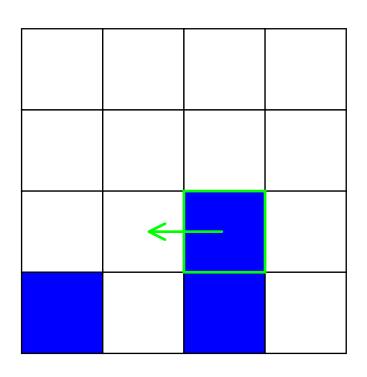
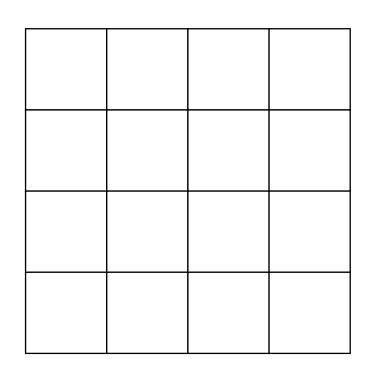
..::SOLUTION:...: Solvable in 1 moves (blocks positions: {(2, 2): <Color: blue>, (3, 0): <Color: blue>, (3, 2): <Color: blue>})

INITIAL STATE: (MOVE 1)
Perform: move_left at position: (2, 2):

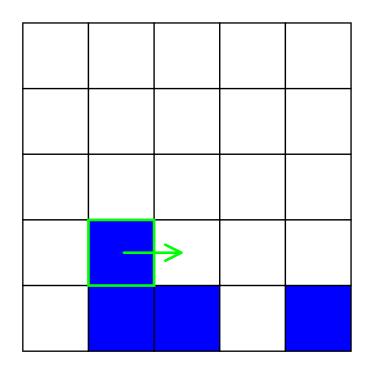


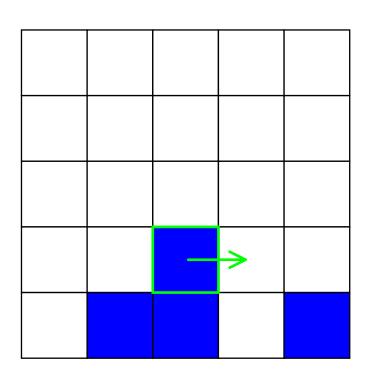


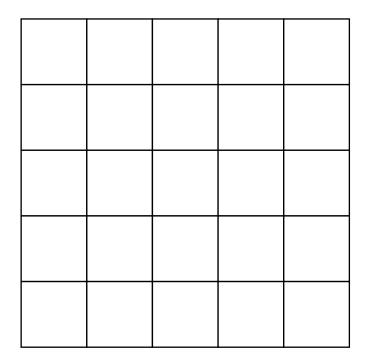
.:::SOLUTION::..: Solvable in 2 moves (blocks positions: $\{(3, 1): < Color: blue >, (4, 1): < Color: blue >, (4, 2): < Color: blue >, (4, 4): < Color: blue > \})$

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

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





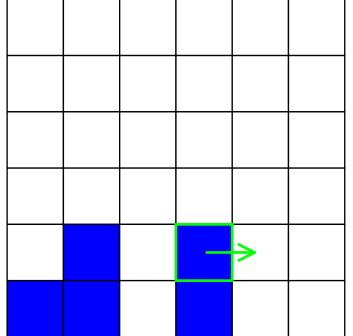


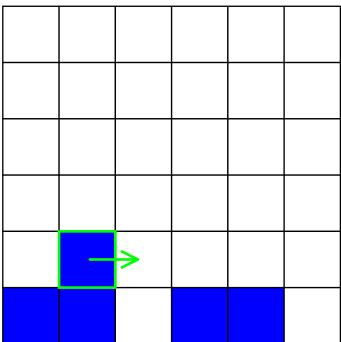
..::SOLUTION:...: Solvable in 2 moves (blocks positions: {(4, 1): <Color: blue>, (4, 3): <Color: blue>, (5, 0): <Color: blue>, (5, 1): <Color: blue>, (5, 3): <Color: blue>})

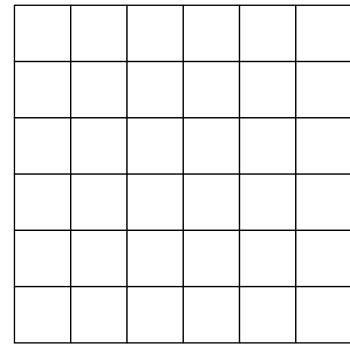
INITIAL STATE: (MOVE 1)
Perform: move_right at position: (4, 3):
Perform: move_right at position: (4, 1):

FINAL STATE

FINAL STATE

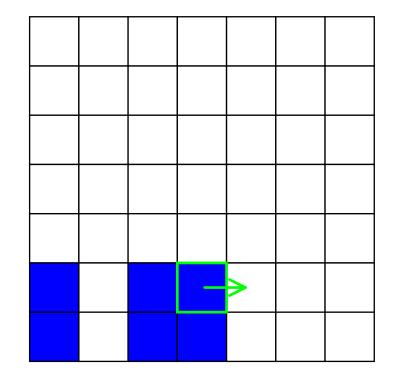




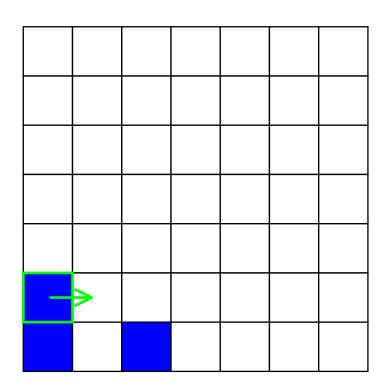


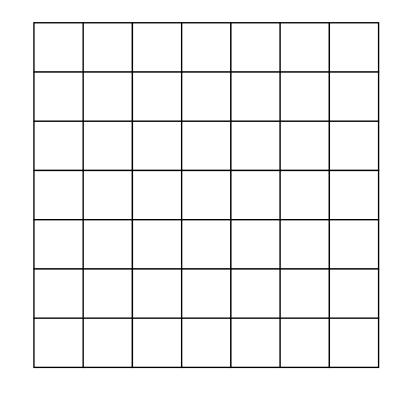
..::SOLUTION:...: Solvable in 2 moves (blocks positions: {(5, 0): <Color: blue>, (5, 2): <Color: blue>, (5, 3): <Color: blue>, (6, 0): <Color: blue>, (6, 2): <Color: blue>, (6, 3): <Color: blue>, (8, 3): <C

INITIAL STATE: (MOVE 1)
Perform: move_right at position: (5, 3):



(MOVE 2)
Perform: move_right at position: (5, 0):

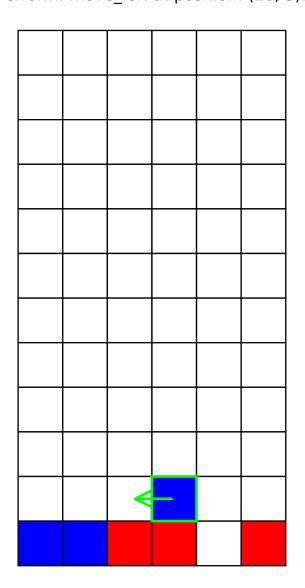


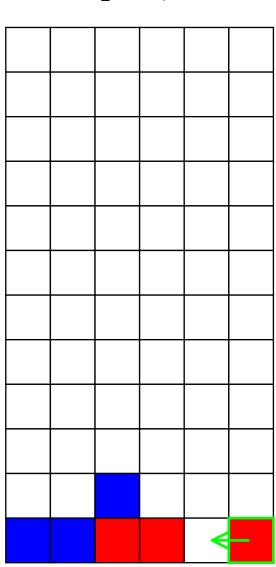


..::SOLUTION:...: Solvable in 2 moves (blocks positions: {(10, 3): <Color: blue>, (11, 0): <Color: blue>, (11, 1): <Color: blue>, (11, 2): <Color: red>, (11, 3): <Color: red>, (11, 5): <Color: blue>, (11, 1): <Color: blue>, (11, 2): <Color: red>, (11, 3): <Color: red>, (11, 5): <Color: blue>, (11, 1):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

INITIAL STATE: (MOVE 1)
Perform: move_left at position: (10, 3):

(MOVE 2)
Perform: move_left at position: (11, 5):

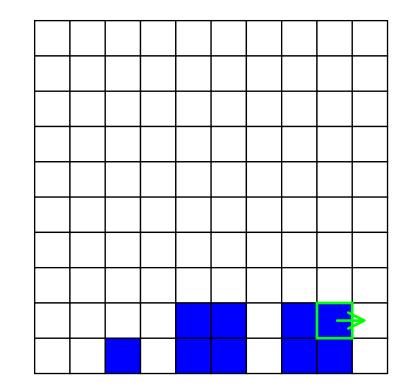




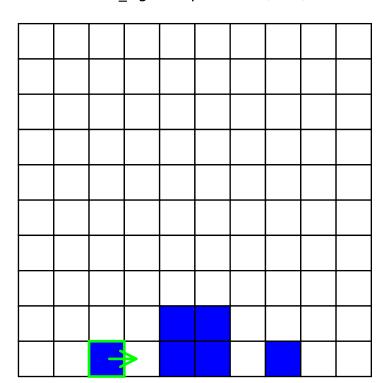
		-

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

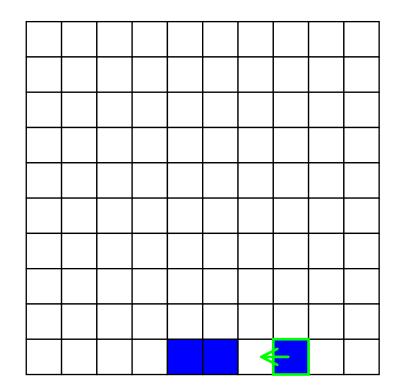
INITIAL STATE: (MOVE 1)
Perform: move_right at position: (8, 8):

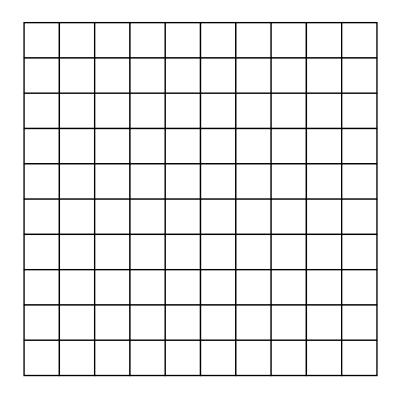


(MOVE 2)
Perform: move_right at position: (9, 2):



(MOVE 3)
Perform: move_left at position: (9, 7):





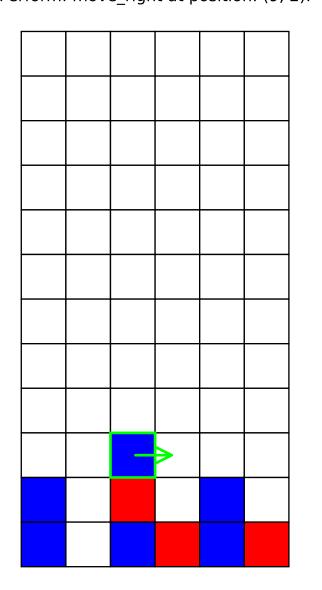
..::SOLUTION:...: Solvable in 3 moves (blocks positions: {(8, 3): <Color: red>, (9, 3): <Color: blue>, (10, 3): <Color: red>, (11, 3): <Color: blue>, (11, 4): <Color: blue>, (11, 5): <Color: red>}) INITIAL STATE: (MOVE 1)
Perform: move_left at position: (9, 3): (MOVE 2)
Perform: move_left at position: (10, 3): (MOVE 3)
Perform: move_left at position: (10, 5): FINAL STATE

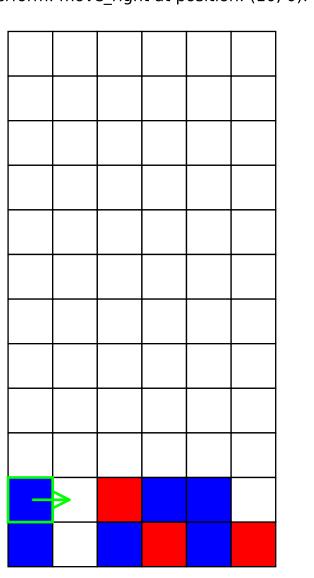
..::SOLUTION:...: Solvable in 3 moves (blocks positions: {(9, 2): <Color: blue>, (10, 0): <Color: blue>, (10, 4): <Color: blue>, (11, 0): <Color: blue>, (11, 2): <Color: blue>, (11, 3): <Color: red>, (11, 4): <Color: blue>, (11, 5)

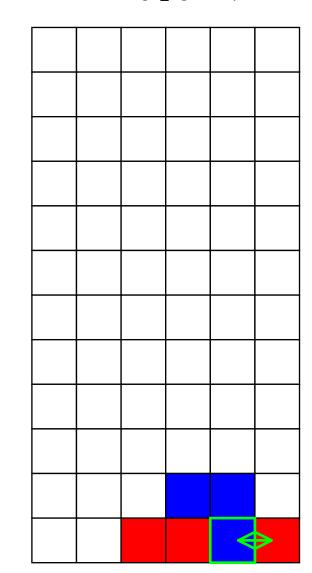
INITIAL STATE: (MOVE 1)
Perform: move_right at position: (9, 2):

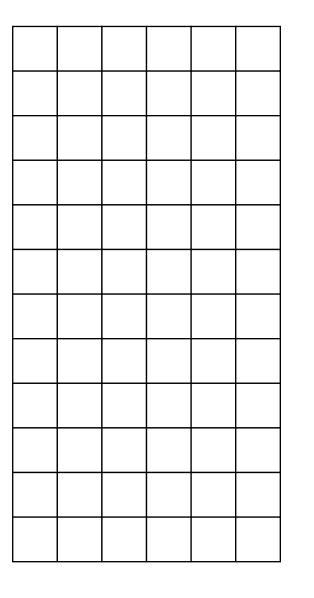
(MOVE 2)
Perform: move_right at position: (10, 0):

(MOVE 3)
Perform: exchange_right at position: (11, 4):



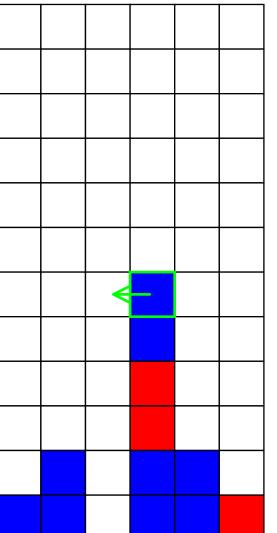


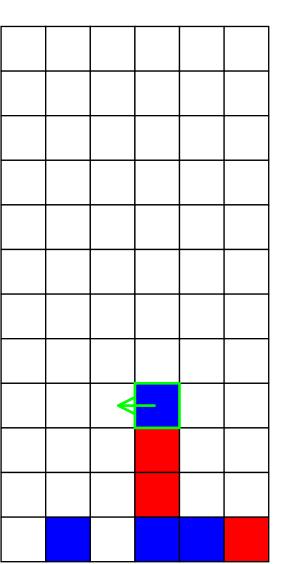


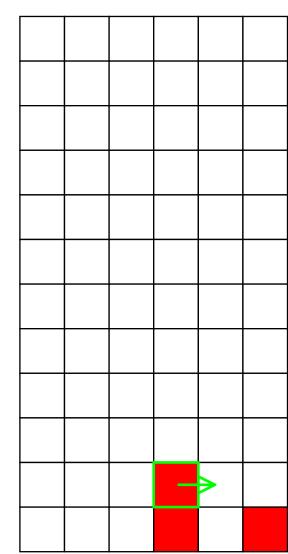


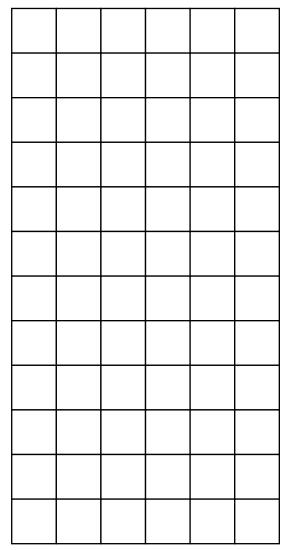
..::SOLUTION:...: Solvable in 3 moves (blocks positions: {(5, 3): <Color: red>, (6, 3): <Color: red>, (7, 3): <Color: blue>, (8, 3): <Color: red>, (9, 1): <Color: red>, (9, 3): <Color: blue>, (10, 1): <Color: red>, (10, 3): <Color: red>, (11, 1): <Color: blue>, (10, 1): <Color: red>, (10, 3): <Color: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

..::SOLUTION:...: Solvable in 3 moves (blocks positions: {(6, 3): <Color: blue>, (7, 3): <Color: blue>, (8, 3): <Color: red>, (9, 3): <Color: red>, (10, 1): <Color: blue>, (10, 3): <Color: blue>, (10, 4): <Color: blue>, (11, 0): <Color: blue>, (11, 1): <Color: blue>, (10, 1): <Color: blue>, (10, 3): <Color: blue>, (10, 4): <Color: blue>, (10, 4): <Color: blue>, (11, 0): <Color: blue>, (11, 1): <Color: blue>, (10, 3): <Color: blue>, (10, 3): <Color: blue>, (10, 4): <Color: blue>, (10, 4): <Color: blue>, (11, 0): <Color: blue>, (11, 1): <Color: blue>, (10, 3): <Color: blue>, (10, 4): <Color: blue>, (10, 4): <Color: blue>, (10, 4): <Color: blue>, (10, 4): <Color: blue>, (11, 0): <Color: blue>, (11, 1): <Color: blue>, (10, 3): <Color: blue>, (10, 4): <Color: blue>, (1

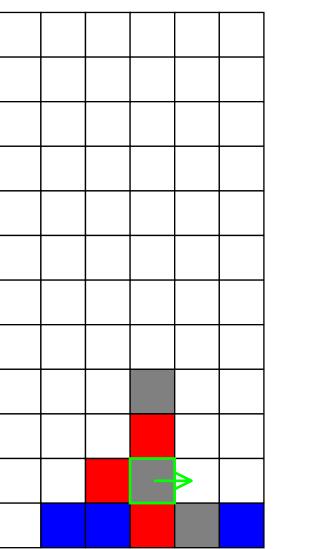


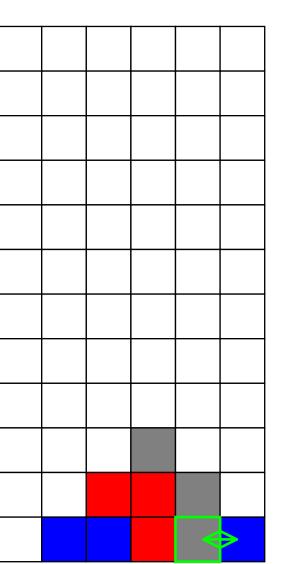


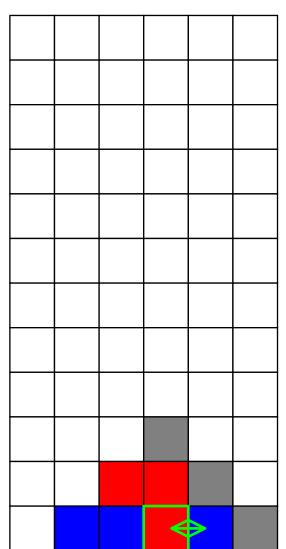


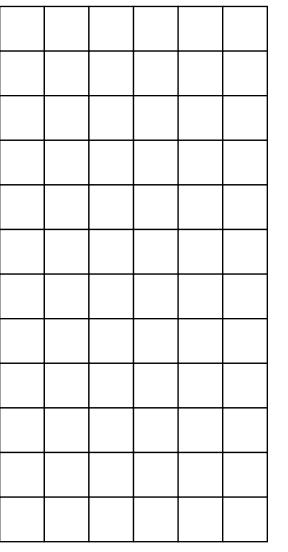


..::SOLUTION:...: Solvable in 3 moves (blocks positions: {(8, 3): <Color: gray>, (9, 3): <Color: red>, (10, 2): <Color: red>, (10, 3): <Color: gray>, (11, 1): <Color: blue>, (11, 2): <Color: blue>, (11, 3): <Color: red>, (11, 4): <Color: gray>, (11, 5): <INITIAL STATE: (MOVE 1)
Perform: move_right at position: (10, 3):
Perform: exchange_right at position: (11, 4):
Perform: exchange_right at position: (11, 3):
Perform: exchange_right at position: (11, 4):
Perform: exchange_right

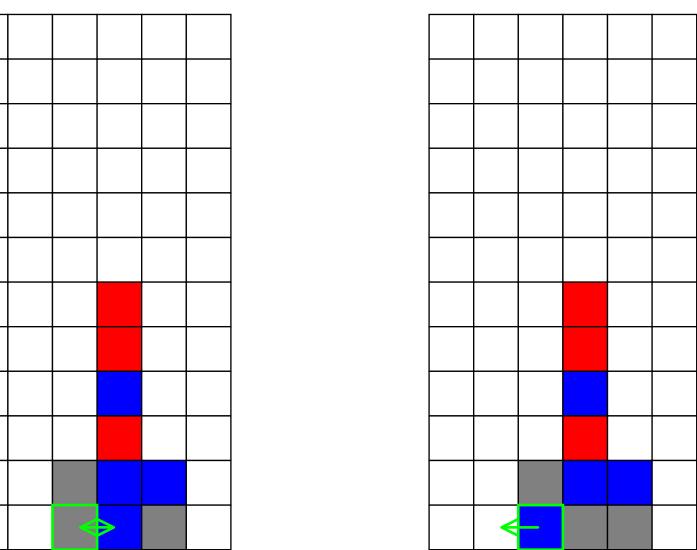


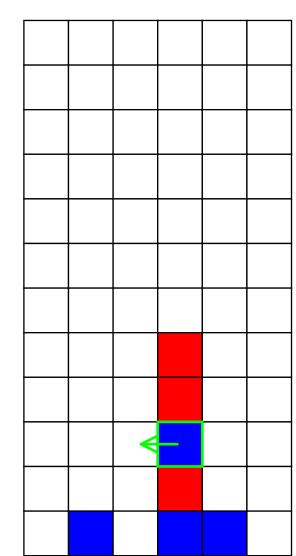


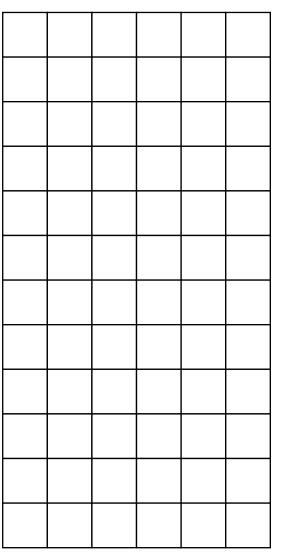




..::SOLUTION:...: Solvable in 3 moves (blocks positions: {(6, 3): <Color: red>, (7, 3): <Color: red>, (8, 3): <Color: blue>, (9, 3): <Color: red>, (10, 2): <Color: gray>, (10, 3): <Color: blue>, (10, 4): <Color: blue>, (11, 2): <Color: gray>, (11, 3): <Color: blue>, (10, 4): <Color: blue>, (10, 4): 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

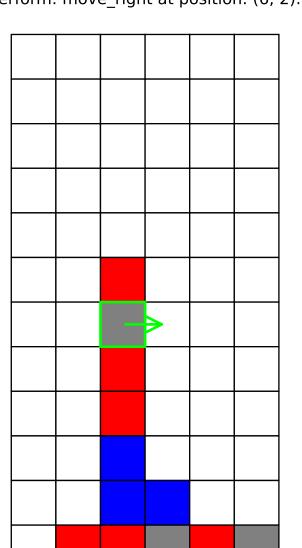




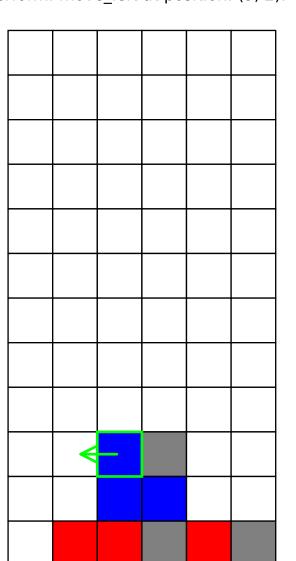


..::SOLUTION:...: Solvable in 3 moves (blocks positions: {(5, 2): <Color: red>, (6, 2): <Color: gray>, (7, 2): <Color: red>, (8, 2): <Color: red>, (9, 2): <Color: blue>, (10, 2): <Color: blue>, (10, 3): <Color: blue>, (11, 1): <Color: red>, (11, 2): <Color: red>, (11, 2): <Color: blue>, (10, 2): <Color: blue>, (10, 3): <Color: blue>, (11, 1): <Color: red>, (11, 2): <Color: blue>, (11, 2): <Color: blue>, (12, 2): <Color: blue>, (13, 2): <Color: blue>, (14, 2): <Color: blue>, (15, 2)

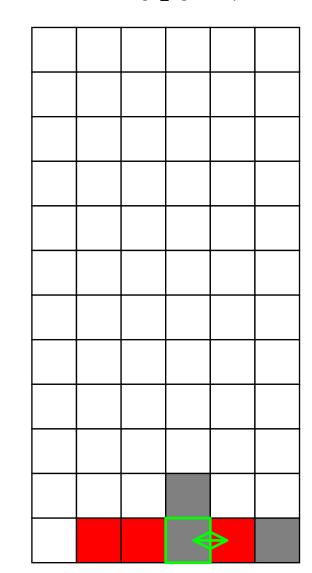
INITIAL STATE: (MOVE 1)
Perform: move_right at position: (6, 2):



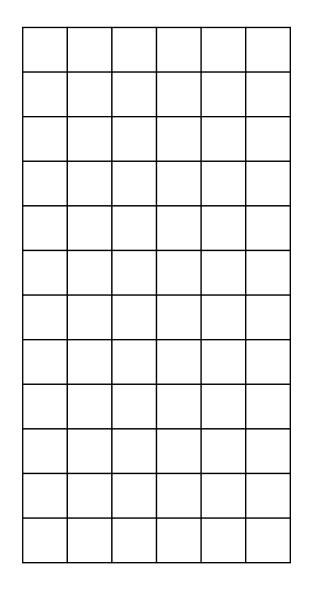
(MOVE 2)
Perform: move_left at position: (9, 2):



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



FINAL STATE



..::SOLUTION:...: Solvable in 4 moves (blocks positions: {(7, 2): <Color: blue>, (7, 4): <Color: blue>, (8, 0): <Color: blue>, (8, 2): <Color: blue>, (8, 4): <Color: blue>, (8, 6): <Color: blue>, (8, 8): <Color: blue>}) (MOVE 2)
Perform: move_right at position: (7, 4): (MOVE 3)
Perform: move_right at position: (8, 0): (MOVE 4)
Perform: move_right at position: (7, 2): INITIAL STATE: (MOVE 1)
Perform: move_left at position: (7, 8): FINAL STATE

..::SOLUTION:...: Solvable in 4 moves (blocks positions: $\{(9, 1): < Color: blue>, (9, 2): < Color: blue>, (10, 1): < Color: blue>, (10, 2): < Color: blue>, (10, 4): < Color: blue>, (10, 5): < Color: blue>, (10, 7): < Color: blue>, (10, 9): < Color: blue>, (10, 1): < Color: blue>, (10, 2): < Color: blue>, (10, 4): < Color: blue>, (10, 5): < Color: blue>, (10, 7): < Color: blue>, (10, 1): < Co$ (MOVE 2)
Perform: move_left at position: (9, 4): (MOVE 3)
Perform: move_right at position: (10, 5): INITIAL STATE: (MOVE 1)
Perform: move_left at position: (9, 1): (MOVE 4)
Perform: move_left at position: (10, 9): FINAL STATE

..::SOLUTION:...: Solvable in 4 moves (blocks positions: {(10, 2): <Color: blue>, (10, 4): <Color: blue>, (11, 1): <Color: blue>, (11, 4): <Color: blue>, (11, 4): <Color: blue>, (11, 6): <Color: blue>, (11, 8): <Color: blue>, (11, 8): <Color: blue>, (11, 1): <Color: blue>, (11, 2): <Color: blu (MOVE 4)
Perform: move_right at position: (10, 6): (MOVE 2)
Perform: move_right at position: (10, 9): (MOVE 3)
Perform: move_right at position: (11, 4): INITIAL STATE: (MOVE 1) Perform: move_right at position: (10, 2): FINAL STATE

..::SOLUTION:...: Solvable in 4 moves (blocks positions: {(11, 1): <Color: blue>, (11, 3): <Color: blue>, (11, 8): <Color: blue>, (11, 9): <Color: blue>, (12, 3): <Color: blue>, (12, 5): <Color: blue>, (12, 6): <Color: blue>, (12, 8): <Color: blue>, (12, 8): <Color: blue>, (12, 1): <Color: blu (MOVE 2)
Perform: move_right at position: (11, 9): (MOVE 3)
Perform: move_right at position: (12, 3): INITIAL STATE: (MOVE 1) (MOVE 4)
Perform: move_left at position: (12, 8): Perform: move_right at position: (11, 1): FINAL STATE

..::SOLUTION:...: Solvable in 4 moves (blocks positions: {(5, 3): <Color: red>, (6, 3): <Color: blue>, (7, 3): <Color: blue>, (9, 3): <Color: blue>, (10, 3): <Color: blue>, (11, 3): <Color: red>, (11, 4): <Color: blue>}) (MOVE 2)
Perform: move_right at position: (9, 3): (MOVE 3)
Perform: exchange_right at position: (11, 3): (MOVE 4)
Perform: exchange_right at position: (9, 3): INITIAL STATE: (MOVE 1) Perform: move_right at position: (5, 3): FINAL STATE

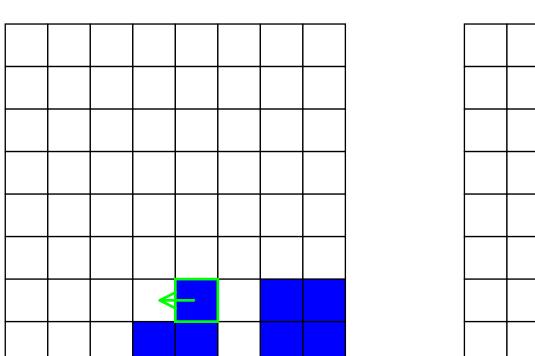
..::SOLUTION:...: Solvable in 4 moves (blocks positions: {(9, 1): <Color: red>, (9, 3): <Color: blue>, (10, 0): <Color: blue>, (10, 4): <Color: red>, (11, 0): <Color: red>, (11, 1): <Color: blue>, (11, 3): <Color: blue>, (11, 4): <Color: blue>}) (MOVE 3)
Perform: move_right at position: (11, 0): (MOVE 4)
Perform: move_right at position: (11, 1): (MOVE 2)
Perform: move_right at position: (10, 1): INITIAL STATE: (MOVE 1) Perform: move_right at position: (11, 1): FINAL STATE

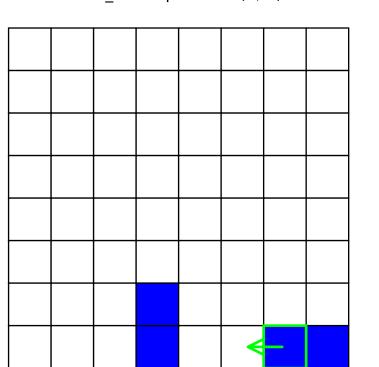
.:::SOLUTION::..: Solvable in 5 moves (blocks positions: {(6, 4): <Color: blue>, (6, 6): <Color: blue>, (6, 7): <Color: blue>, (7, 3): <Color: blue>, (7, 4): <Color: blue>, (7, 6): <Color: blue>, (7, 7): <Color: blue>})

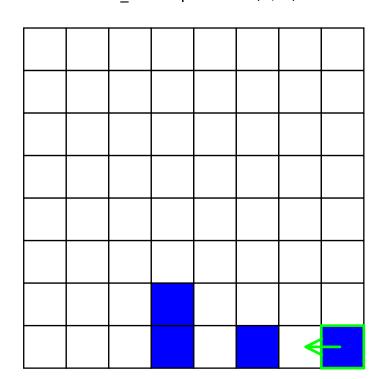
INITIAL STATE: (MOVE 1)
Perform: move_left at position: (6, 4):

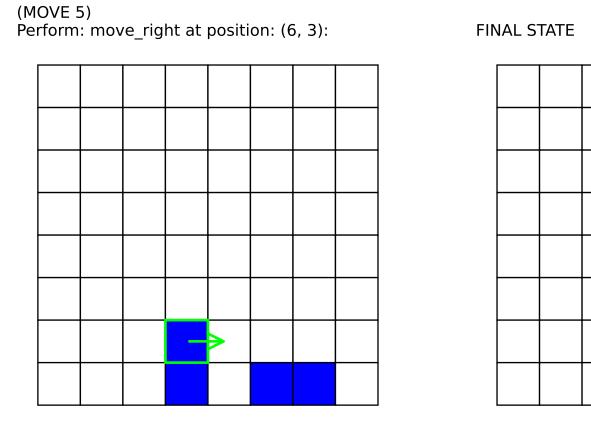
(MOVE 2)
Perform: move_left at position: (7, 6):
Perform: move_left at position: (7, 6):

(MOVE 4)
Perform: move_left at position: (7, 6):









..::SOLUTION:...: Solvable in 5 moves (blocks positions: {(9, 2): <Color: blue>, (10, 1): <Color: red>, (11, 0): <Color: blue>, (11, 1): <Color: red>, (11, 2): <Color: gray>, (11, 3): <Color: gray>, (11, 3): <Color: gray>, (11, 4): <Color: red>, (11, 5): <Color: gray>}) INITIAL STATE: (MOVE 1) (MOVE 2)
Perform: exchange_right at position: (10, 1): (MOVE 3)
Perform: exchange_right at position: (11, 3): (MOVE 4)
Perform: exchange_right at position: (11, 2): (MOVE 5)
Perform: move_left at position: (10, 3): Perform: exchange_right at position: (9, 2): FINAL STATE

