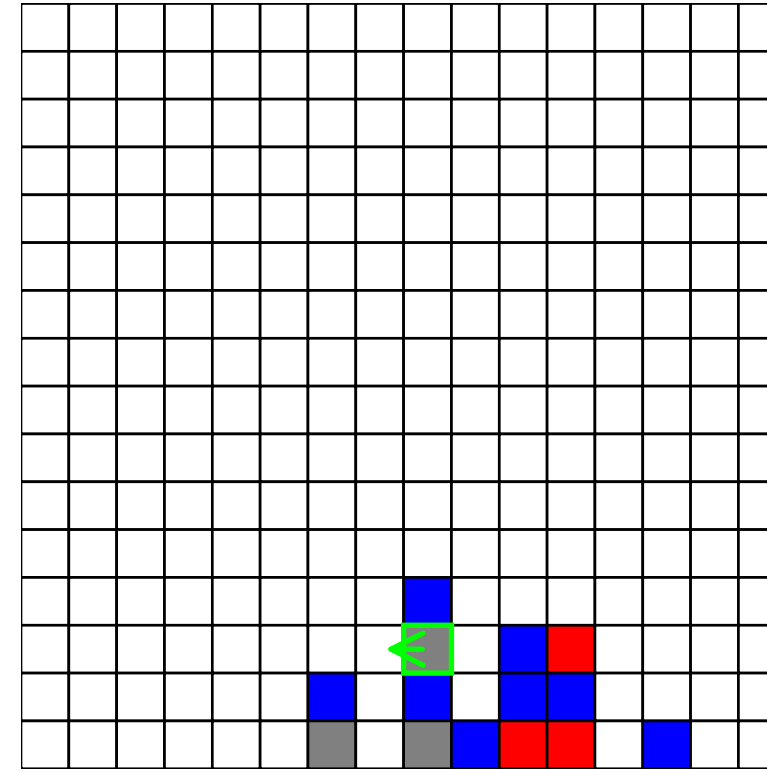
FINAL STATE



...:SOLUTION::...: Solvable in 5 moves (blocks positions: {(12, 8): <Color: blue>, (13, 8): <Color: gray>, (13, 10): <Color: blue>, (13, 11): <Color: red>, (14, 6): <Color: blue>, (14, 8): <Color: blue>, (14, 10): <Color: blue>, (14, 11): <Color: blue>, (15, 6): <Color: gray>, (15, 8): <Color: gray>, (15, 9): <Color: blue>, (15, 10): <Color: red>, (15, 11): <Color: red>, (15, 13): <Color: blue>})

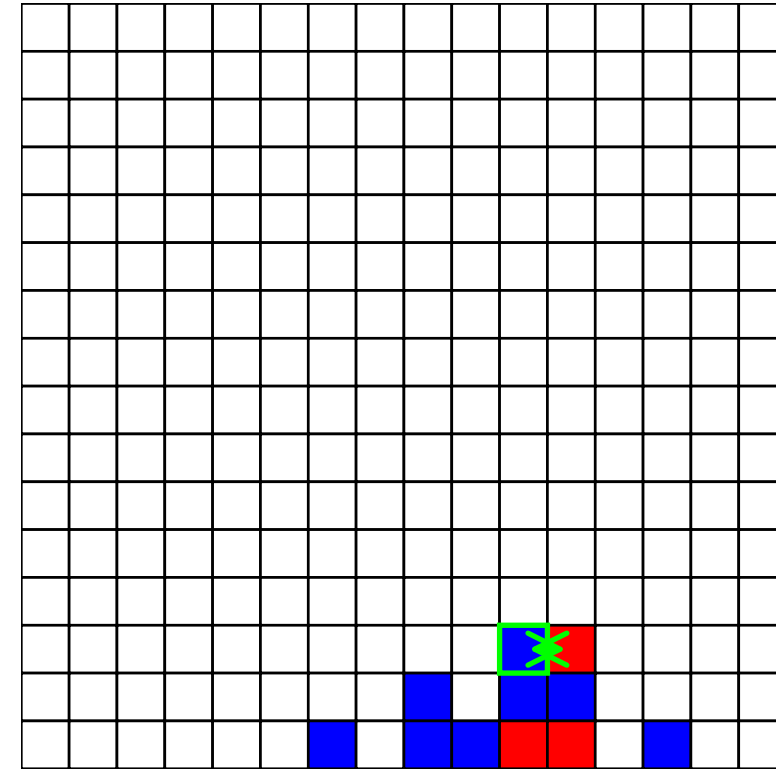
INITIAL STATE: (MOVE 1)

Perform: move_left at position: (13, 8):



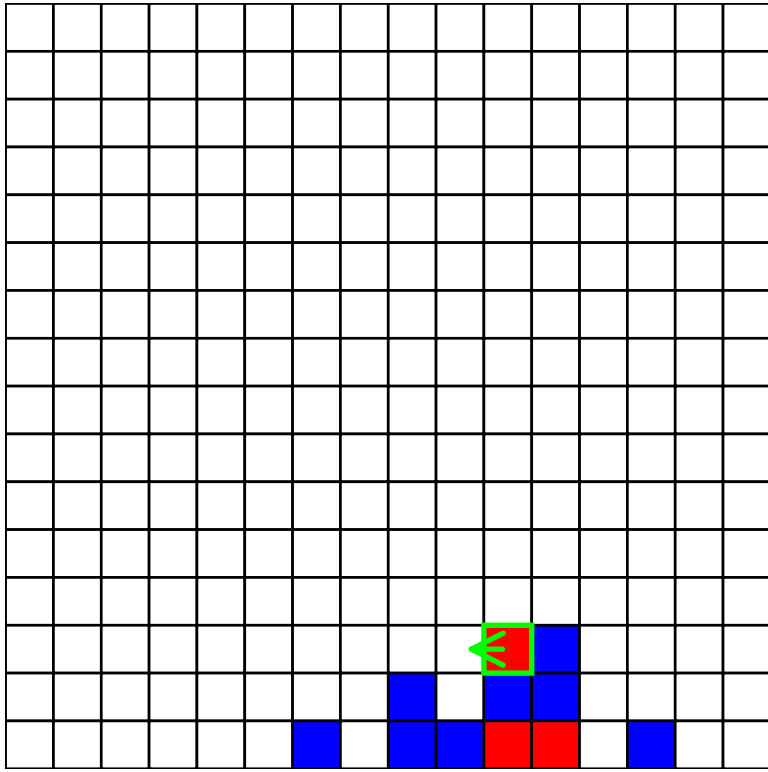
(MOVE 2)

Perform: exchange_right at position: (13, 10):



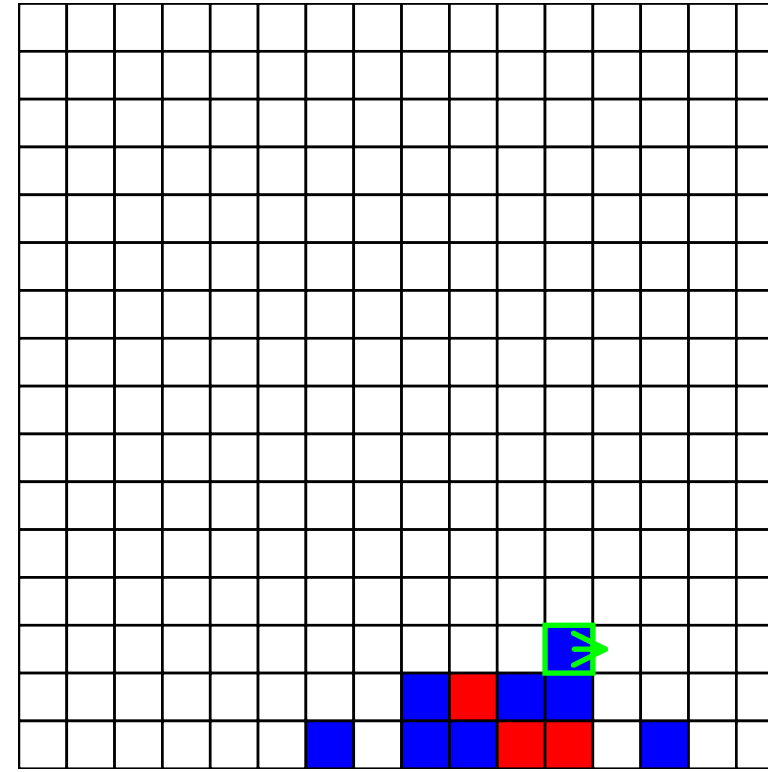
(MOVE 3)

Perform: move_left at position: (13, 10):



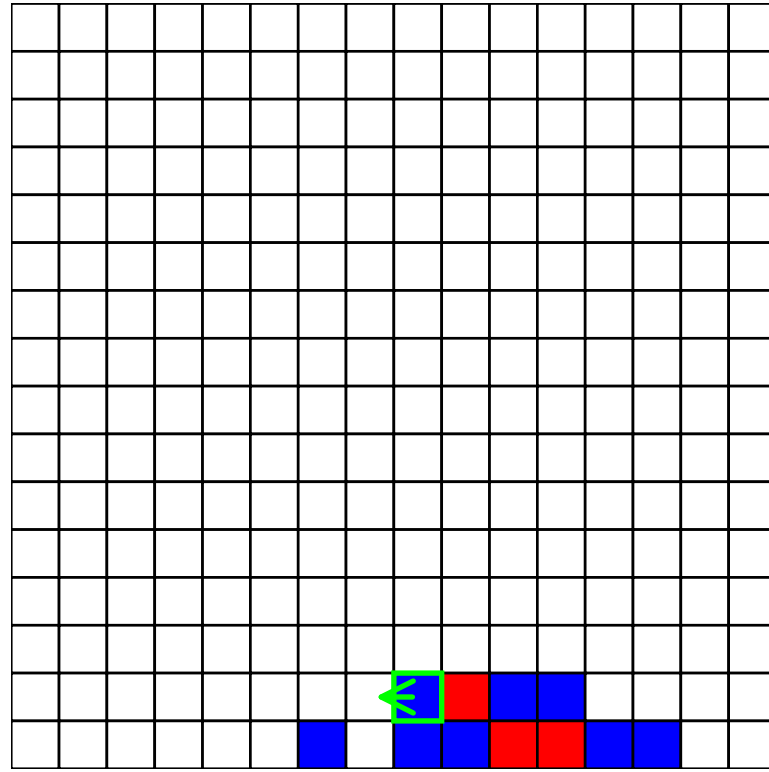
(MOVE 4)

Perform: move_right at position: (13, 11):

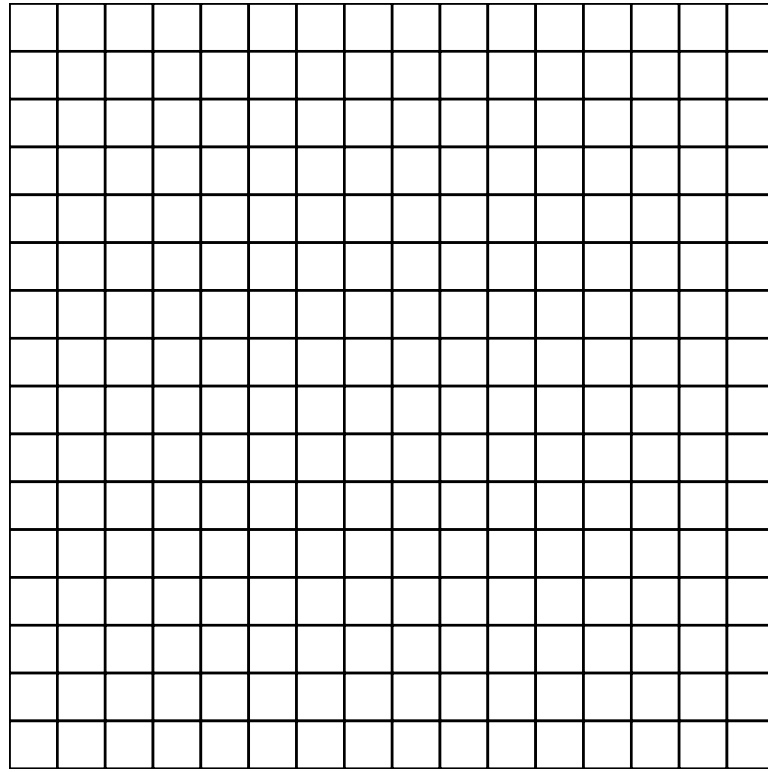


(MOVE 5)

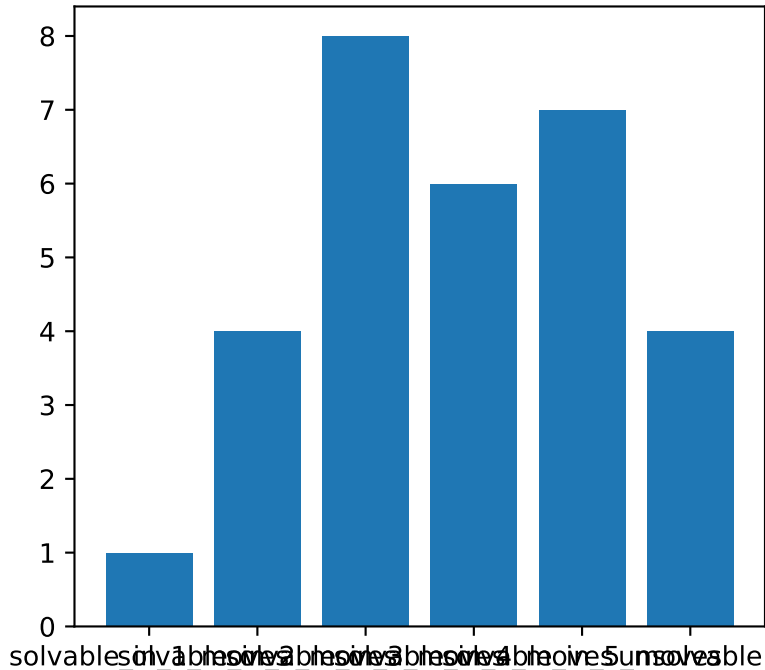
Perform: move_left at position: (14, 8):



FINAL STATE



Number of Puzzles Generated (Bar Chart)



Number of Puzzles Generated (Pie Chart)

