

Grid has 5 rows, 5 columns

Start position: (2, 2)

Goal position: (3, 0)

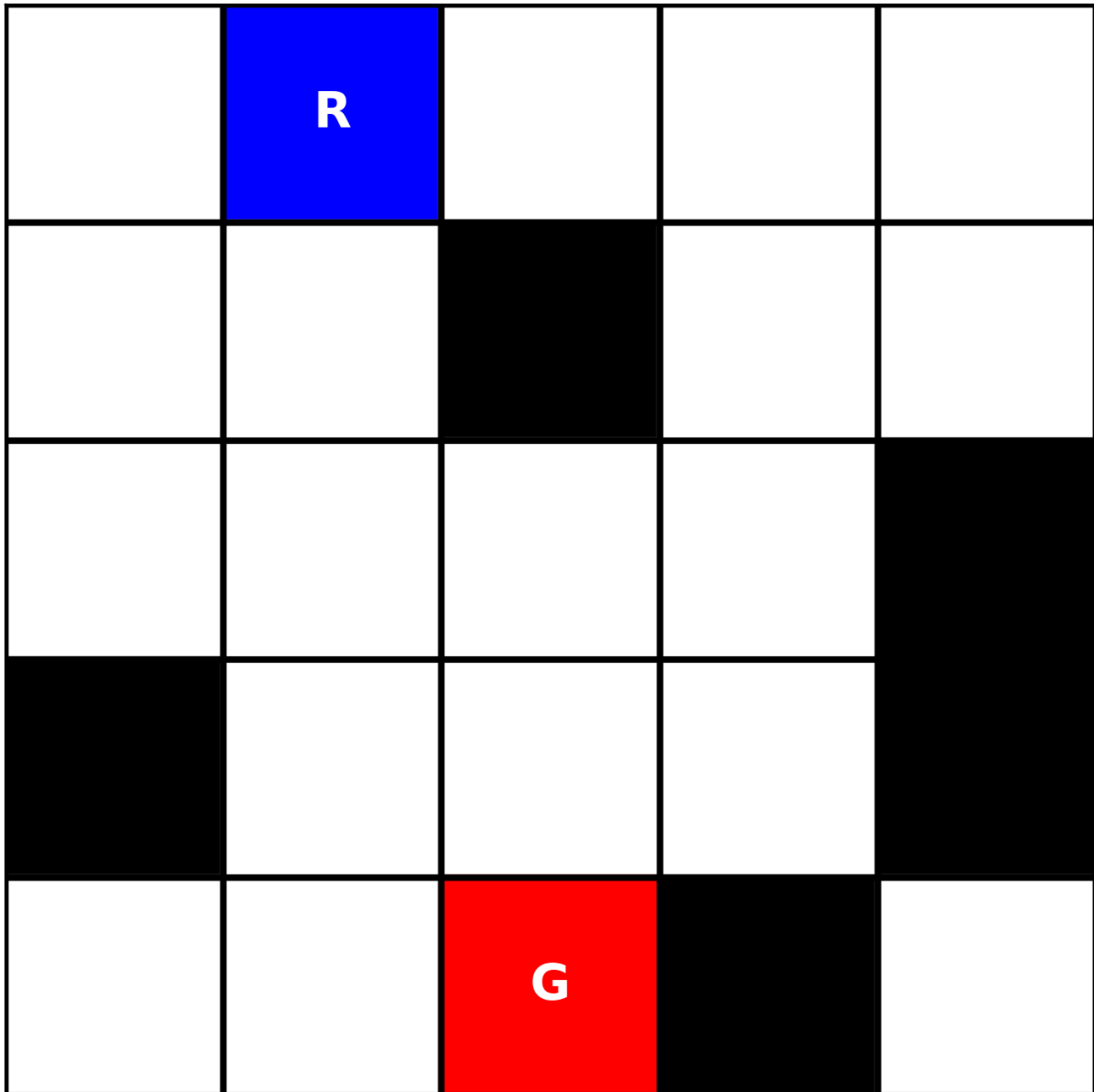
Obstacle positions: (0, 1), (1, 3), (3, 2), (3, 4), (4,3)

SOLUTION:

(MOVE-LEFT-FROM-TO ROBOT1 (2, 2) (2, 1))

(MOVE-LEFT-FROM-TO ROBOT1 (2, 1) (2, 0))

(MOVE-DOWN-FROM-TO ROBOT1 (2, 0) (3, 0))



Grid has 5 rows, 5 columns

Start position: (0,1)

Goal position: (4, 2)

Obstacle positions: (1, 2), (2, 4), (3, 4), (3, 0), (4,3)

SOLUTION:

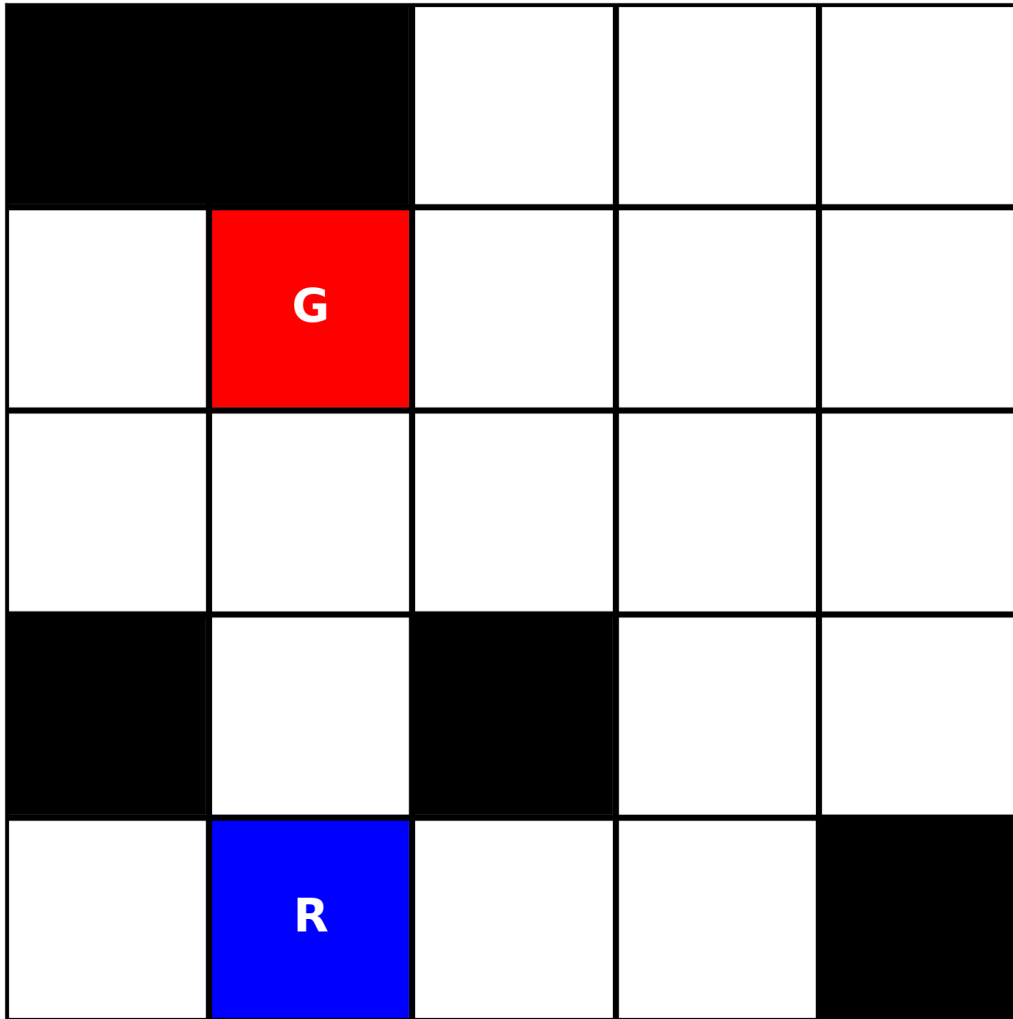
(MOVE-DOWN-FROM-TO ROBOT1 (0, 1) (1, 1))

(MOVE-DOWN-FROM-TO ROBOT1 (1, 1) (2, 1))

(MOVE-DOWN-FROM-TO ROBOT1 (2, 1) (3, 1))

(MOVE-DOWN-FROM-TO ROBOT1 (3, 1) (4, 1))

(MOVE-RIGHT-FROM-TO ROBOT1 (4, 1) (4, 2))



Grid has 5 rows, 5 columns

Start position: (4,1)

Goal position: (0, 1)

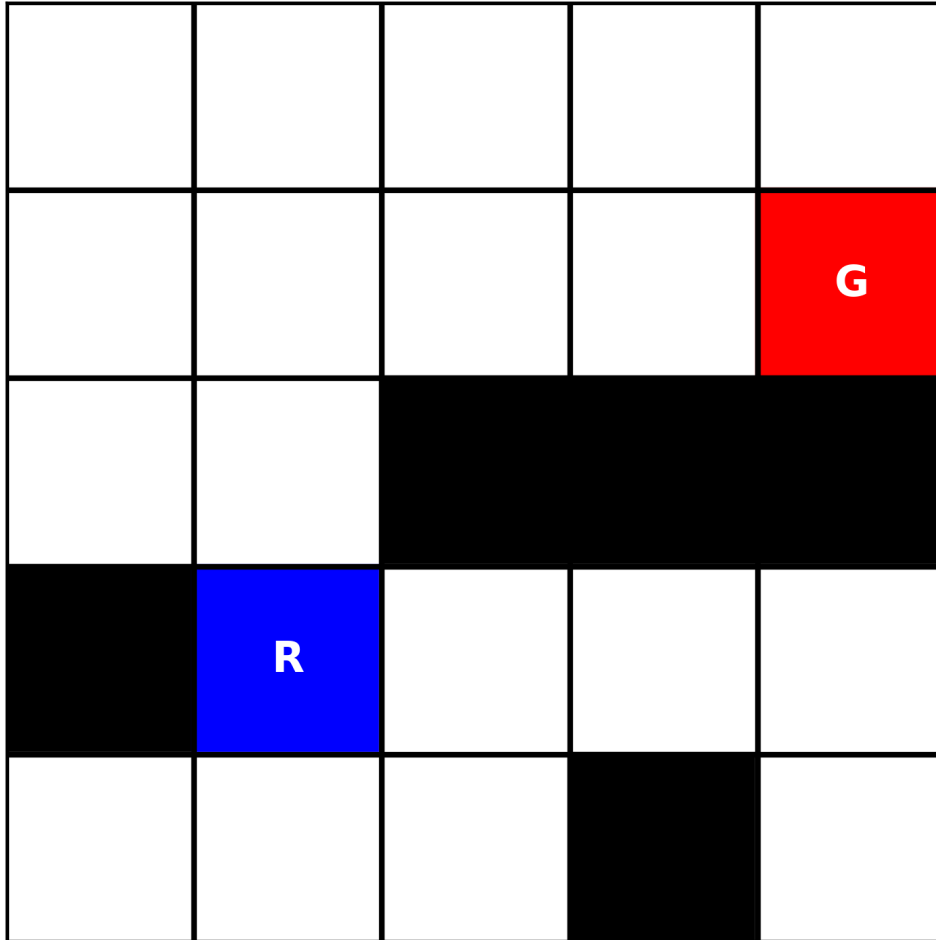
Obstacle positions: (2, 0), (2, 2), (4, 4)

SOLUTION:

(MOVE-UP-FROM-TO ROBOT1 (4, 1) (3, 1))

(MOVE-UP-FROM-TO ROBOT1 (3, 1) (2, 1))

(MOVE-UP-FROM-TO ROBOT1 (2, 1) (1, 1))



Grid has 5 rows, 5 columns

Start position: (3,1)

Goal position: (1, 4)

Obstacle positions: (3, 0), (2, 2), (2, 3), (2,4), (4,3)

SOLUTION:

(MOVE-UP-FROM-TO ROBOT1 (4, 1) (3, 1))

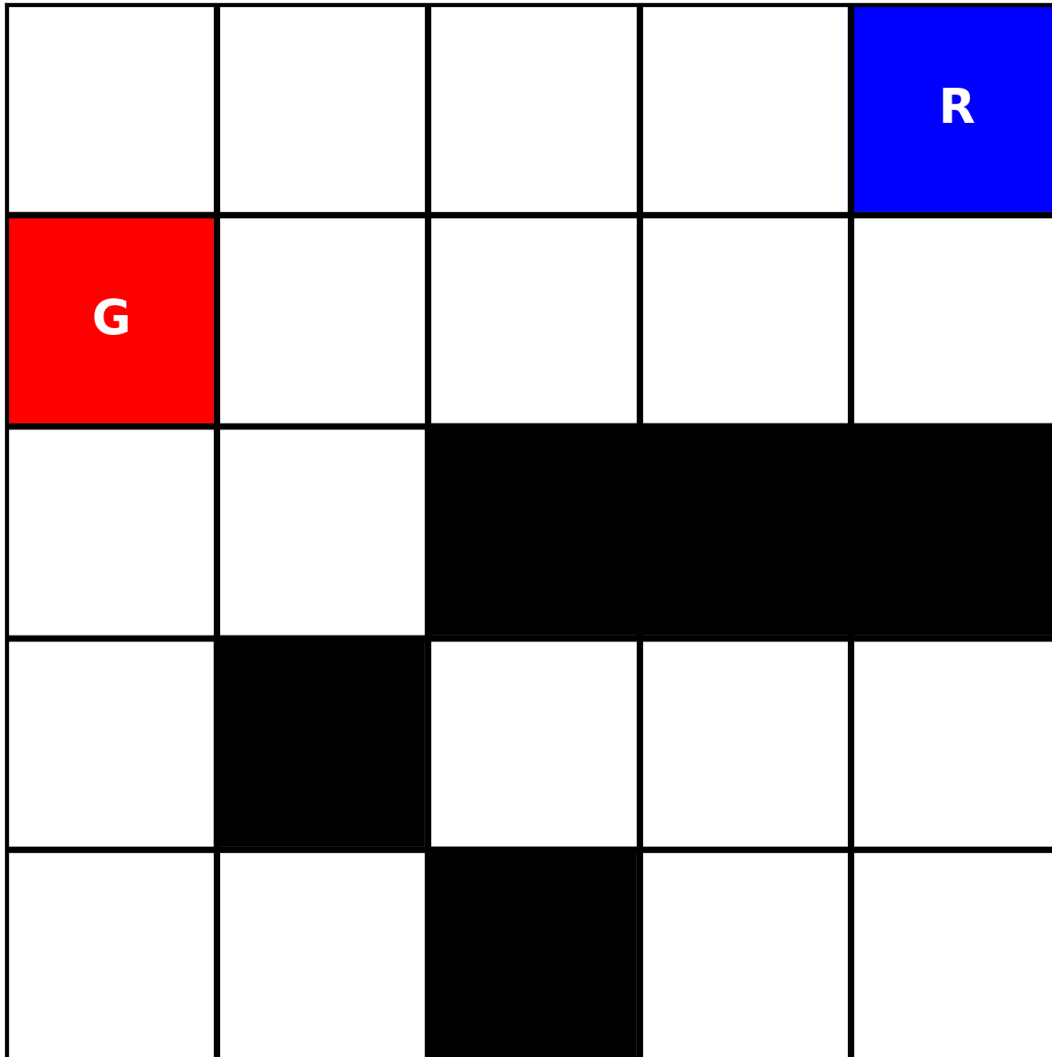
(MOVE-UP-FROM-TO ROBOT1 (3, 1) (2, 1))

(MOVE-UP-FROM-TO ROBOT1 (2, 1) (1, 1))

(MOVE-RIGHT-FROM-TO ROBOT1 (1, 1) (1, 2))

(MOVE-RIGHT-FROM-TO ROBOT1 (1, 2) (1, 3))

(MOVE-RIGHT-FROM-TO ROBOT1 (2, 3) (1, 4))



Grid has 5 rows, 5 columns

Start position: (0, 4)

Goal position: (1, 0)

Obstacle positions: (3, 1), (2, 2), (2, 3), (2,4), (4,2)

SOLUTION:

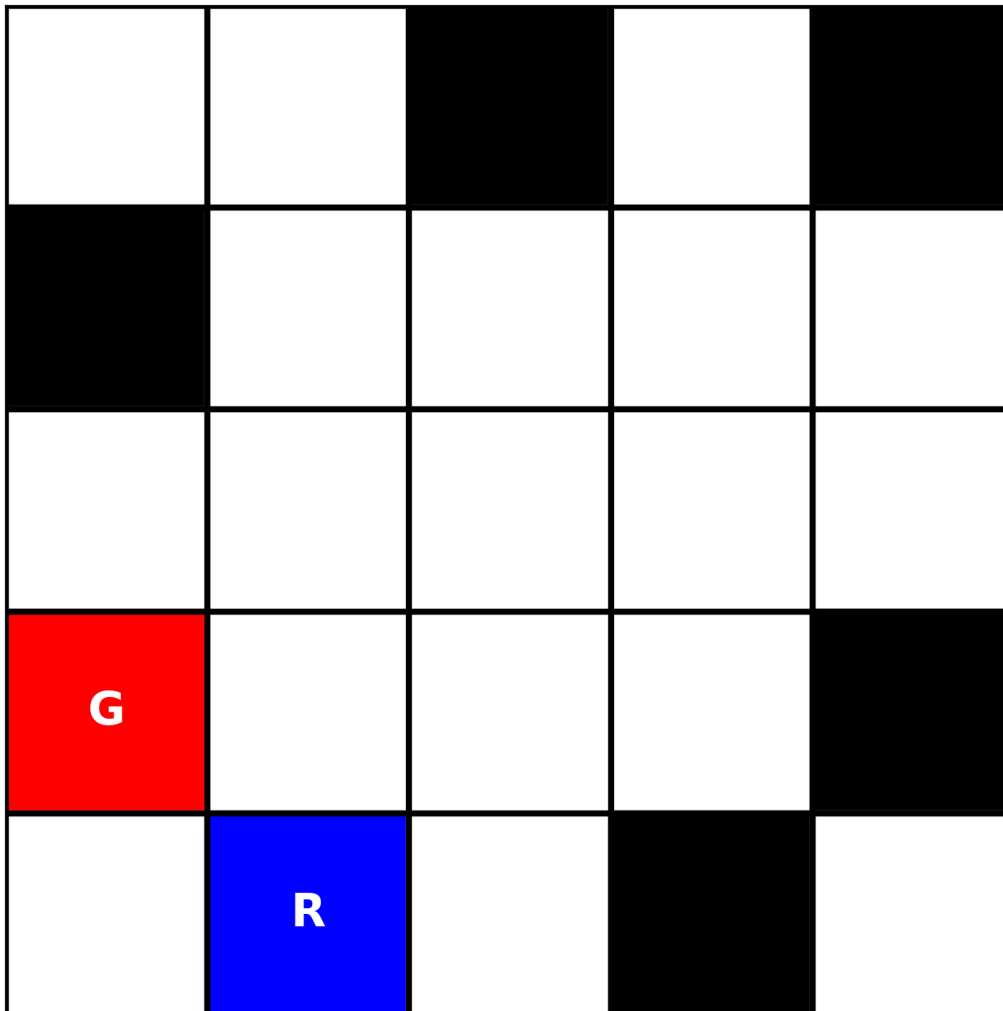
(MOVE-LEFT-FROM-TO ROBOT1 (0, 4) (0, 3))

(MOVE-LEFT-FROM-TO ROBOT1 (0, 3) (0, 2))

(MOVE-LEFT-FROM-TO ROBOT1 (0, 2) (0, 1))

(MOVE-LEFT-FROM-TO ROBOT1 (0, 1) (0, 0))

(MOVE-DOWN-FROM-TO ROBOT1 (0, 0) (1, 0))



Grid has 5 rows, 5 columns

Start position: (4, 1)

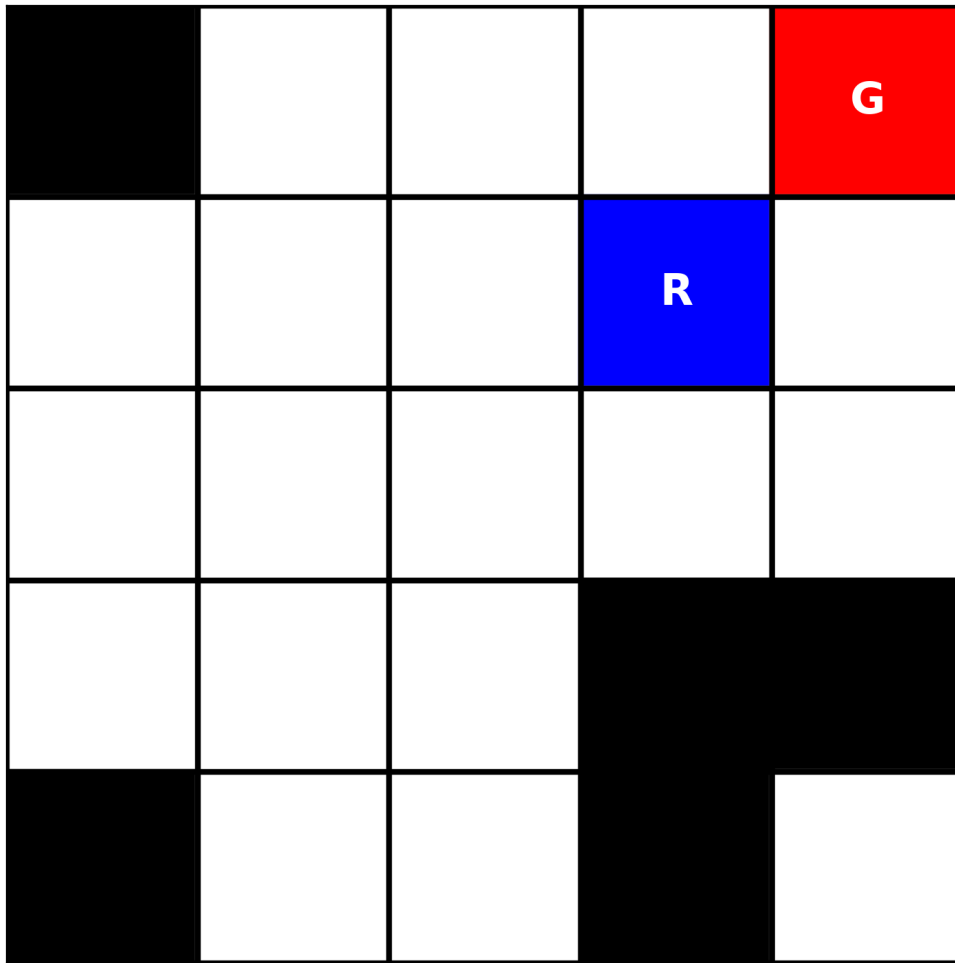
Goal position: (3, 0)

Obstacle positions: (0, 2), (0, 4), (1, 0), (3, 4), (4, 3)

SOLUTION:

(MOVE-LEFT-FROM-TO ROBOT1 (4, 1) (4, 0))

(MOVE-TOP-FROM-TO ROBOT1 (4, 0) (3, 0))



Grid has 5 rows, 5 columns

Start position: (1, 3)

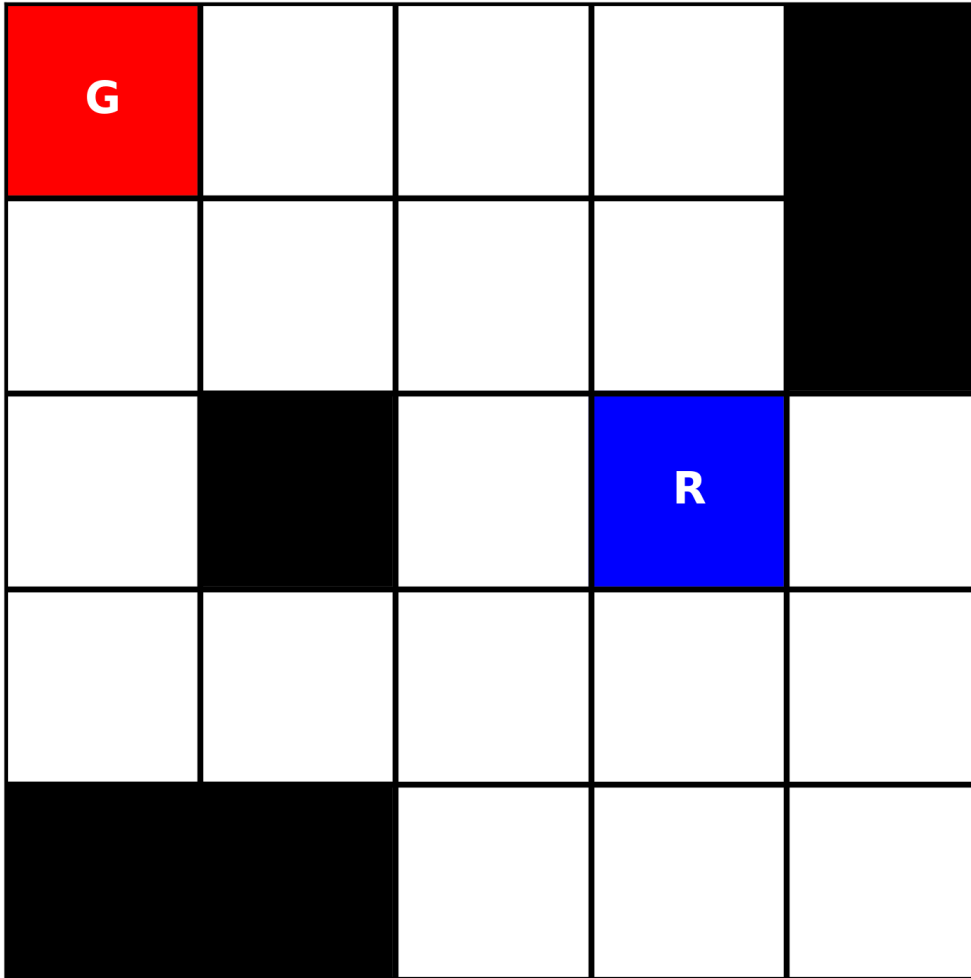
Goal position: (0, 4)

Obstacle positions: (0, 0), (4, 0), (4, 3), (3, 3), (3, 4)

SOLUTION:

(MOVE-RIGHT-FROM-TO ROBOT1 (1, 3) (1, 4))

(MOVE-TOP-FROM-TO ROBOT1 (1, 4) (0, 4))



Grid has 5 rows, 5 columns

Start position: (2, 3)

Goal position: (0, 0)

Obstacle positions: (2, 1), (0, 4), (1, 4), (4, 0), (4, 1)

SOLUTION:

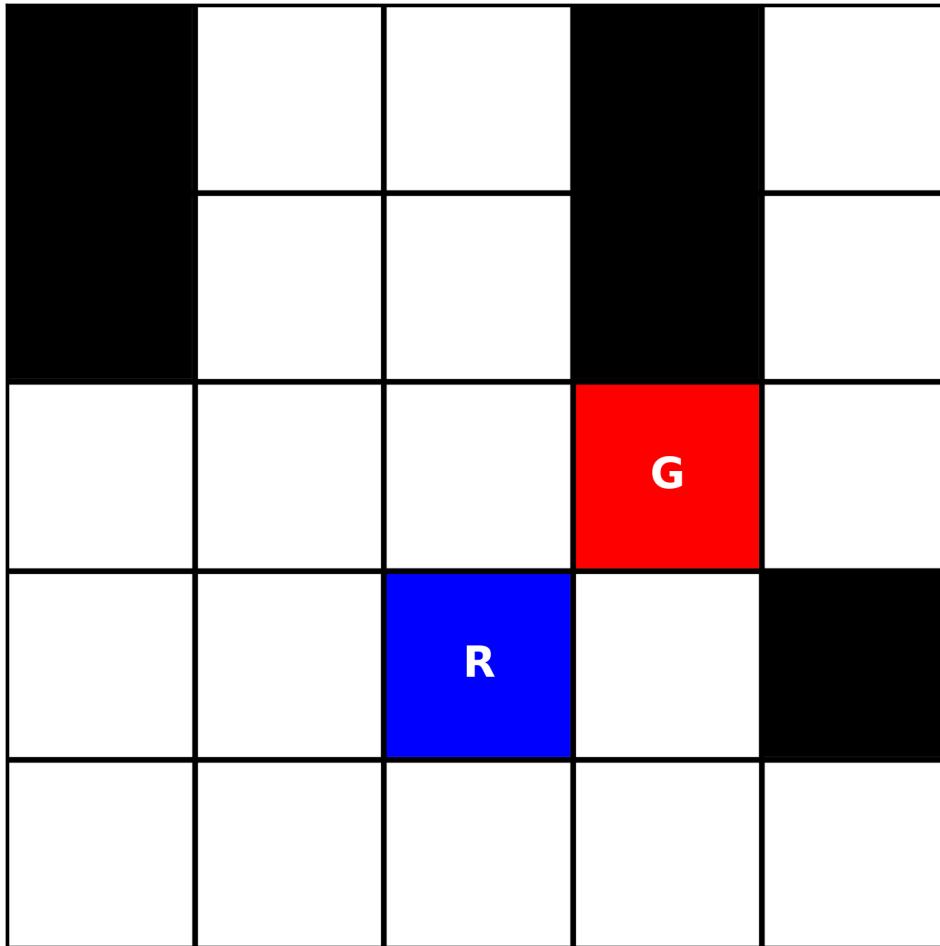
(MOVE-TOP-FROM-TO ROBOT1 (2, 3) (1, 3))

(MOVE-TOP-FROM-TO ROBOT1 (1, 3) (0, 3))

(MOVE-LEFT-FROM-TO ROBOT1 (0, 3) (0, 2))

(MOVE-LEFT-FROM-TO ROBOT1 (0, 2) (0, 1))

(MOVE-LEFT-FROM-TO ROBOT1 (0, 1) (0, 0))



Grid has 5 rows, 5 columns

Start position: (2, 3)

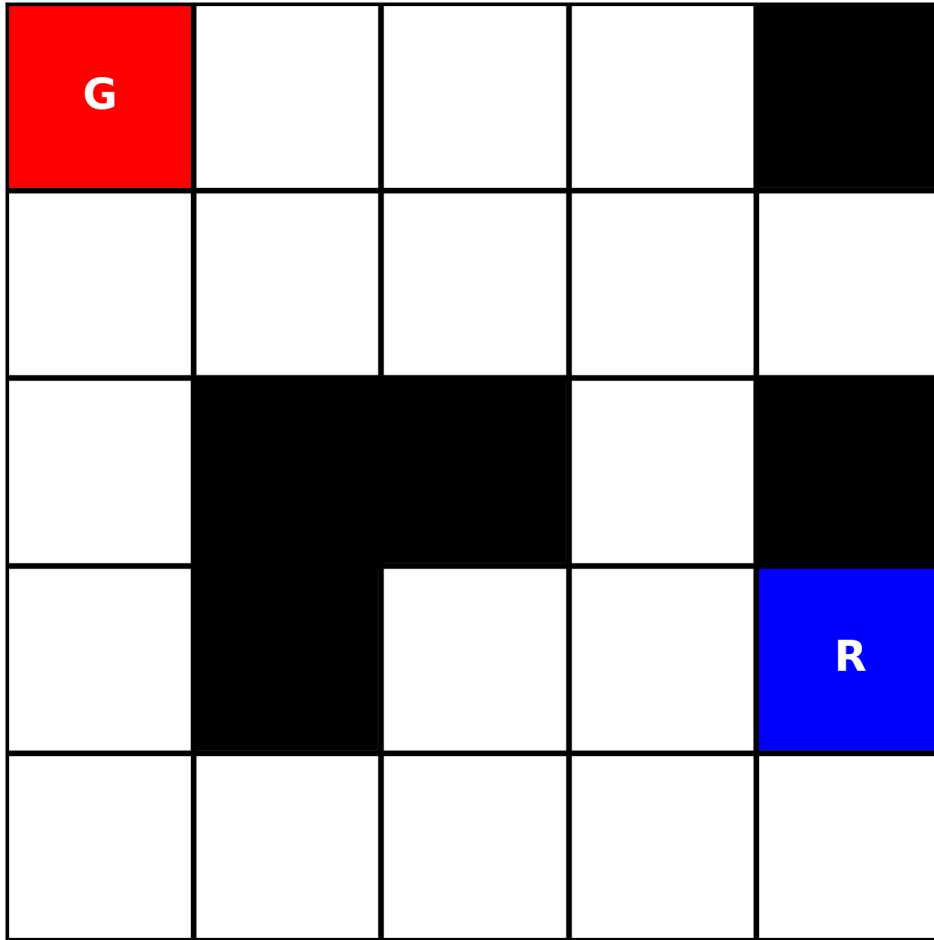
Goal position: (3, 2)

Obstacle positions: (0, 0), (1, 0), (0, 3), (1, 3), (3, 4)

SOLUTION:

(MOVE-RIGHT-FROM-TO ROBOT1 (3, 2) (3, 3))

(MOVE-TOP-FROM-TO ROBOT1 (3, 3) (2, 3))



Grid has 5 rows, 5 columns

Start position: (3, 4)

Goal position: (0, 0)

Obstacle positions: (0, 4), (2, 1), (2, 2), (2, 4), (3, 1)

SOLUTION:

(MOVE-LEFT-FROM-TO ROBOT1 (3, 4) (2, 4))

(MOVE-TOP-FROM-TO ROBOT1 (2, 4) (2, 3))

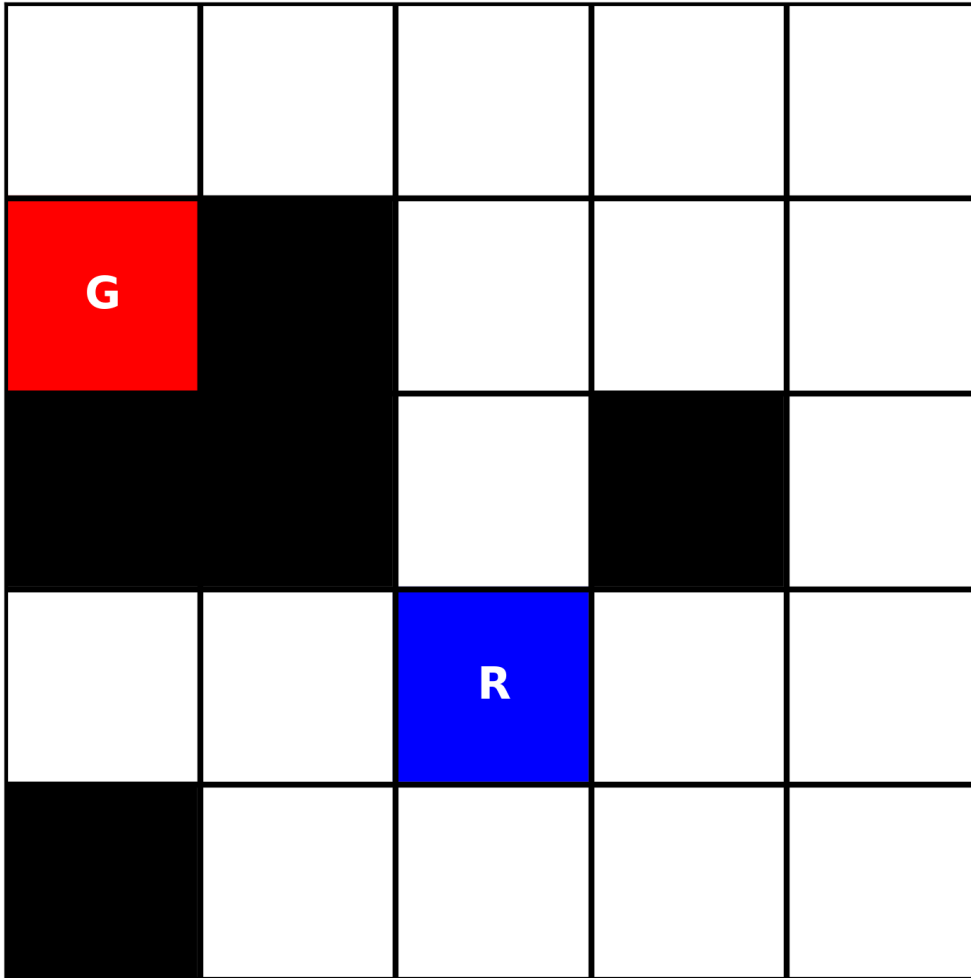
(MOVE-TOP-FROM-TO ROBOT1 (2, 3) (1, 3))

(MOVE-TOP-FROM-TO ROBOT1 (1, 3) (0, 3))

(MOVE-LEFT-FROM-TO ROBOT1 (0, 3) (0, 2))

(MOVE-LEFT-FROM-TO ROBOT1 (0, 2) (0, 1))

(MOVE-LEFT-FROM-TO ROBOT1 (0, 1) (0, 0))



Grid has 5 rows, 5 columns

Start position: (3, 2)

Goal position: (1, 0)

Obstacle positions: (2, 0), (2, 1), (2, 3), (1, 1), (4, 0)

SOLUTION:

(MOVE-TOP-FROM-TO ROBOT1 (3, 2) (2, 2))

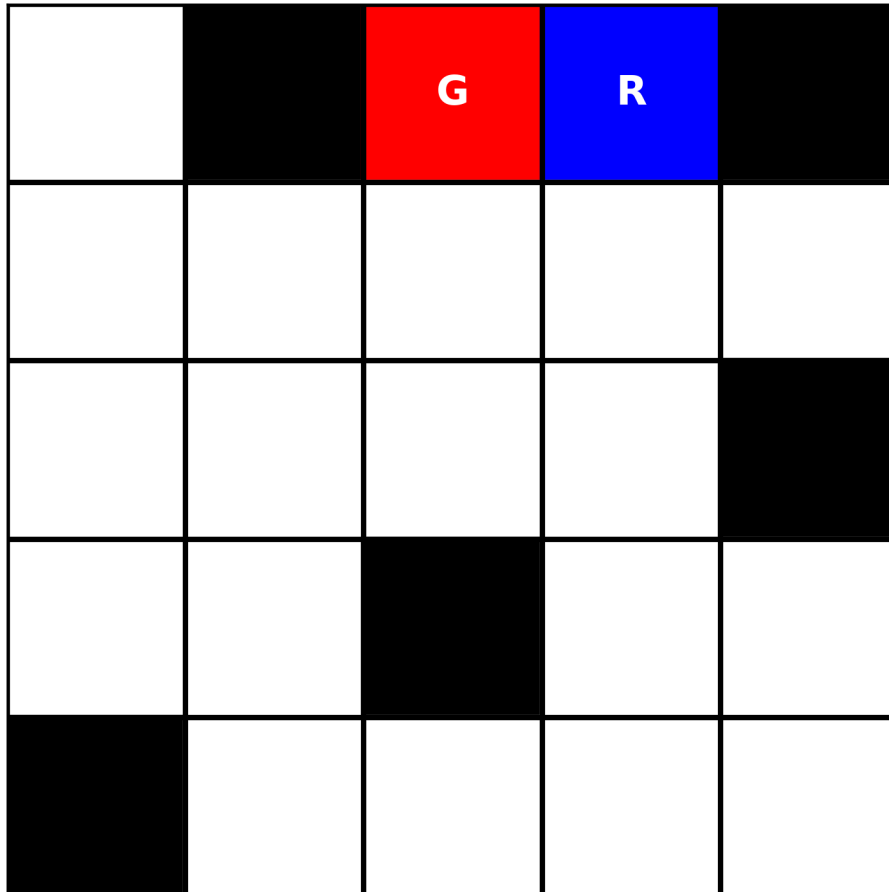
(MOVE-TOP-FROM-TO ROBOT1 (2, 2) (1, 2))

(MOVE-TOP-FROM-TO ROBOT1 (1, 2) (0, 2))

(MOVE-LEFT-FROM-TO ROBOT1 (0, 2) (0, 1))

(MOVE-LEFT-FROM-TO ROBOT1 (0, 1) (0, 0))

(MOVE-DOWN-FROM-TO ROBOT1 (0, 0) (0, 1))



Grid has 5 rows, 5 columns

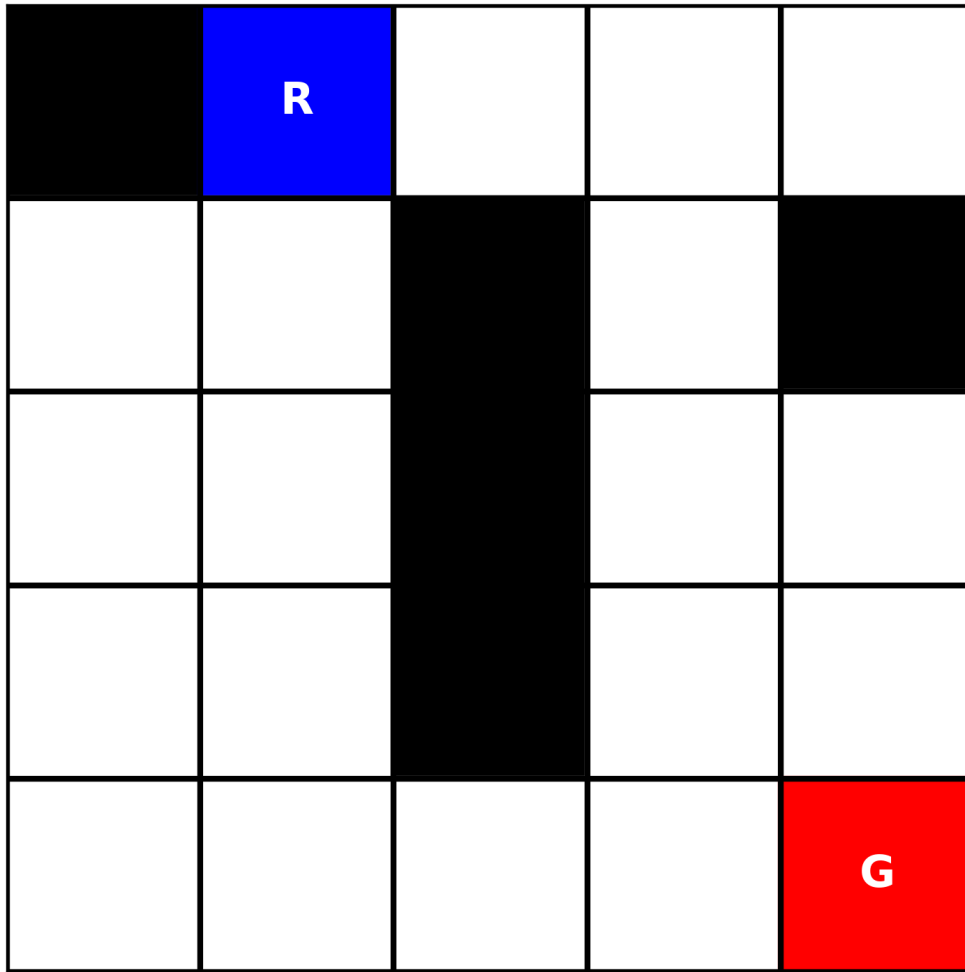
Start position: (0, 3)

Goal position: (0, 2)

Obstacle positions: (0, 1), (0, 4), (2, 4), (3, 2), (4, 0)

SOLUTION:

(MOVE-LEFT-FROM-TO ROBOT1 (0, 3) (0, 2))



Grid has 5 rows, 5 columns

Start position: (0, 1)

Goal position: (4, 4)

Obstacle positions: (0, 0), (1, 2), (1, 4), (1, 2), (3, 2)

SOLUTION:

(MOVE-DOWN-FROM-TO ROBOT1 (0, 1) (1, 1))

(MOVE-DOWN-FROM-TO ROBOT1 (1, 1) (2, 1))

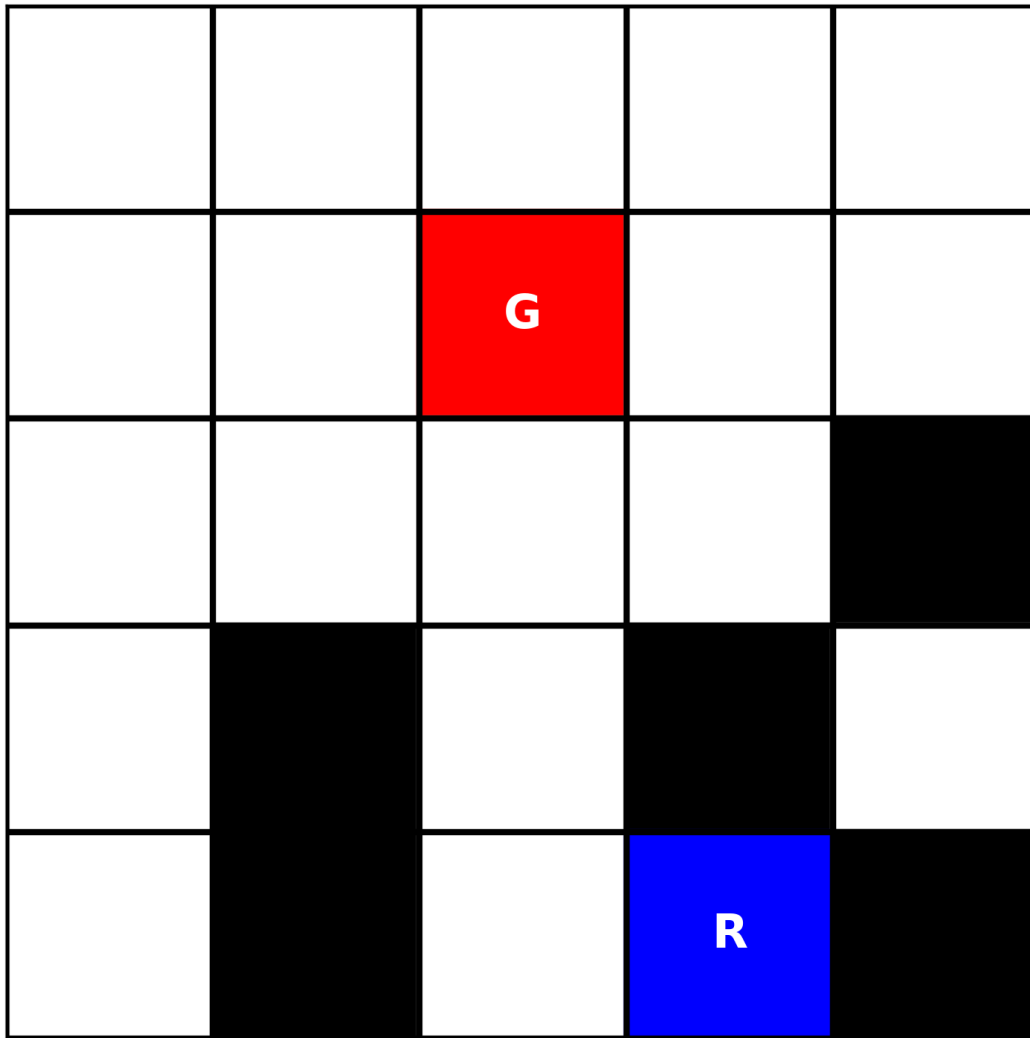
(MOVE-DOWN-FROM-TO ROBOT1 (2, 1) (3, 1))

(MOVE-DOWN-FROM-TO ROBOT1 (3, 1) (4, 1))

(MOVE-RIGHT-FROM-TO ROBOT1 (4, 1) (4, 2))

(MOVE-RIGHT-FROM-TO ROBOT1 (4, 2) (4, 3))

(MOVE-RIGHT-FROM-TO ROBOT1 (4, 3) (4, 4))



Grid has 5 rows, 5 columns

Start position: (4, 3)

Goal position: (1, 2)

Obstacle positions: (4, 1), (4, 4), (3, 1), (3, 3), (2, 4)

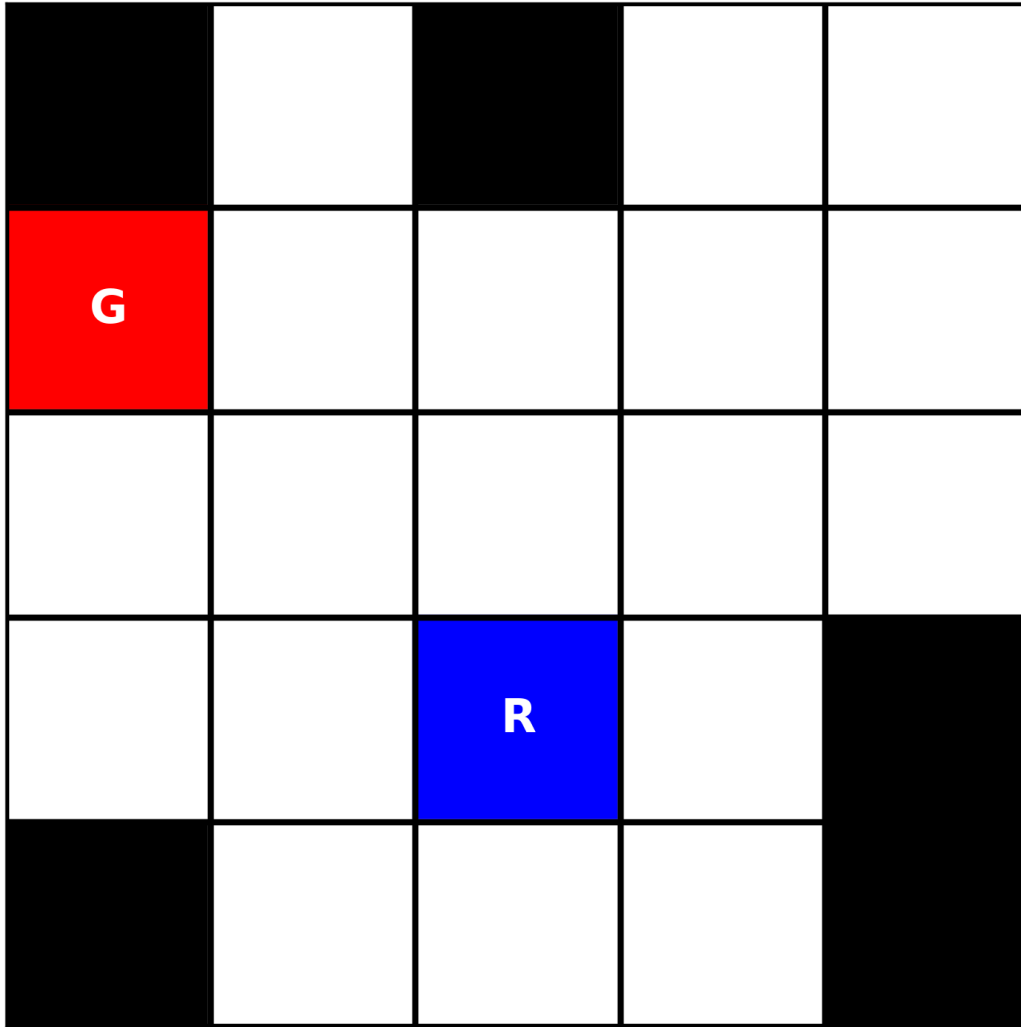
SOLUTION:

(MOVE-LEFT-FROM-TO ROBOT1 (4, 3) (4, 2))

(MOVE-TOP-FROM-TO ROBOT1 (4, 2) (3, 2))

(MOVE-TOP-FROM-TO ROBOT1 (3, 2) (2, 2))

(MOVE-TOP-FROM-TO ROBOT1 (2, 2) (2, 1))



Grid has 5 rows, 5 columns

Start position: (3, 2)

Goal position: (1, 0)

Obstacle positions: (4, 0), (4, 4), (3, 4), (0, 0), (0, 2)

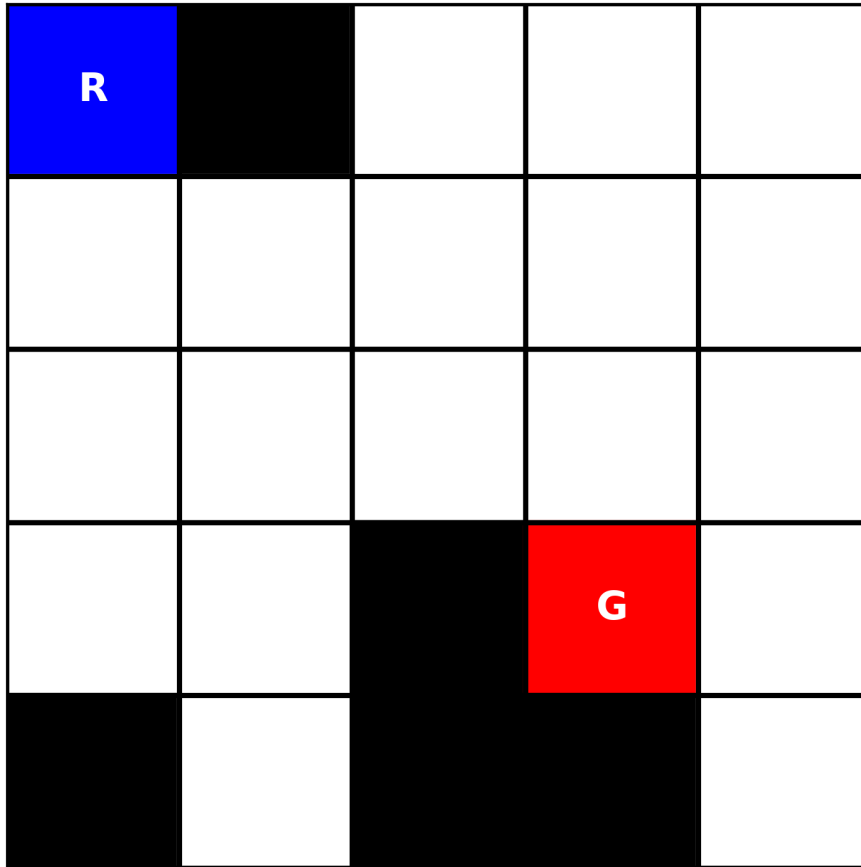
SOLUTION:

(MOVE-TOP-FROM-TO ROBOT1 (3, 2) (2, 2))

(MOVE-TOP-FROM-TO ROBOT1 (2, 2) (1, 2))

(MOVE-LEFT-FROM-TO ROBOT1 (1, 2) (1, 1))

(MOVE-LEFT-FROM-TO ROBOT1 (1, 1) (1, 0))



Grid has 5 rows, 5 columns

Start position: (0, 0)

Goal position: (3, 3)

Obstacle positions: (0, 1), (3, 2), (4, 0), (4, 2), (4, 3)

SOLUTION:

(MOVE-DOWN-FROM-TO ROBOT1 (0, 0) (1, 0))

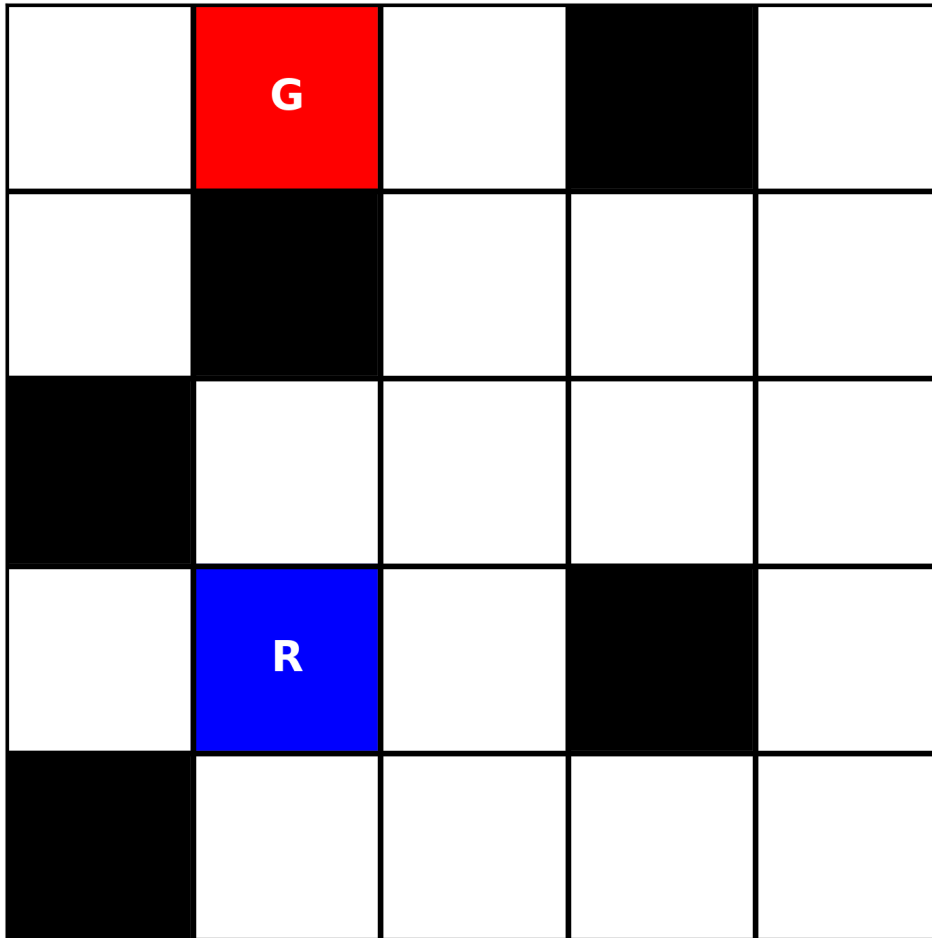
(MOVE-DOWN-FROM-TO ROBOT1 (1, 0) (2, 0))

(MOVE-RIGHT-FROM-TO ROBOT1 (2, 0) (2, 1))

(MOVE-RIGHT-FROM-TO ROBOT1 (2, 1) (2, 2))

(MOVE-RIGHT-FROM-TO ROBOT1 (2, 2) (2, 3))

(MOVE-DOWN-FROM-TO ROBOT1 (2, 3) (3, 3))



Grid has 5 rows, 5 columns

Start position: (3, 0)

Goal position: (0, 1)

Obstacle positions: (0, 3), (1, 1), (2, 0), (3, 3), (4, 0)

SOLUTION:

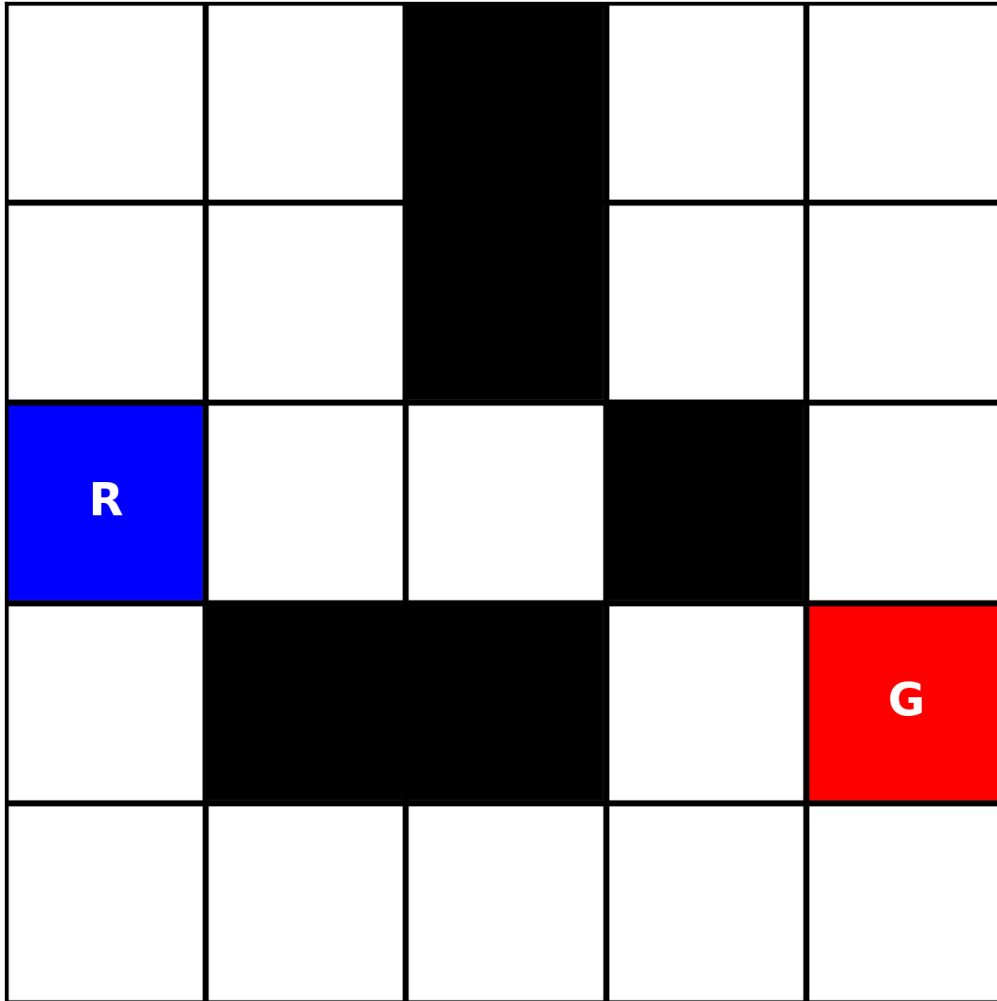
(MOVE-RIGHT-FROM-TO ROBOT1 (3, 1) (3, 2))

(MOVE-TOP-FROM-TO ROBOT1 (3, 2) (2, 2))

(MOVE-TOP-FROM-TO ROBOT1 (2, 2) (1, 2))

(MOVE-TOP-FROM-TO ROBOT1 (1, 2) (0, 2))

(MOVE-LEFT-FROM-TO ROBOT1 (0, 2) (0, 1))



Grid has 5 rows, 5 columns

Start position: (2, 0)

Goal position: (3, 4)

Obstacle positions: (0, 2), (1, 2), (2, 3), (3, 1), (3, 2)

SOLUTION:

(MOVE-DOWN-FROM-TO ROBOT1 (2, 0) (3, 0))

(MOVE-DOWN-FROM-TO ROBOT1 (3, 0) (4, 0))

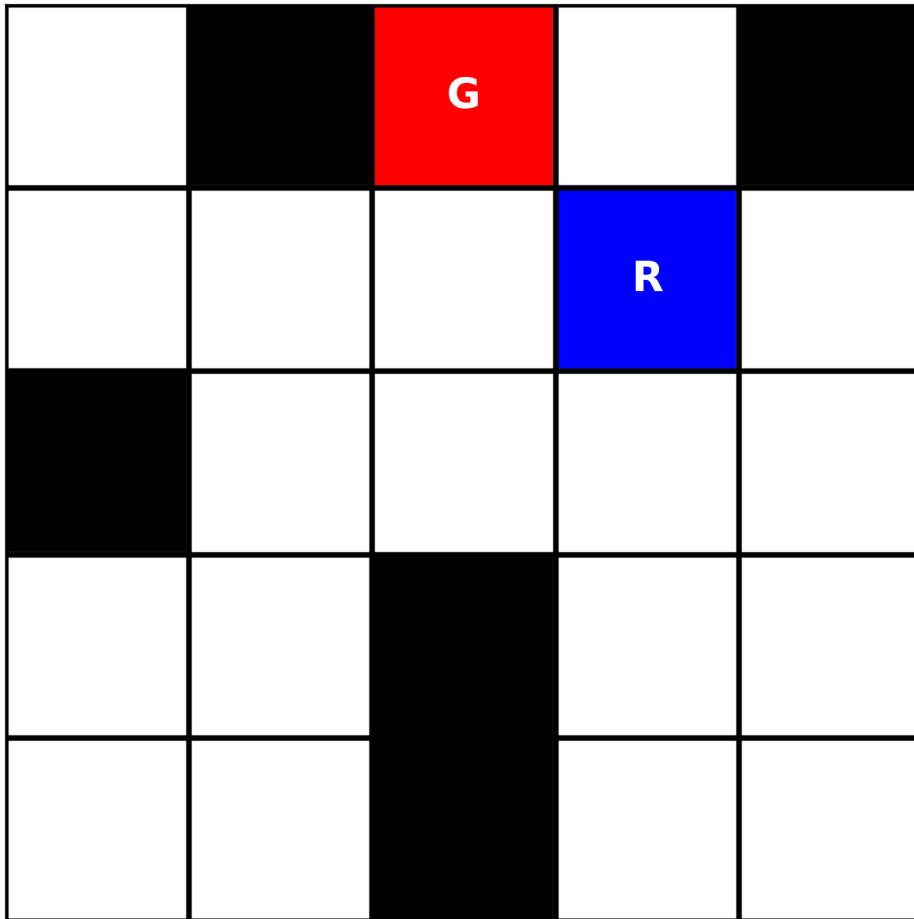
(MOVE-RIGHT-FROM-TO ROBOT1 (4, 0) (4, 1))

(MOVE-RIGHT-FROM-TO ROBOT1 (4, 1) (4, 2))

(MOVE-RIGHT-FROM-TO ROBOT1 (4, 2) (0, 3))

(MOVE-RIGHT-FROM-TO ROBOT1 (4, 3) (4, 4))

(MOVE-UP-FROM-TO ROBOT1 (4, 4) (3, 4))



Grid has 5 rows, 5 columns

Start position: (2, 3)

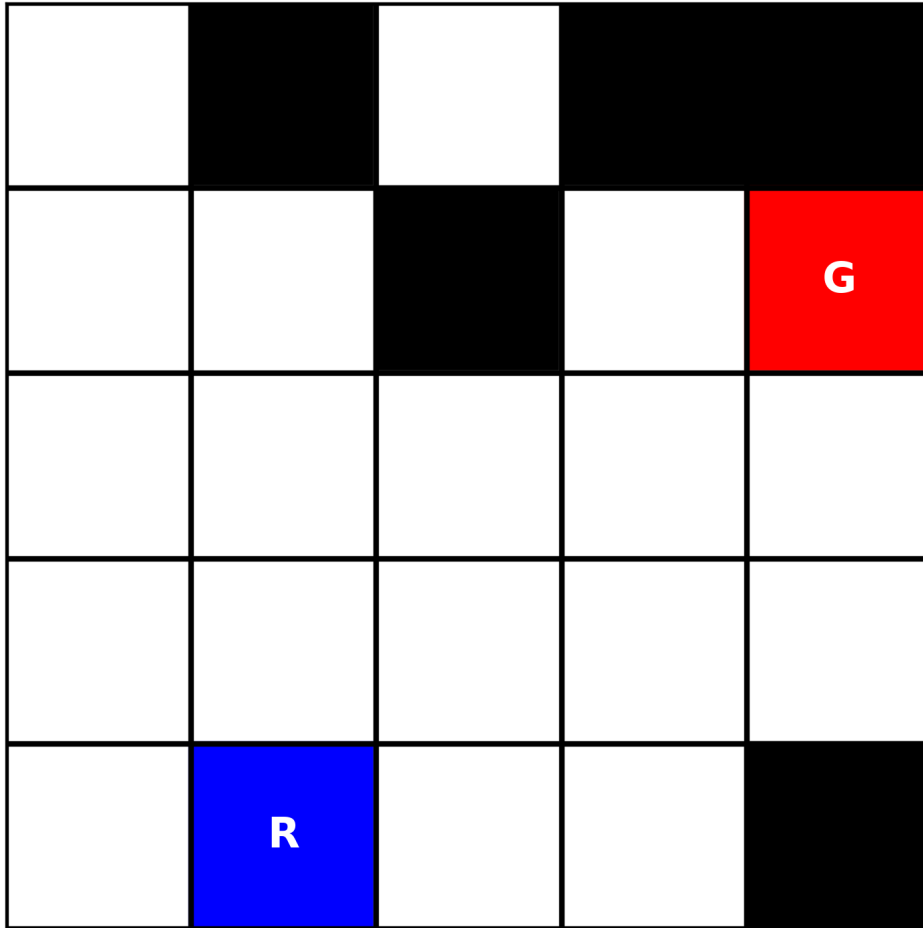
Goal position: (0, 2)

Obstacle positions: (0, 1), (0, 4), (2, 1), (3, 2), (4, 2)

SOLUTION:

(MOVE-TOP-FROM-TO ROBOT1 (1, 3) (0, 3))

(MOVE-LEFT-FROM-TO ROBOT1 (0, 3) (0, 2))



Grid has 5 rows, 5 columns

Start position: (4, 1)

Goal position: (1, 4)

Obstacle positions: (0, 1), (0, 3), (0, 4), (1, 2), (4, 4)

SOLUTION:

(MOVE-TOP-FROM-TO ROBOT1 (4, 1) (3, 1))

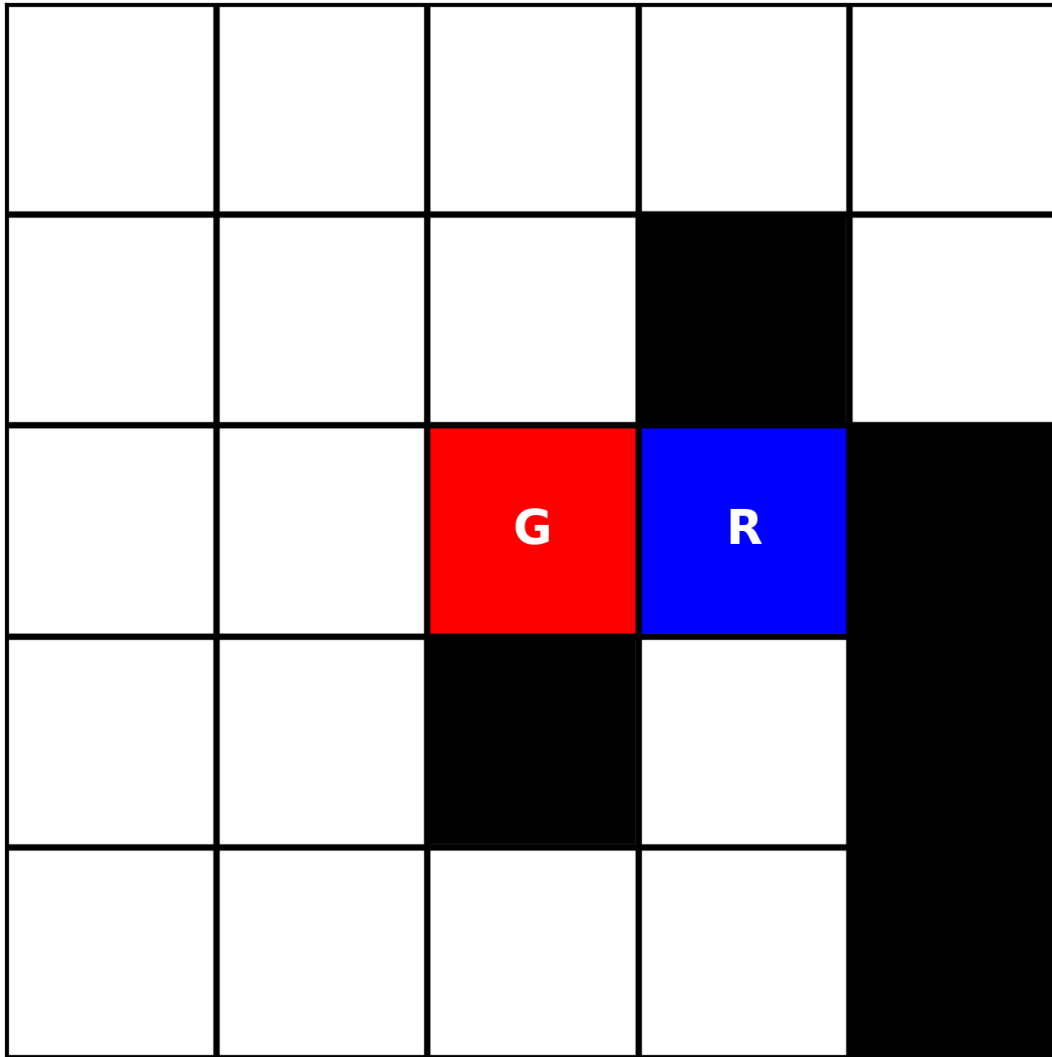
(MOVE-TOP-FROM-TO ROBOT1 (3, 1) (2, 1))

(MOVE-RIGHT-FROM-TO ROBOT1 (2, 1) (2, 2))

(MOVE-RIGHT-FROM-TO ROBOT1 (2, 2) (2, 3))

(MOVE-RIGHT-FROM-TO ROBOT1 (2, 3) (2, 4))

(MOVE-TOP-FROM-TO ROBOT1 (2, 4) (1, 4))



Grid has 5 rows, 5 columns

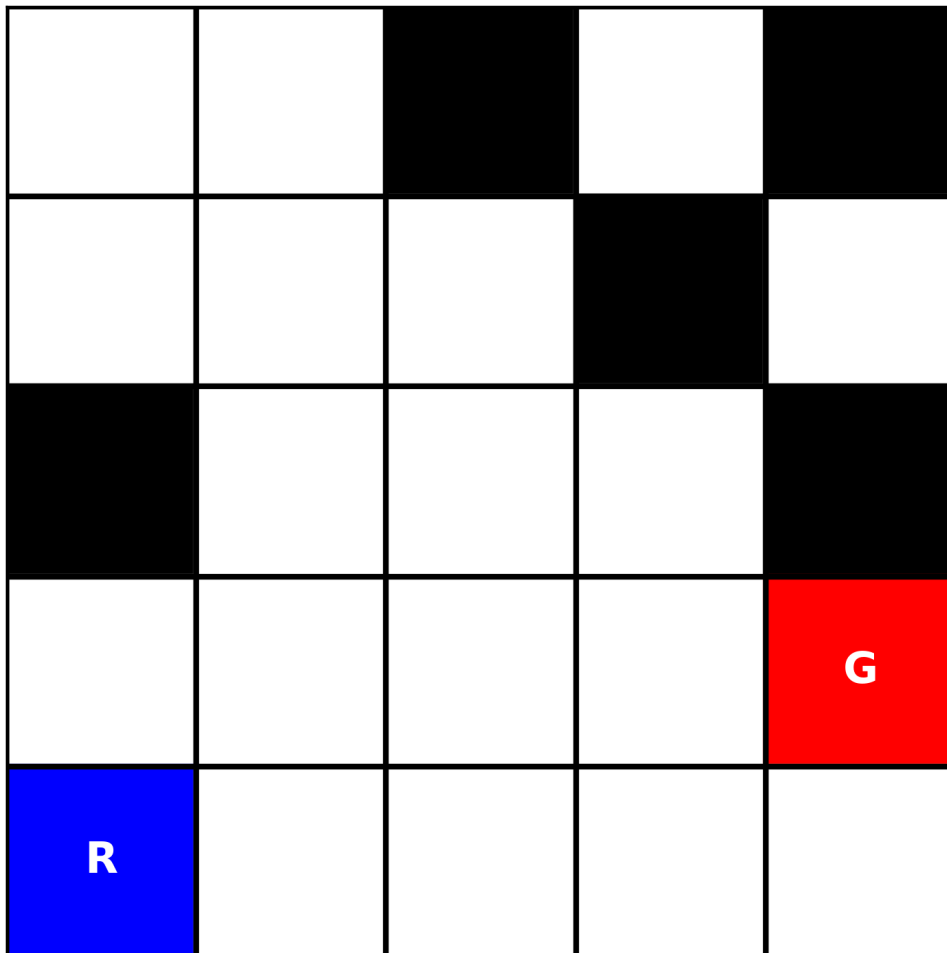
Start position: (2, 3)

Goal position: (2, 2)

Obstacle positions: (1, 3), (2, 4), (3, 2), (3, 4), (4, 4)

SOLUTION:

(MOVE-LEFT-FROM-TO ROBOT1 (2, 3) (2, 2))



Grid has 5 rows, 5 columns

Start position: (4, 0)

Goal position: (1, 4)

Obstacle positions: (0, 2), (0, 4), (1, 3), (2, 0), (2, 4)

SOLUTION:

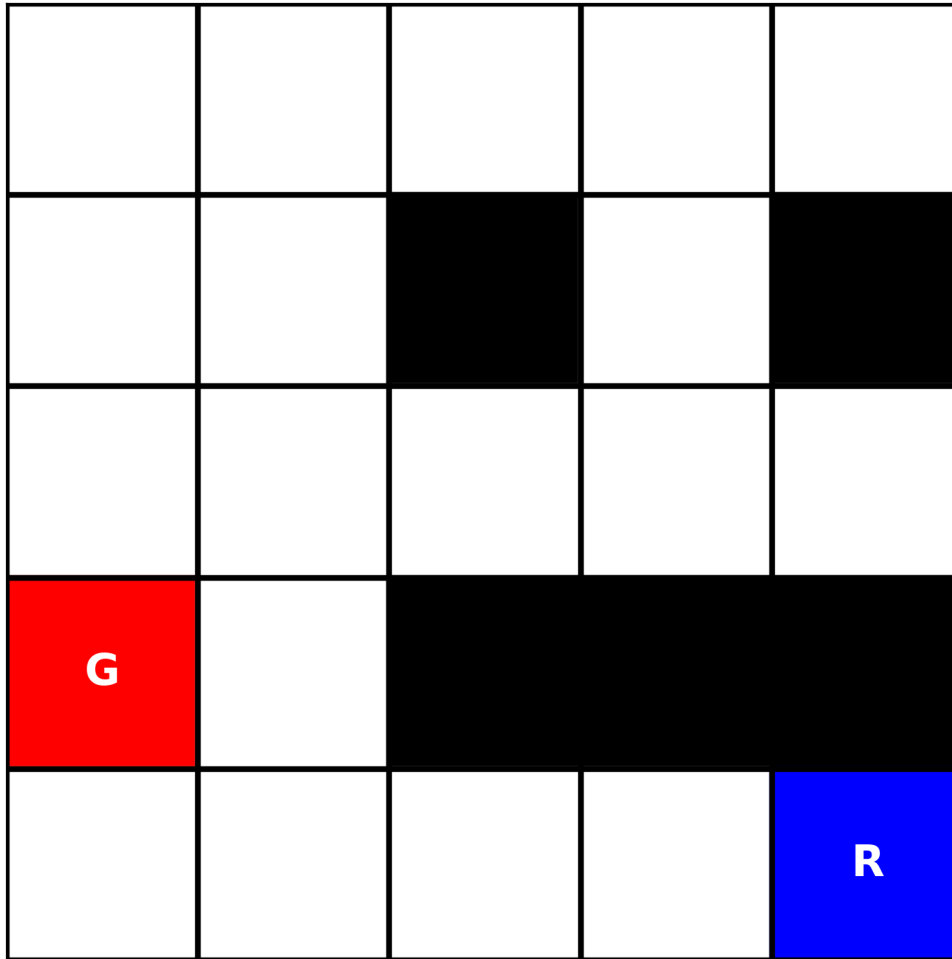
(MOVE-RIGHT-FROM-TO ROBOT1 (0, 4) (1, 4))

(MOVE-RIGHT-FROM-TO ROBOT1 (1, 4) (2, 4))

(MOVE-RIGHT-FROM-TO ROBOT1 (2, 4) (3, 4))

(MOVE-RIGHT-FROM-TO ROBOT1 (3, 4) (4, 4))

(MOVE-TOP-FROM-TO ROBOT1 (4, 4) (3, 4))



Grid has 5 rows, 5 columns

Start position: (4, 4)

Goal position: (3, 0)

Obstacle positions: (1, 2), (1, 4), (3, 2), (3, 3), (3, 4)

SOLUTION:

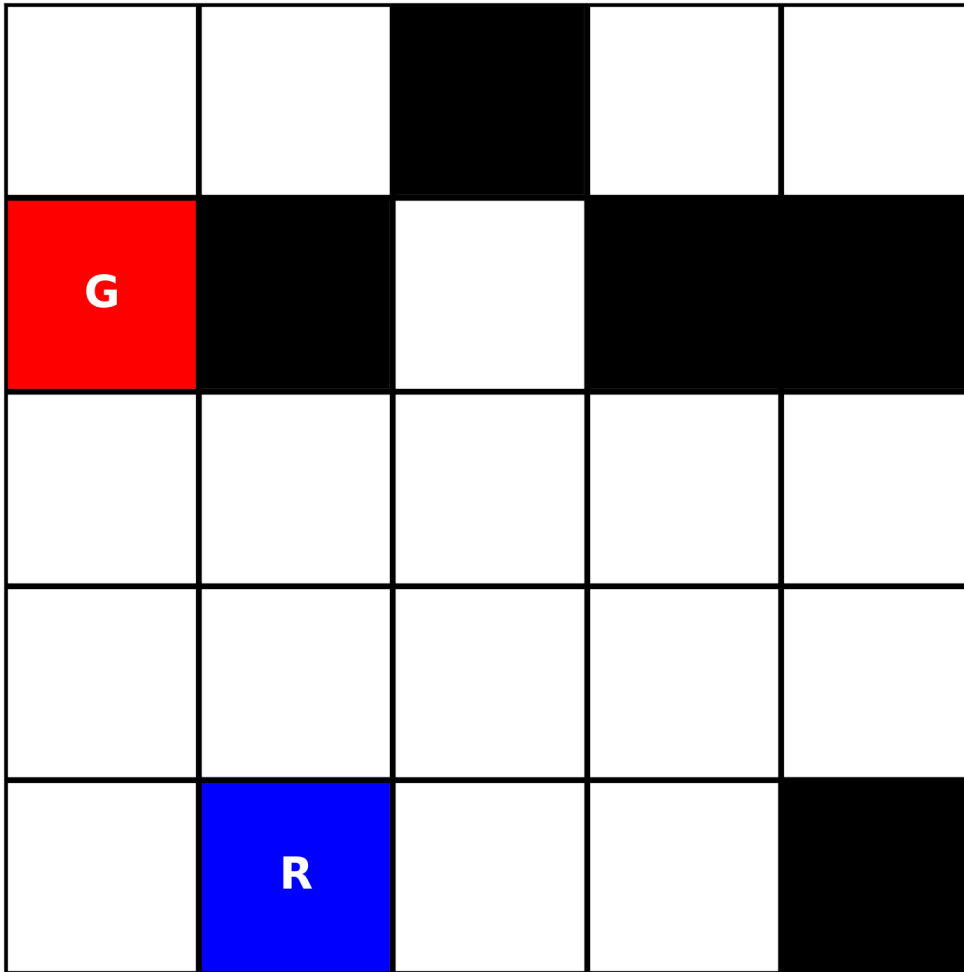
(MOVE-LEFT-FROM-TO ROBOT1 (4, 4) (3, 4))

(MOVE-LEFT-FROM-TO ROBOT1 (3, 4) (2, 4))

(MOVE-LEFT-FROM-TO ROBOT1 (2, 4) (1, 4))

(MOVE-LEFT-FROM-TO ROBOT1 (1, 4) (0, 4))

(MOVE-TOP-FROM-TO ROBOT1 (0, 4) (0, 3))



Grid has 5 rows, 5 columns

Start position: (4, 1)

Goal position: (1, 0)

Obstacle positions: (1, 1), (1, 3), (0, 2), (1, 4), (4, 4)

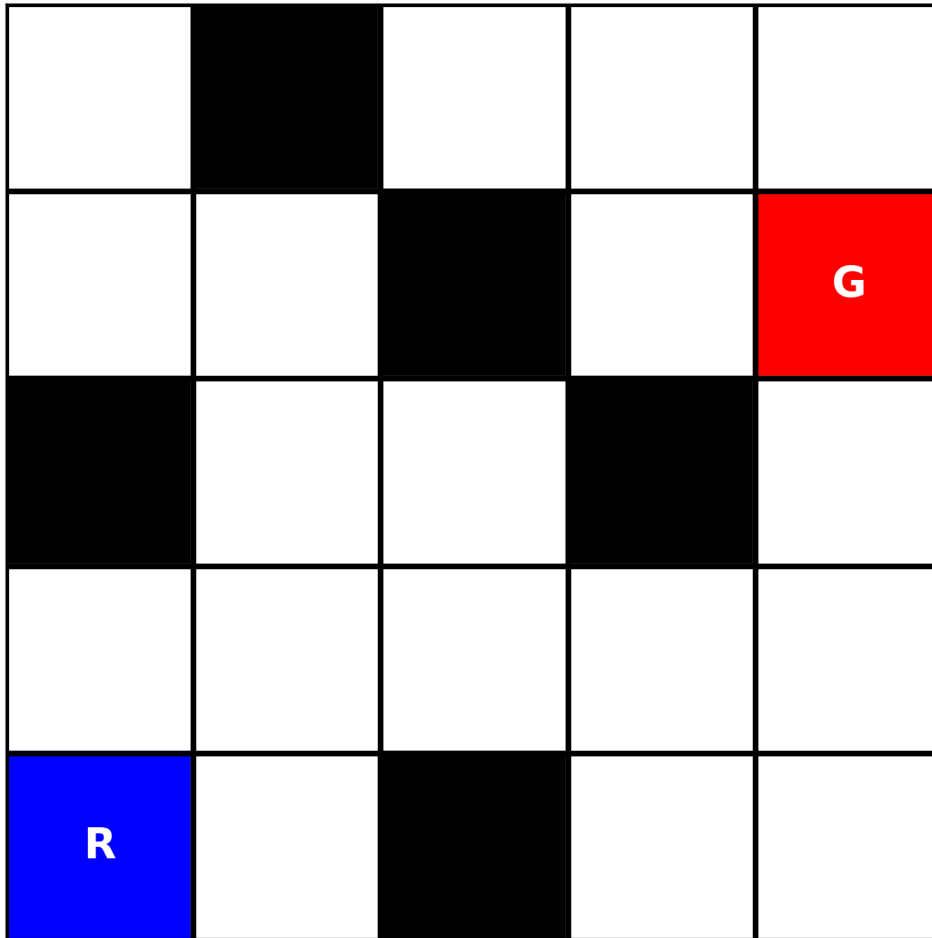
SOLUTION:

(MOVE-LEFT-FROM-TO ROBOT1 (1, 4) (0, 4))

(MOVE-TOP-FROM-TO ROBOT1 (0, 4) (0, 3))

(MOVE-TOP-FROM-TO ROBOT1 (0, 3) (0, 3))

(MOVE-TOP-FROM-TO ROBOT1 (1, 3) (0, 2))



Grid has 5 rows, 5 columns

Start position: (4, 0)

Goal position: (1, 4)

Obstacle positions: (0, 1), (1, 2), (2, 0), (2, 3), (3, 2)

SOLUTION:

(MOVE-TOP-FROM-TO ROBOT1 (4, 4) (3, 0))

(MOVE-RIGHT-FROM-TO ROBOT1 (3, 0) (3, 1))

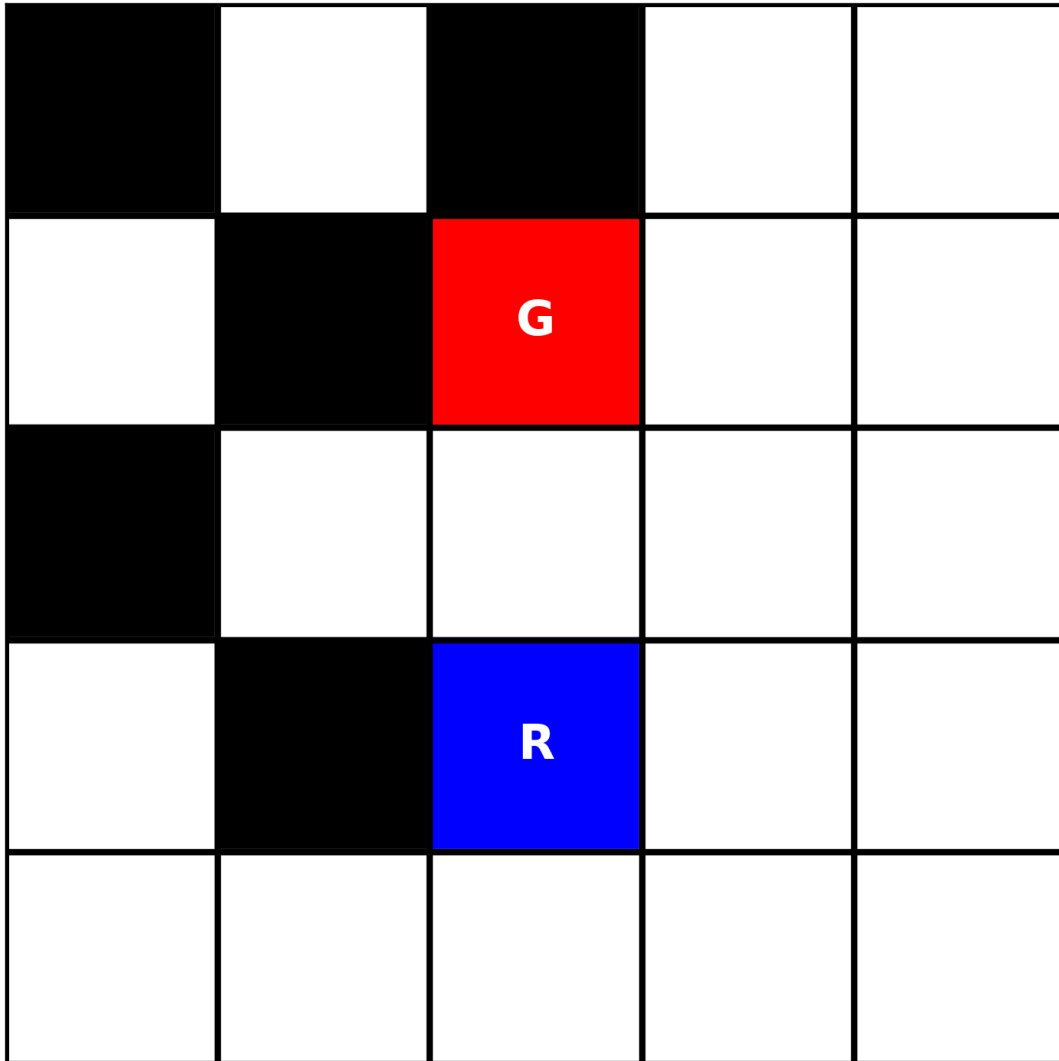
(MOVE-RIGHT-FROM-TO ROBOT1 (3, 1) (3, 2))

(MOVE-RIGHT-FROM-TO ROBOT1 (3, 2) (3, 3))

(MOVE-RIGHT-FROM-TO ROBOT1 (3, 3) (3, 4))

(MOVE-TOP-FROM-TO ROBOT1 (3, 4) (2, 4))

(MOVE-TOP-FROM-TO ROBOT1 (2, 4) (1, 4))



Grid has 5 rows, 5 columns

Start position: (3, 2)

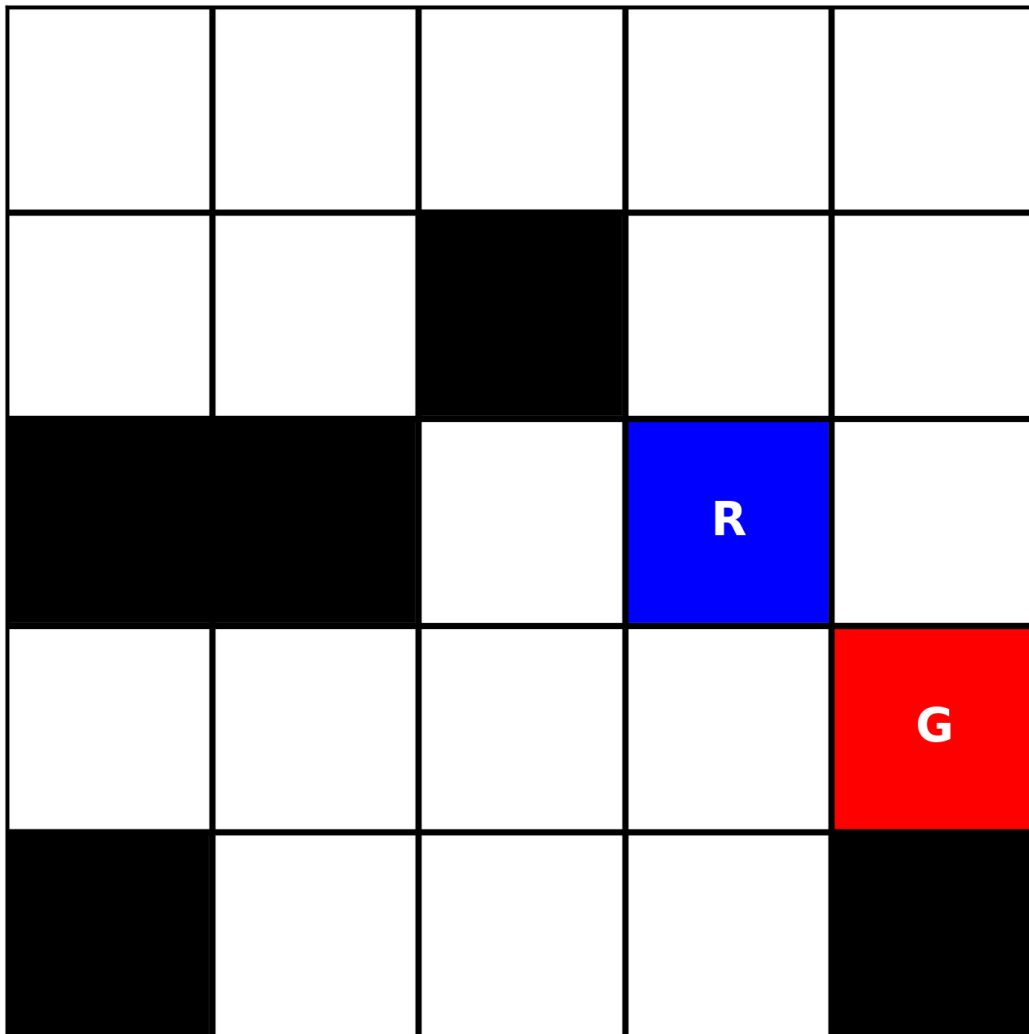
Goal position: (1, 2)

Obstacle positions: (0, 0), (0, 2), (1, 1), (3, 0), (3, 1)

SOLUTION:

(MOVE-TOP-FROM-TO ROBOT1 (3, 2) (2, 2))

(MOVE-TOP-FROM-TO ROBOT1 (2, 2) (1, 2))



Grid has 5 rows, 5 columns

Start position: (2, 3)

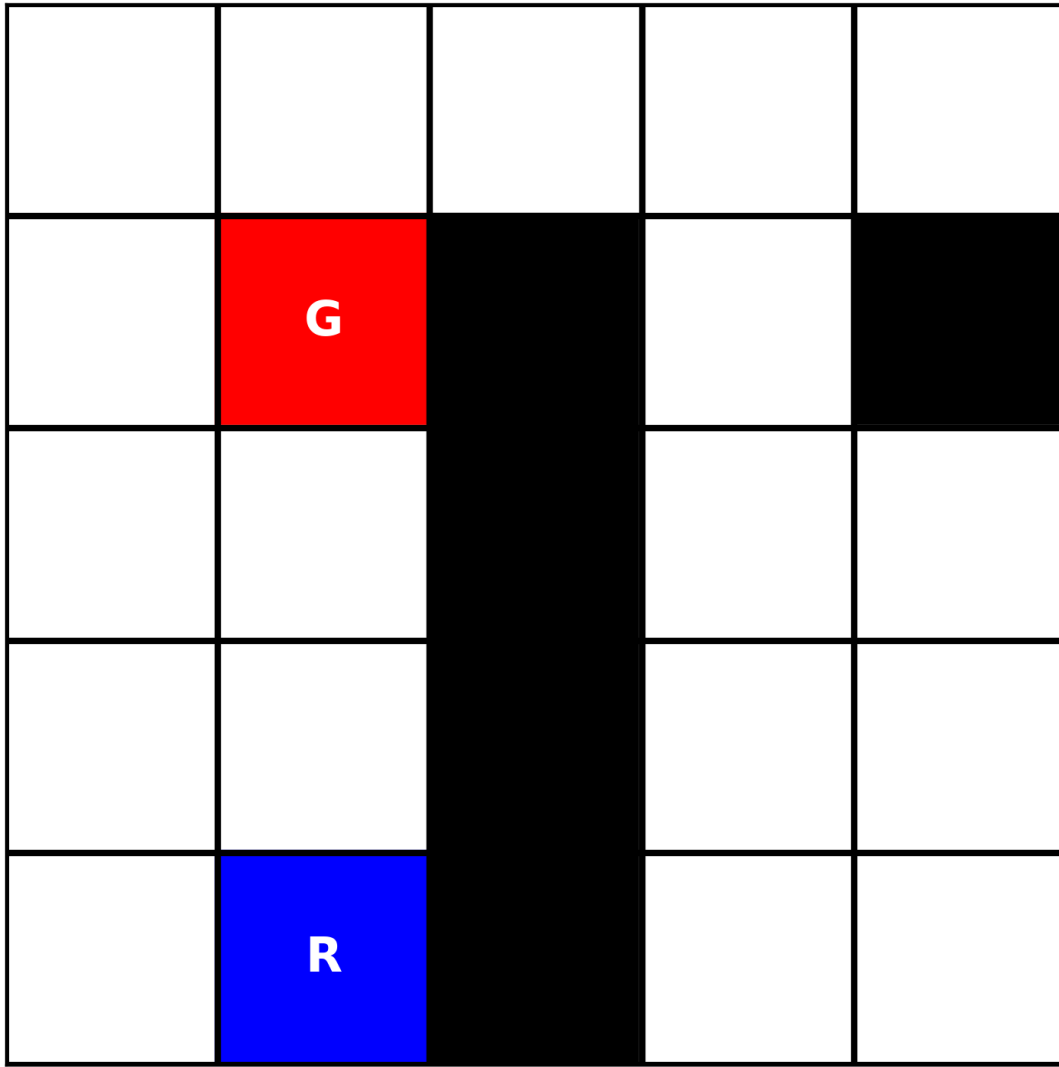
Goal position: (3, 4)

Obstacle positions: (1, 2), (2, 0), (2, 1), (4, 0), (4, 4)

SOLUTION:

(MOVE-LEFT-FROM-TO ROBOT1 (3, 4) (3, 3))

(MOVE-TOP-FROM-TO ROBOT1 (3, 3) (2, 3))



Grid has 5 rows, 5 columns

Start position: (4, 1)

Goal position: (1, 1)

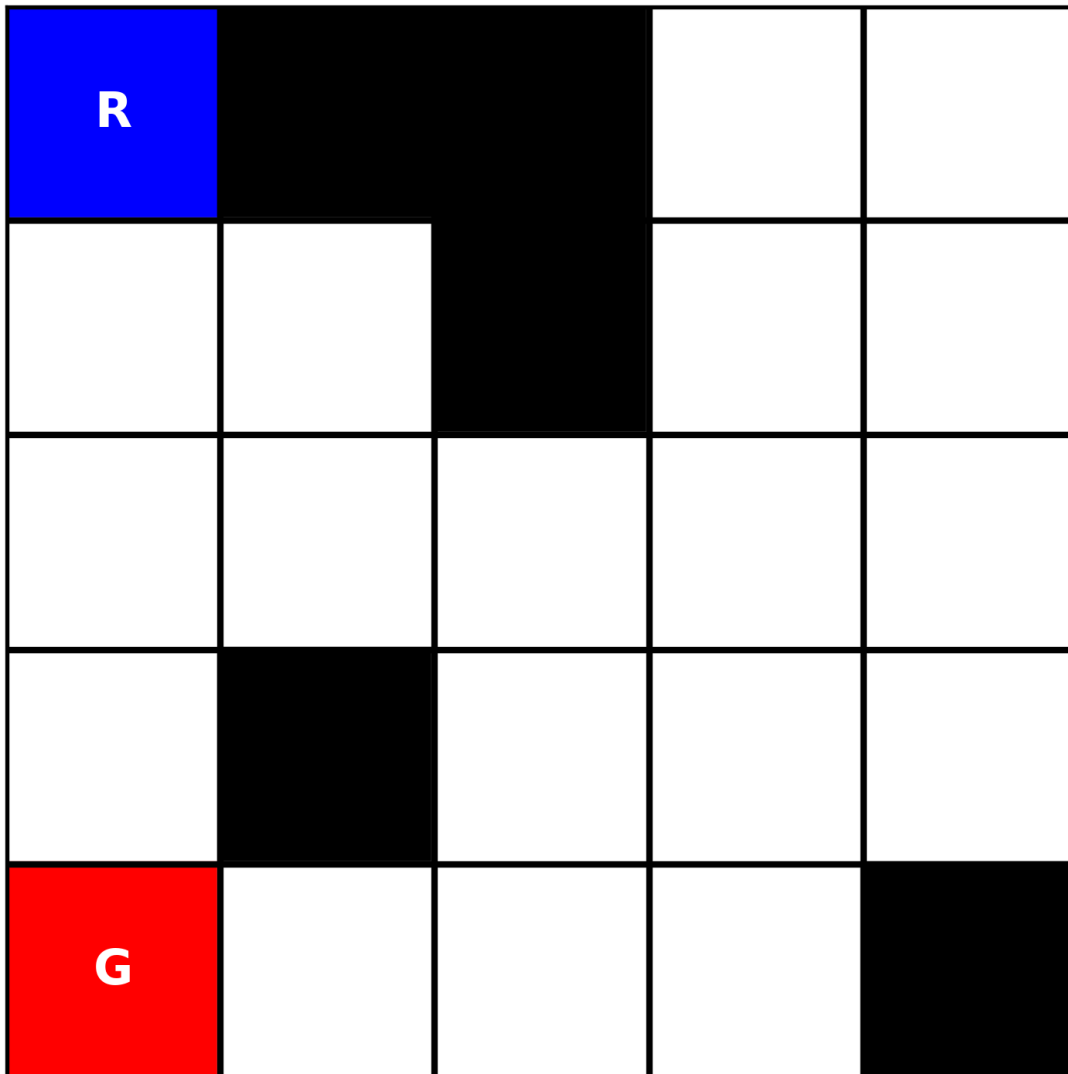
Obstacle positions: (1, 2), (2, 2), (3, 2), (4, 2), (1, 4)

SOLUTION:

(MOVE-TOP-FROM-TO ROBOT1 (4, 1) (3, 1))

(MOVE-TOP-FROM-TO ROBOT1 (3, 1) (2, 1))

(MOVE-TOP-FROM-TO ROBOT1 (2, 1) (1, 1))



Grid has 5 rows, 5 columns

Start position: (0, 0)

Goal position: (4, 0)

Obstacle positions: (0, 1), (0, 2), (1, 2), (3, 1), (4, 4)

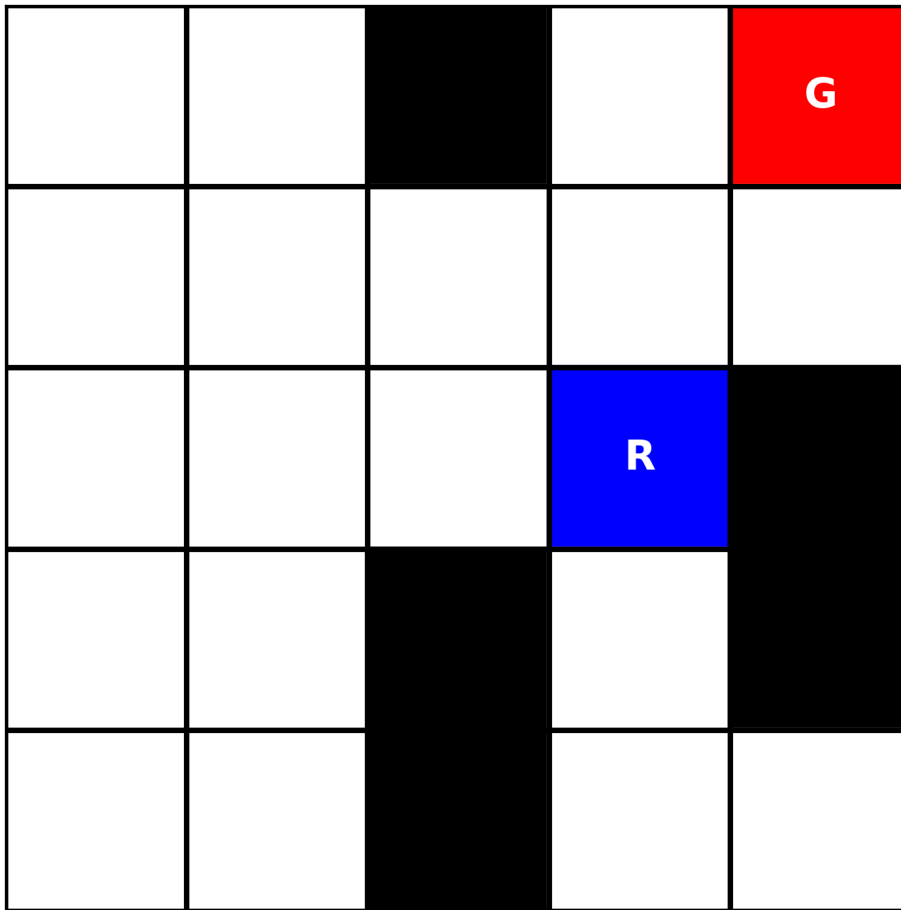
SOLUTION:

(MOVE-BOTTOM-FROM-TO ROBOT1 (0, 0) (1, 0))

(MOVE-BOTTOM-FROM-TO ROBOT1 (1, 0) (2, 0))

(MOVE-BOTTOM-FROM-TO ROBOT1 (2, 0) (3, 0))

(MOVE-BOTTOM-FROM-TO ROBOT1 (3, 0) (4, 0))



Grid has 5 rows, 5 columns

Start position: (0, 4)

Goal position: (2, 3)

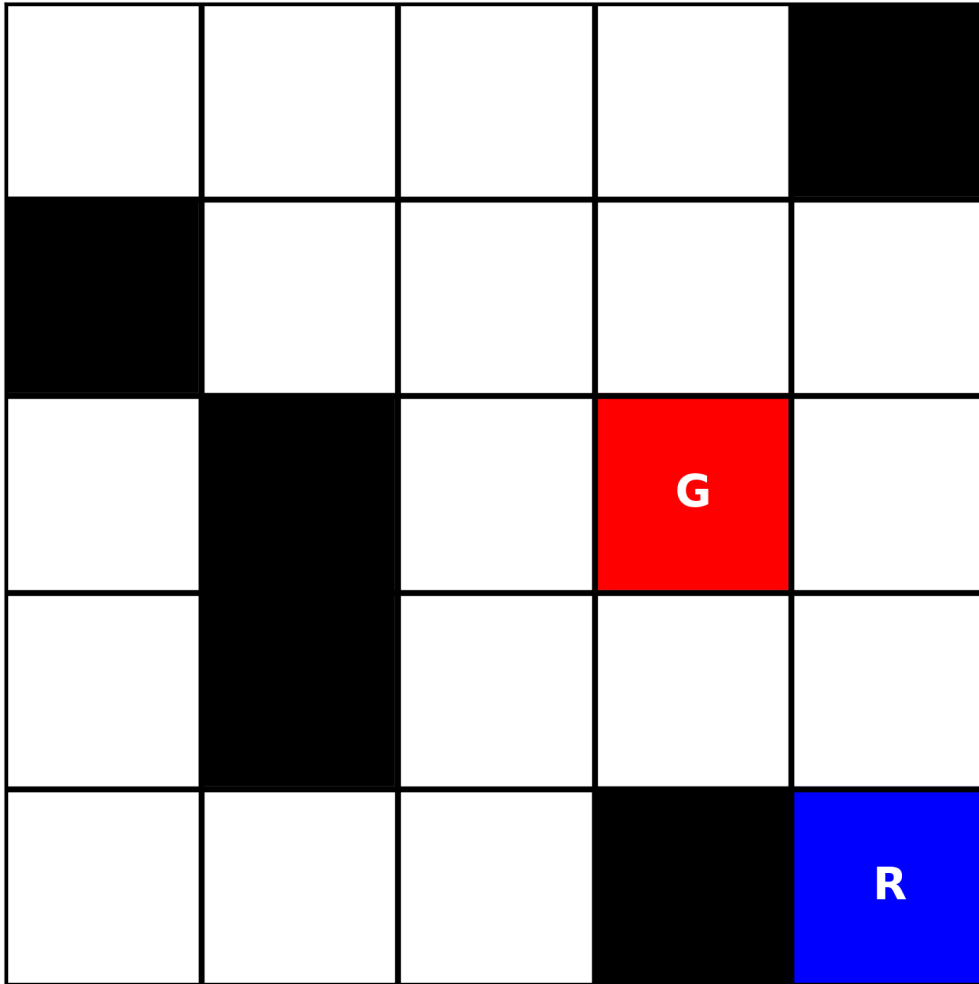
Obstacle positions: (0, 2), (2, 4), (3, 2), (3, 4), (4, 2)

SOLUTION:

(MOVE-TOP-FROM-TO ROBOT1 (2, 3) (1, 3))

(MOVE-TOP-FROM-TO ROBOT1 (1, 3) (0, 3))

(MOVE-RIGHT-FROM-TO ROBOT1 (0, 3) (0, 4))



Grid has 5 rows, 5 columns

Start position: (4, 4)

Goal position: (2, 3)

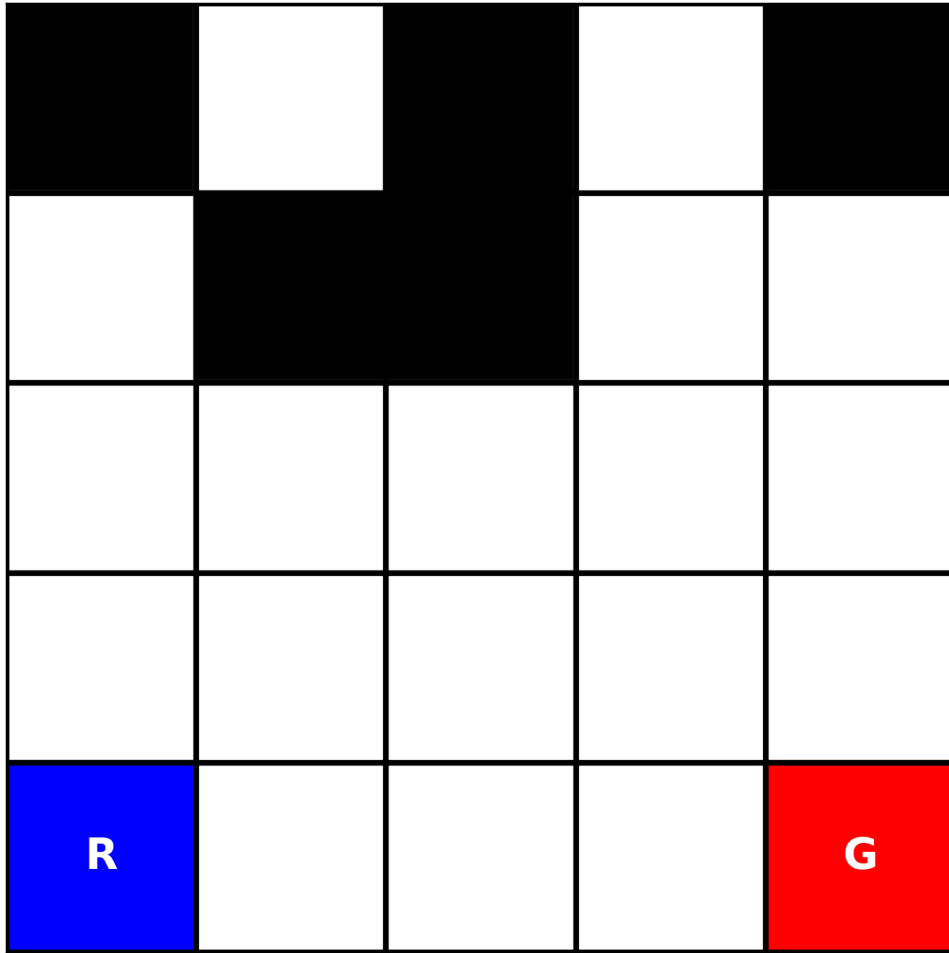
Obstacle positions: (0, 4), (1, 0), (2, 1), (3, 1), (4, 3)

SOLUTION:

(MOVE-TOP-FROM-TO ROBOT1 (4, 4) (3, 4))

(MOVE-TOP-FROM-TO ROBOT1 (3, 4) (2, 4))

(MOVE-LEFT-FROM-TO ROBOT1 (2, 4) (2, 3))



Grid has 5 rows, 5 columns

Start position: (4, 0)

Goal position: (4, 4)

Obstacle positions: (0, 0), (0, 2), (0, 4), (1, 1), (1, 2)

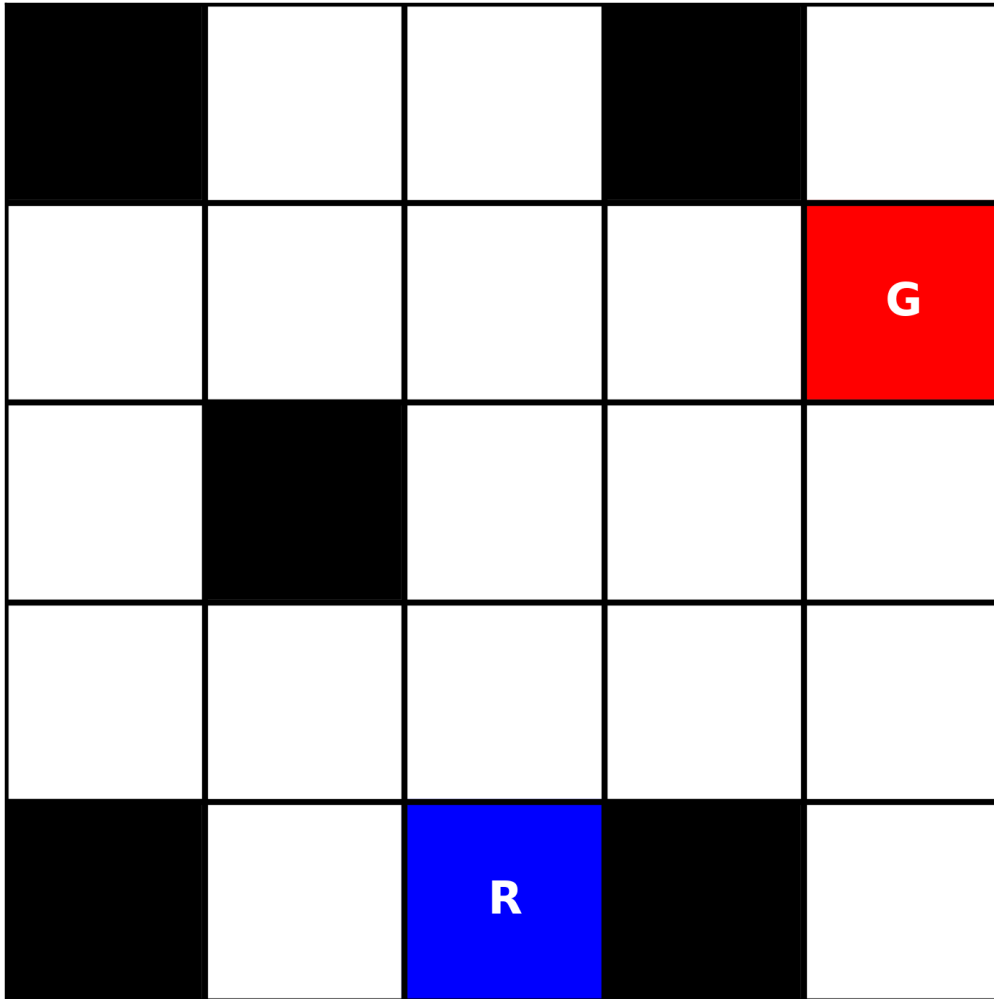
SOLUTION:

(MOVE-RIGHT-FROM-TO ROBOT1 (4, 0) (4, 1))

(MOVE-RIGHT-FROM-TO ROBOT1 (4, 1) (4, 2))

(MOVE-RIGHT-FROM-TO ROBOT1 (4, 2) (4, 3))

(MOVE-RIGHT-FROM-TO ROBOT1 (4, 3) (4, 4))



Grid has 5 rows, 5 columns

Start position: (4, 2)

Goal position: (1, 4)

Obstacle positions: (0, 0), (0, 3), (2, 0), (4, 0), (4, 3)

SOLUTION:

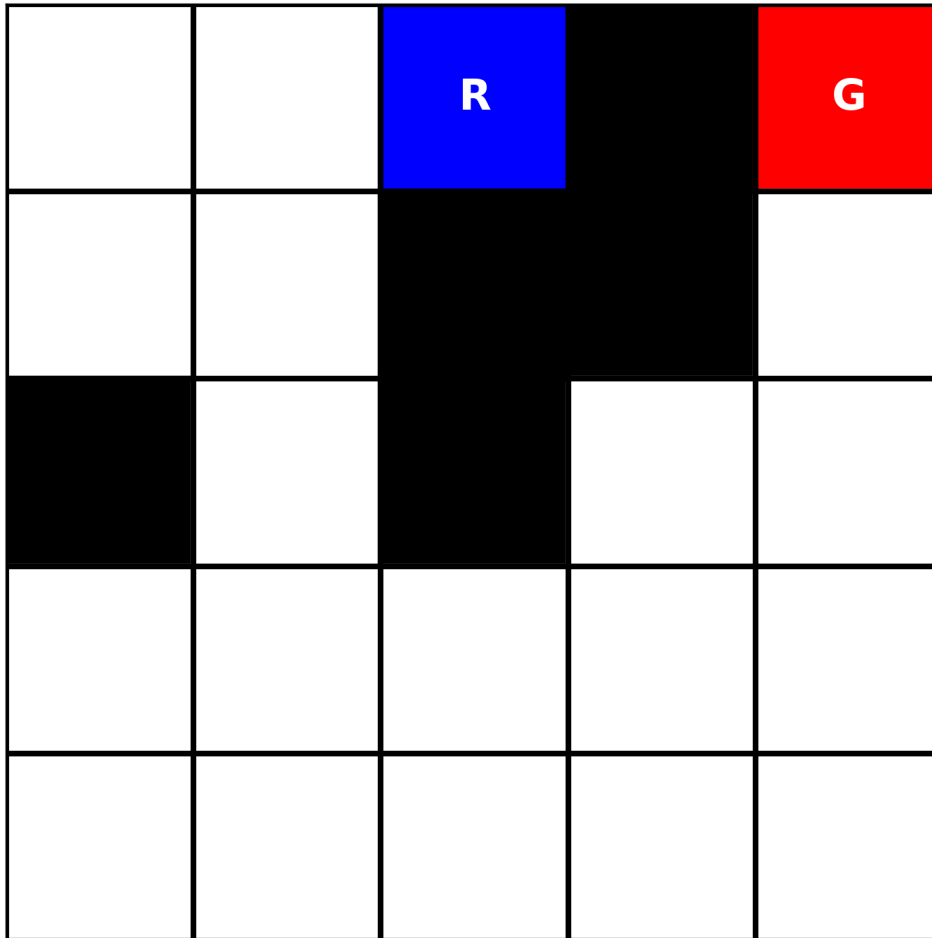
(MOVE-TOP-FROM-TO ROBOT1 (4, 2) (3, 2))

(MOVE-TOP-FROM-TO ROBOT1 (3, 2) (2, 2))

(MOVE-TOP-FROM-TO ROBOT1 (2, 2) (1, 2))

(MOVE-RIGHT-FROM-TO ROBOT1 (1, 2) (1, 3))

(MOVE-RIGHT-FROM-TO ROBOT1 (1, 3) (1, 4))



Grid has 5 rows, 5 columns

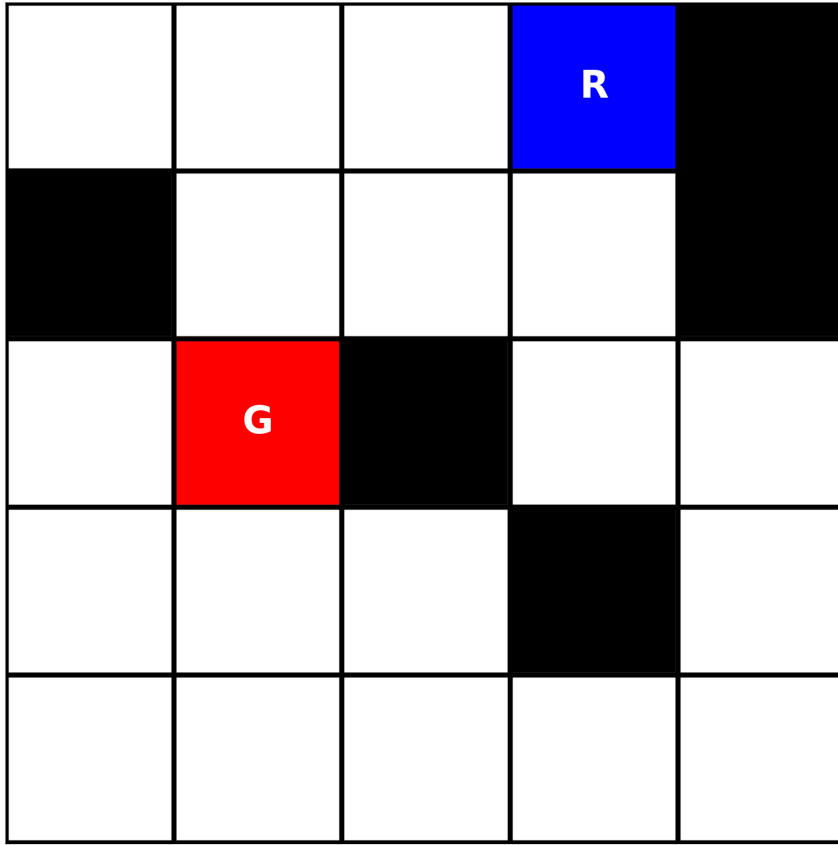
Start position: (0, 2)

Goal position: (0, 4)

Obstacle positions: (1, 2), (0, 3), (1, 3), (2, 0), (2, 2)

SOLUTION:

(MOVE-LEFT-FROM-TO ROBOT1 (0, 2) (0, 1))
(MOVE-DOWN-FROM-TO ROBOT1 (0, 1) (1, 1))
(MOVE-DOWN-FROM-TO ROBOT1 (1, 1) (2, 1))
(MOVE-DOWN-FROM-TO ROBOT1 (2, 1) (3, 1))
(MOVE-RIGHT-FROM-TO ROBOT1 (3, 1) (3, 2))
(MOVE-RIGHT-FROM-TO ROBOT1 (3, 2) (3, 3))
(MOVE-RIGHT-FROM-TO ROBOT1 (3, 3) (3, 4))
(MOVE-TOP-FROM-TO ROBOT1 (3, 4) (2, 4))
(MOVE-TOP-FROM-TO ROBOT1 (2, 4) (1, 4))
(MOVE-TOP-FROM-TO ROBOT1 (1, 4) (0, 4))



Grid has 5 rows, 5 columns

Start position: (0, 3)

Goal position: (2, 1)

Obstacle positions: (0, 4), (1, 0), (1, 4), (2, 2), (3, 3)

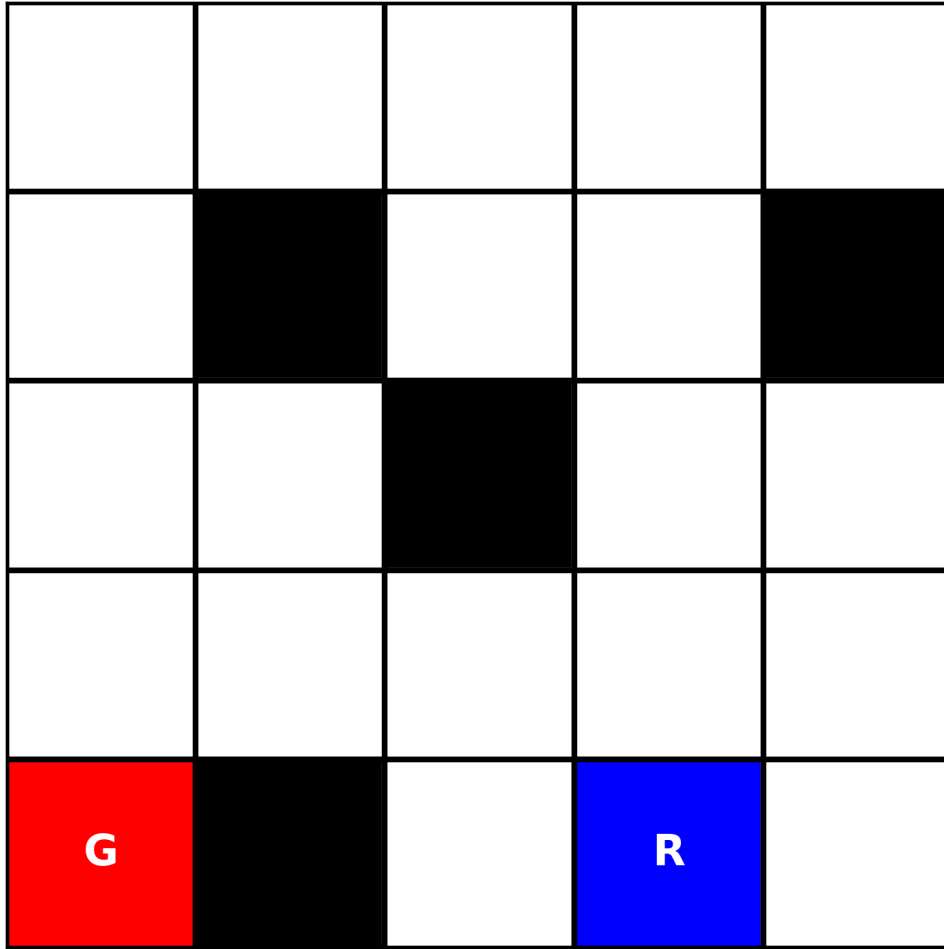
SOLUTION:

(MOVE-LEFT-FROM-TO ROBOT1 (0, 3) (0, 2))

(MOVE-LEFT-FROM-TO ROBOT1 (0, 2) (0, 1))

(MOVE-BOTTOM-FROM-TO ROBOT1 (0, 1) (1, 1))

(MOVE-BOTTOM-FROM-TO ROBOT1 (1, 1) (2, 1))



Grid has 5 rows, 5 columns

Start position: (4, 3)

Goal position: (4, 0)

Obstacle positions: (1, 0), (1, 4), (2, 2), (4, 1)

SOLUTION:

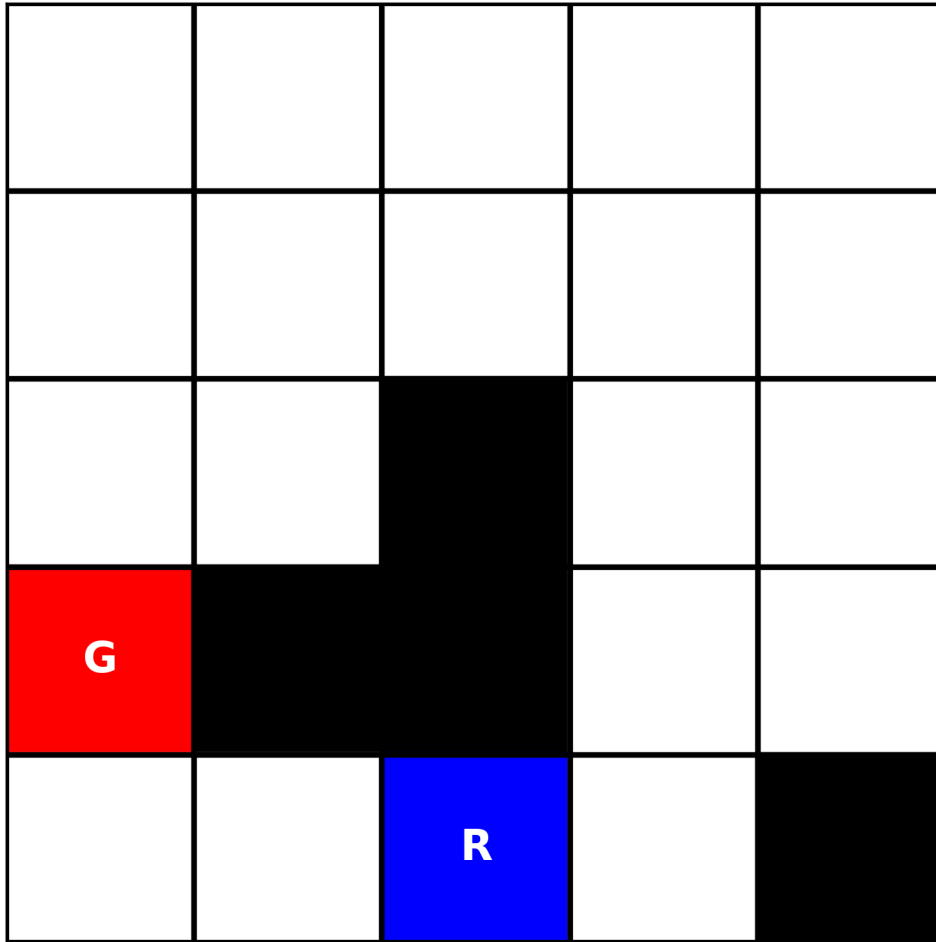
(MOVE-TOP-FROM-TO ROBOT1 (4, 3) (3, 3))

(MOVE-LEFT-FROM-TO ROBOT1 (3, 3) (3, 2))

(MOVE-LEFT-FROM-TO ROBOT1 (3, 2) (3, 1))

(MOVE-LEFT-FROM-TO ROBOT1 (3, 1) (3, 0))

(MOVE-BOTTOM-FROM-TO ROBOT1 (3, 0) (4, 0))



Grid has 5 rows, 5 columns

Start position: (4, 2)

Goal position: (3, 0)

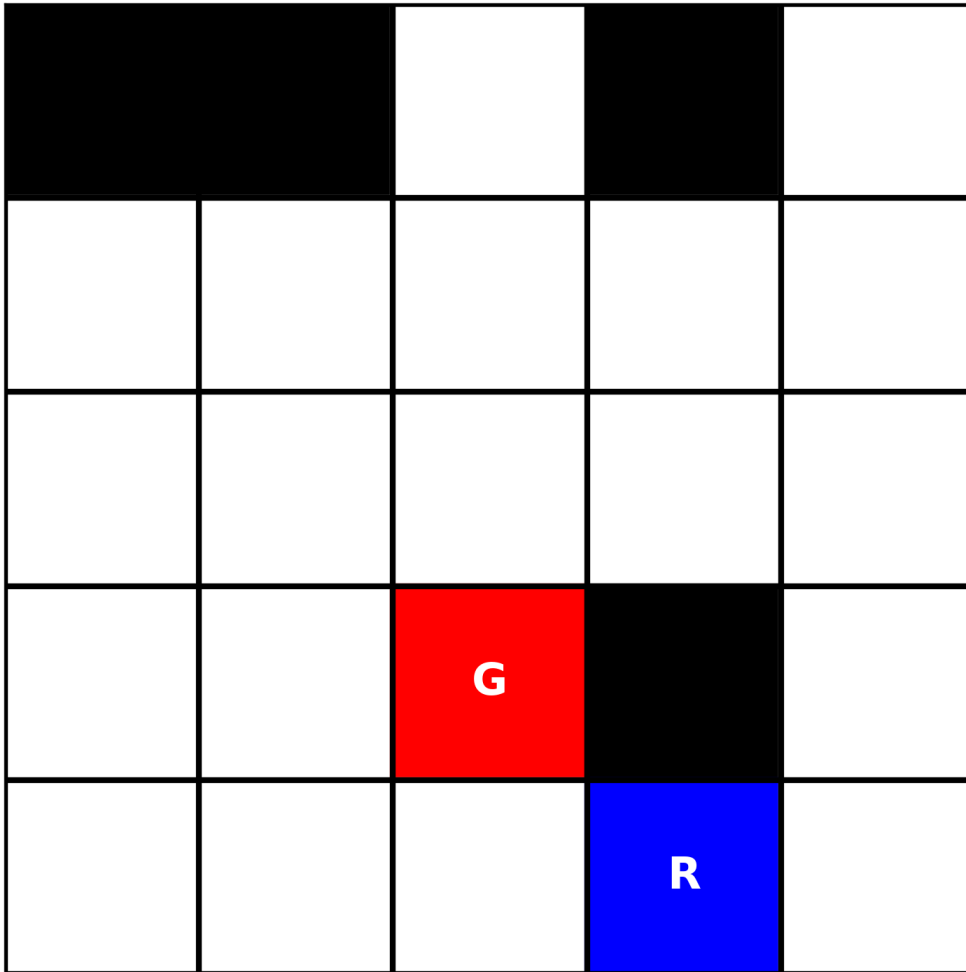
Obstacle positions: (4, 4), (3, 1), (3, 2), (1, 2)

SOLUTION:

(MOVE-LEFT-FROM-TO ROBOT1 (4, 2) (4, 1))

(MOVE-LEFT-FROM-TO ROBOT1 (4, 0) (4, 0))

(MOVE-TOP-FROM-TO ROBOT1 (4, 0) (3, 0))



Grid has 5 rows, 5 columns

Start position: (4, 3)

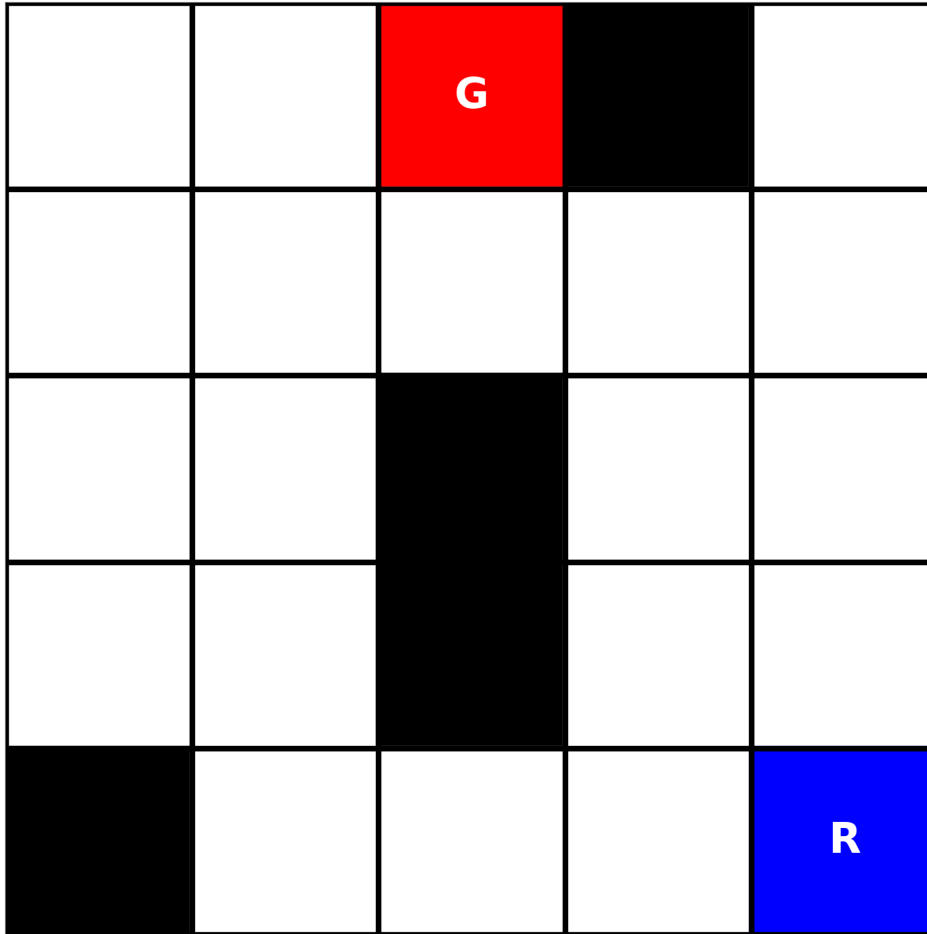
Goal position: (3, 2)

Obstacle positions: (0, 0), (0, 1), (0, 3), (3, 3)

SOLUTION:

(MOVE-LEFT-FROM-TO ROBOT1 (4, 3) (4, 2))

(MOVE-TOP-FROM-TO ROBOT1 (4, 2) (3, 2))



Grid has 5 rows, 5 columns

Start position: (4, 4)

Goal position: (0, 2)

Obstacle positions: (4, 0), (3, 2), (2, 2), (0, 3)

SOLUTION:

(MOVE-LEFT-FROM-TO ROBOT1 (4, 4) (4, 3))

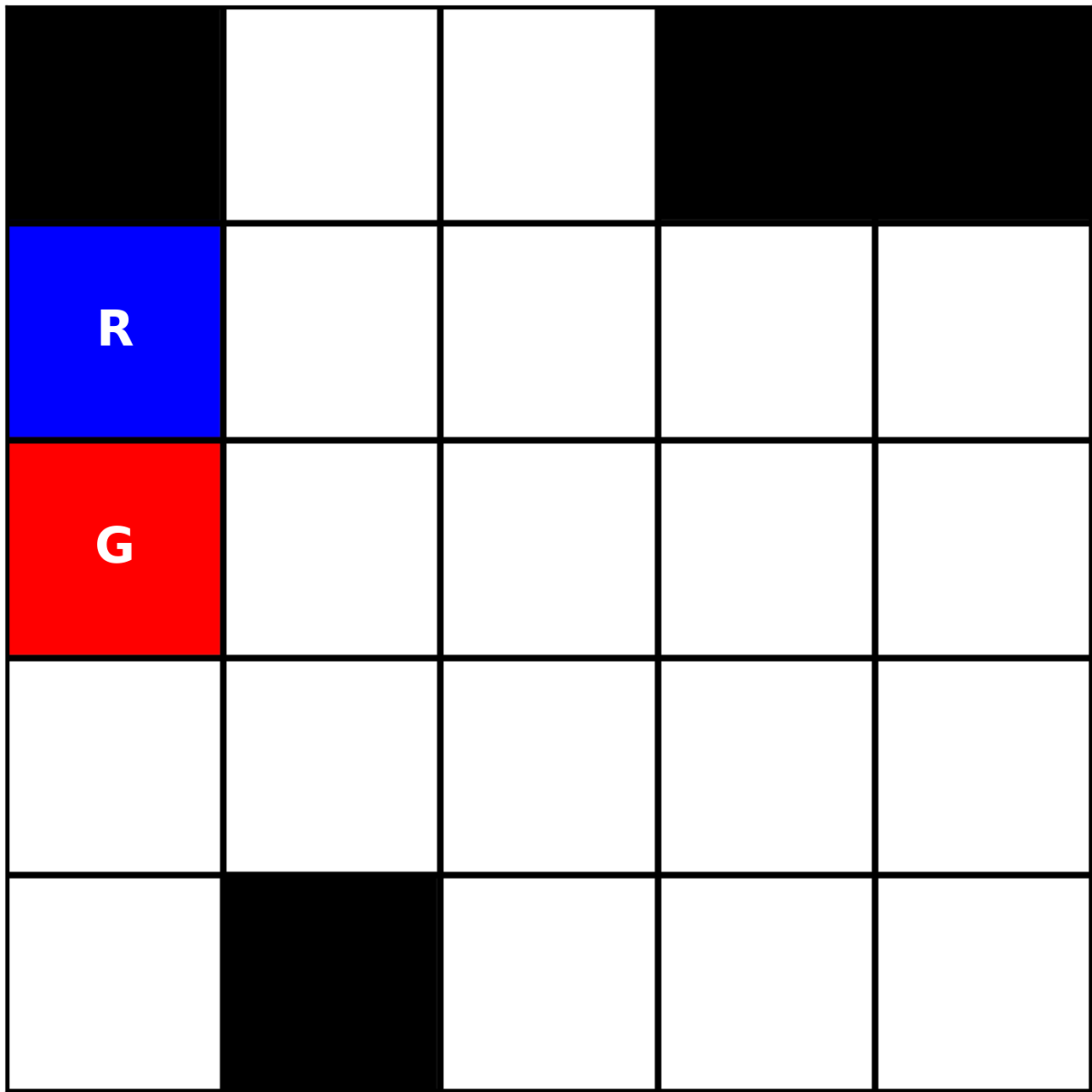
(MOVE-TOP-FROM-TO ROBOT1 (4, 3) (3, 3))

(MOVE-TOP-FROM-TO ROBOT1 (3, 3) (2, 3))

(MOVE-TOP-FROM-TO ROBOT1 (2, 3) (1, 3))

(MOVE-LEFT-FROM-TO ROBOT1 (1, 3) (1, 2))

(MOVE-TOP-FROM-TO ROBOT1 (1, 2) (0, 2))



Grid has 5 rows, 5 columns

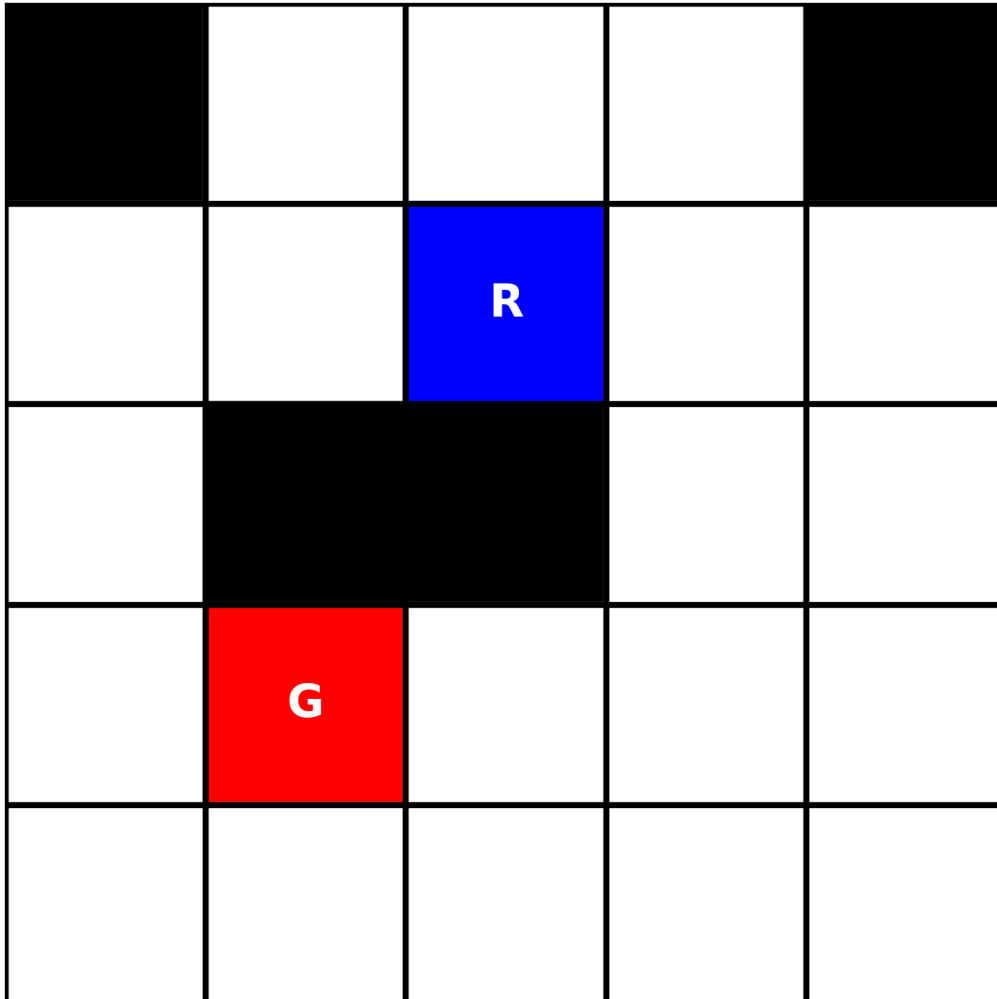
Start position: (1, 0)

Goal position: (2, 0)

Obstacle positions: (0, 3), (0, 4), (4, 1)

SOLUTION:

(MOVE-BOTTOM-FROM-TO ROBOT1 (0, 1) (2, 0))



Grid has 5 rows, 5 columns

Start position: (1, 2)

Goal position: (3, 1)

Obstacle positions: (0, 0), (0, 4), (2, 1), (2, 2)

SOLUTION:

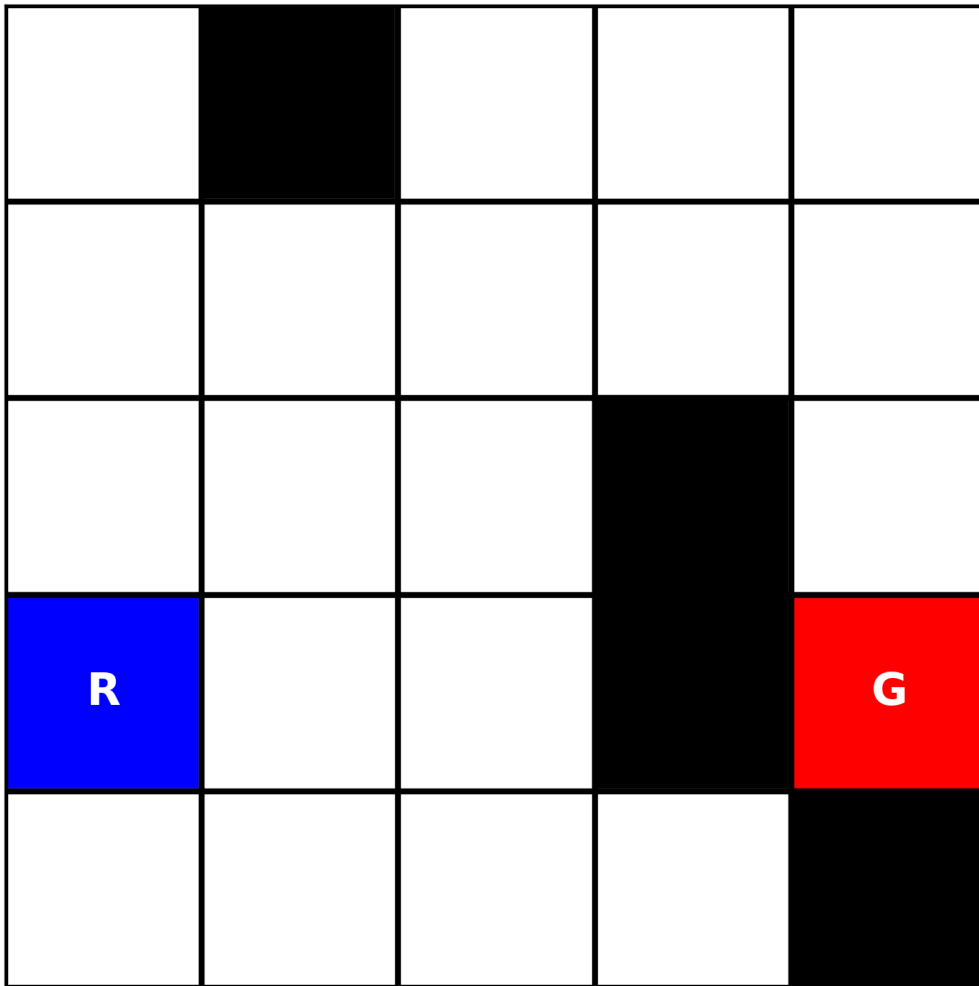
(MOVE-LEFT-FROM-TO ROBOT1 (1, 2) (1, 1))

(MOVE-LEFT-FROM-TO ROBOT1 (1, 1) (1, 0))

(MOVE-BOTTOM-FROM-TO ROBOT1 (1, 0) (2, 0))

(MOVE-BOTTOM-FROM-TO ROBOT1 (2, 0) (3, 0))

(MOVE-RIGHT-FROM-TO ROBOT1 (3, 0) (3, 1))



Grid has 5 rows, 5 columns

Start position: (3, 0)

Goal position: (3, 4)

Obstacle positions: (4, 4), (3, 3), (2, 3), (0, 1)

SOLUTION:

(MOVE-TOP-FROM-TO ROBOT1 (3, 0) (2, 0))

(MOVE-TOP-FROM-TO ROBOT1 (2, 0) (1, 0))

(MOVE-RIGHT-FROM-TO ROBOT1 (1, 0) (1, 1))

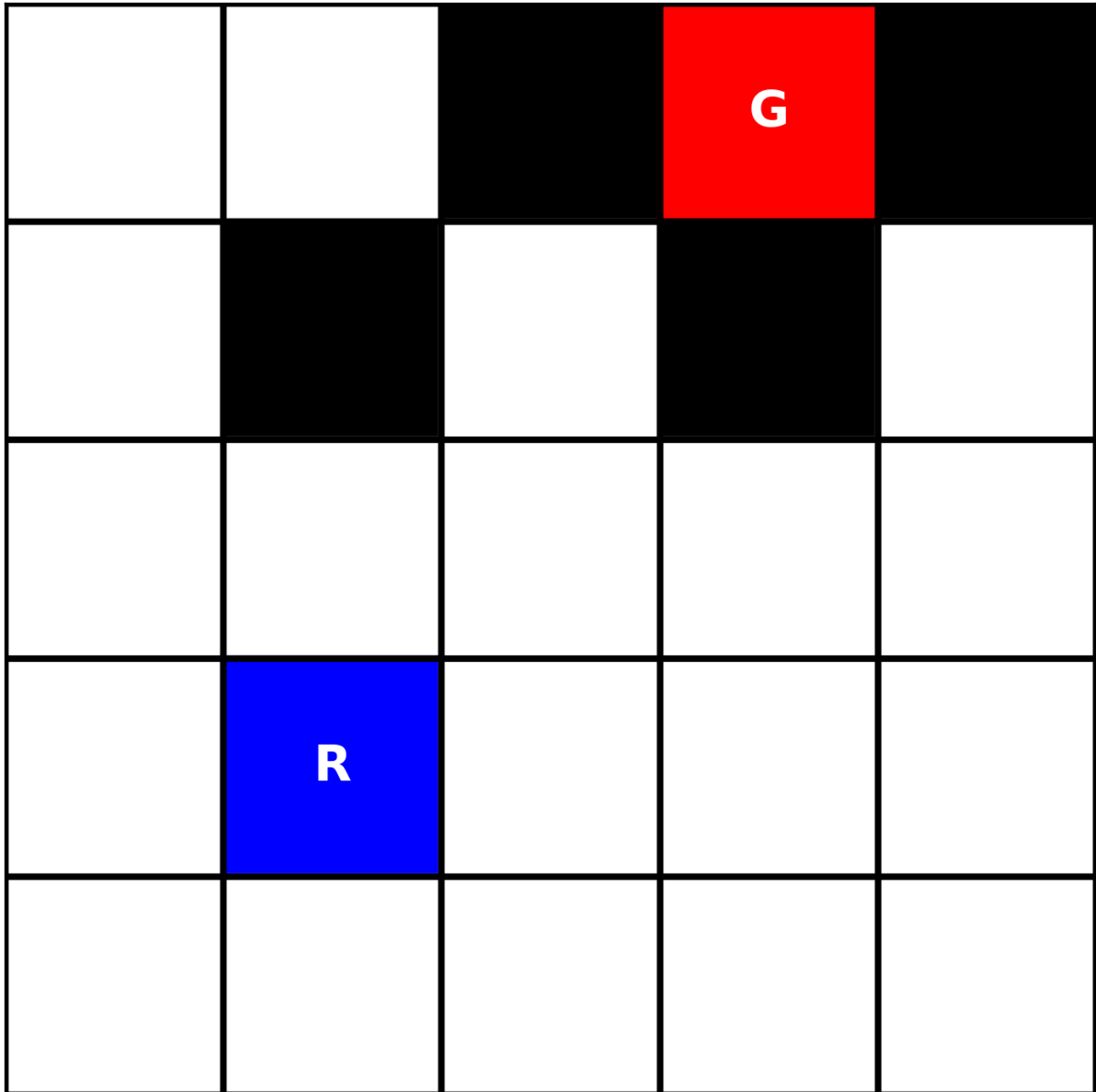
(MOVE-RIGHT-FROM-TO ROBOT1 (1, 1) (1, 2))

(MOVE-RIGHT-FROM-TO ROBOT1 (1, 2) (1, 3))

(MOVE-RIGHT-FROM-TO ROBOT1 (1, 3) (1, 4))

(MOVE-BOTTOM-FROM-TO ROBOT1 (1, 4) (2, 4))

(MOVE-BOTTOM-FROM-TO ROBOT1 (2, 4) (3, 4))



Grid has 5 rows, 5 columns

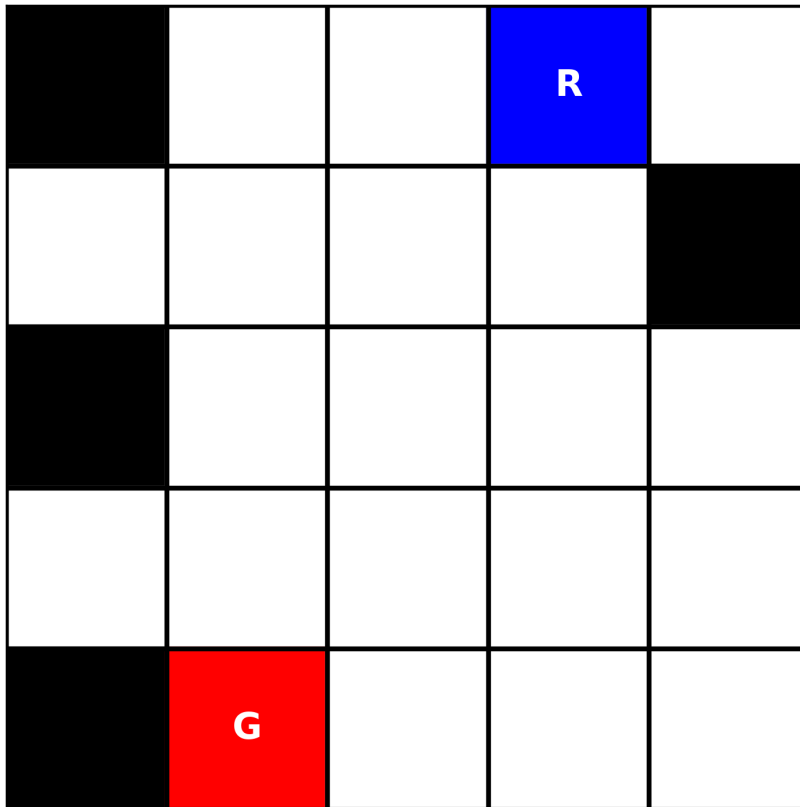
Start position: (3, 1)

Goal position: (0, 3)

Obstacle positions: (0, 2), (0, 4), (1, 1), (1, 3)

SOLUTION:

NO PLAN



Grid has 5 rows, 5 columns

Start position: (0, 3)

Goal position: (4,1)

Obstacle positions: (0, 0), (1, 4), (2, 0), (4, 0)

SOLUTION:

(MOVE-BOTTOM-FROM-TO ROBOT1 (0, 3) (1, 3))

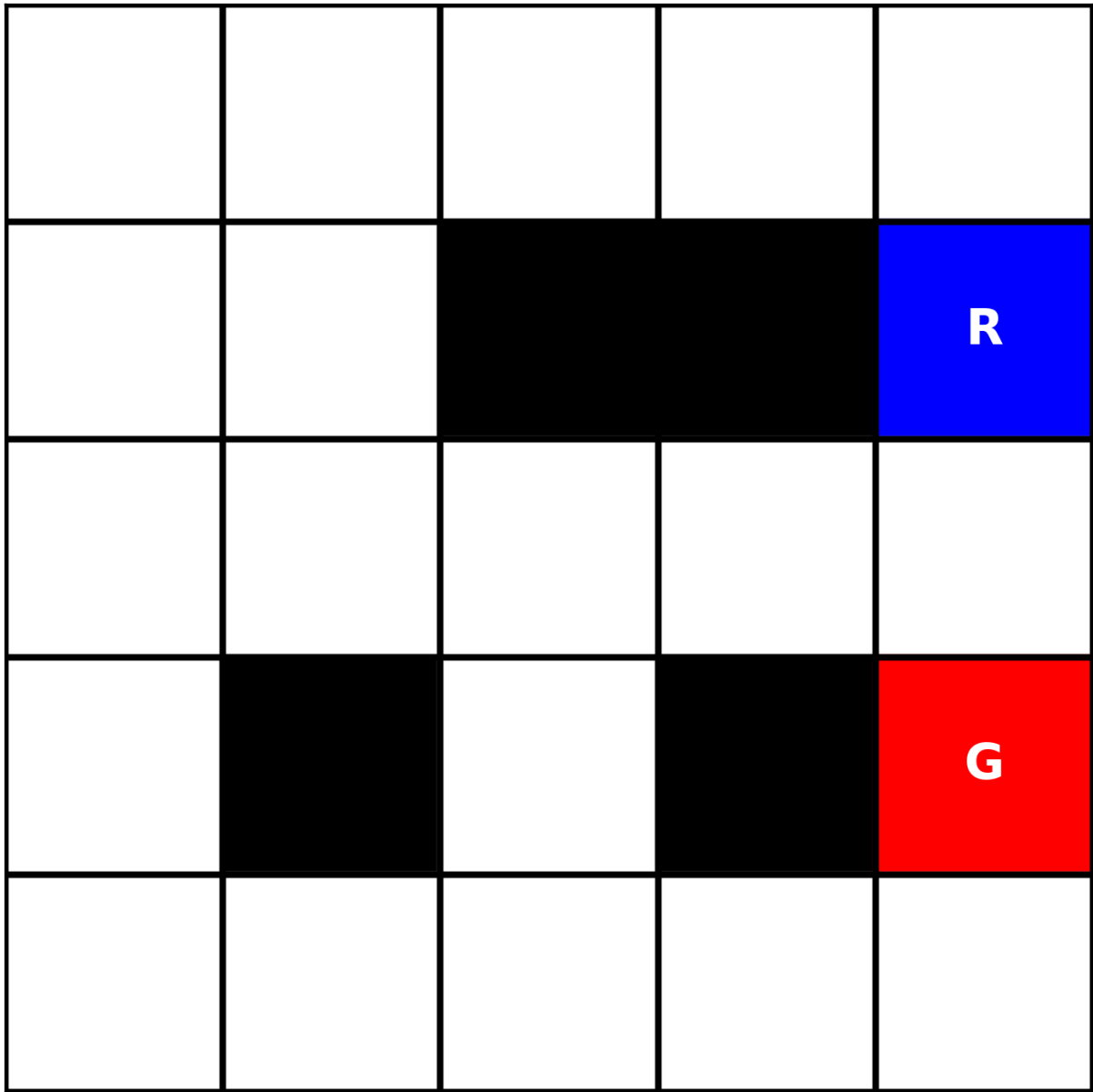
(MOVE-BOTTOM-FROM-TO ROBOT1 (1, 3) (2, 3))

(MOVE-BOTTOM-FROM-TO ROBOT1 (2, 3) (3, 3))

(MOVE-BOTTOM-FROM-TO ROBOT1 (3, 3) (3, 4))

(MOVE-LEFT-FROM-TO ROBOT1 (3, 4) (2, 4))

(MOVE-LEFT-FROM-TO ROBOT1 (2, 4) (1, 4))



Grid has 5 rows, 5 columns

Start position: (1, 4)

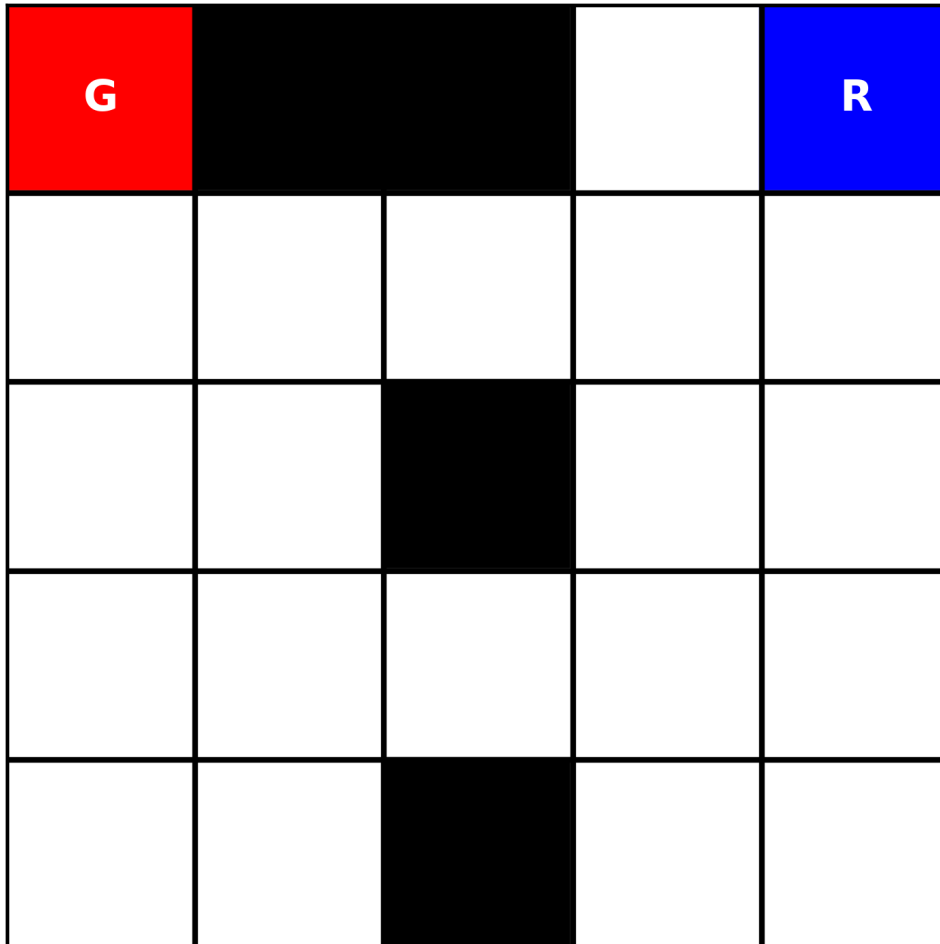
Goal position: (3, 4)

Obstacle positions: (3, 1), (1, 2), (1, 3), (3, 3)

SOLUTION:

(MOVE-BOTTOM-FROM-TO ROBOT1 (1, 4) (2, 4))

(MOVE-BOTTOM-FROM-TO ROBOT1 (2, 4) (3, 4))



Grid has 5 rows, 5 columns

Start position: (0, 4)

Goal position: (0, 0)

Obstacle positions: (0, 1), (0, 2), (4, 2), (2, 2)

SOLUTION:

(MOVE-BOTTOM-FROM-TO ROBOT1 (0, 4) (1, 4))

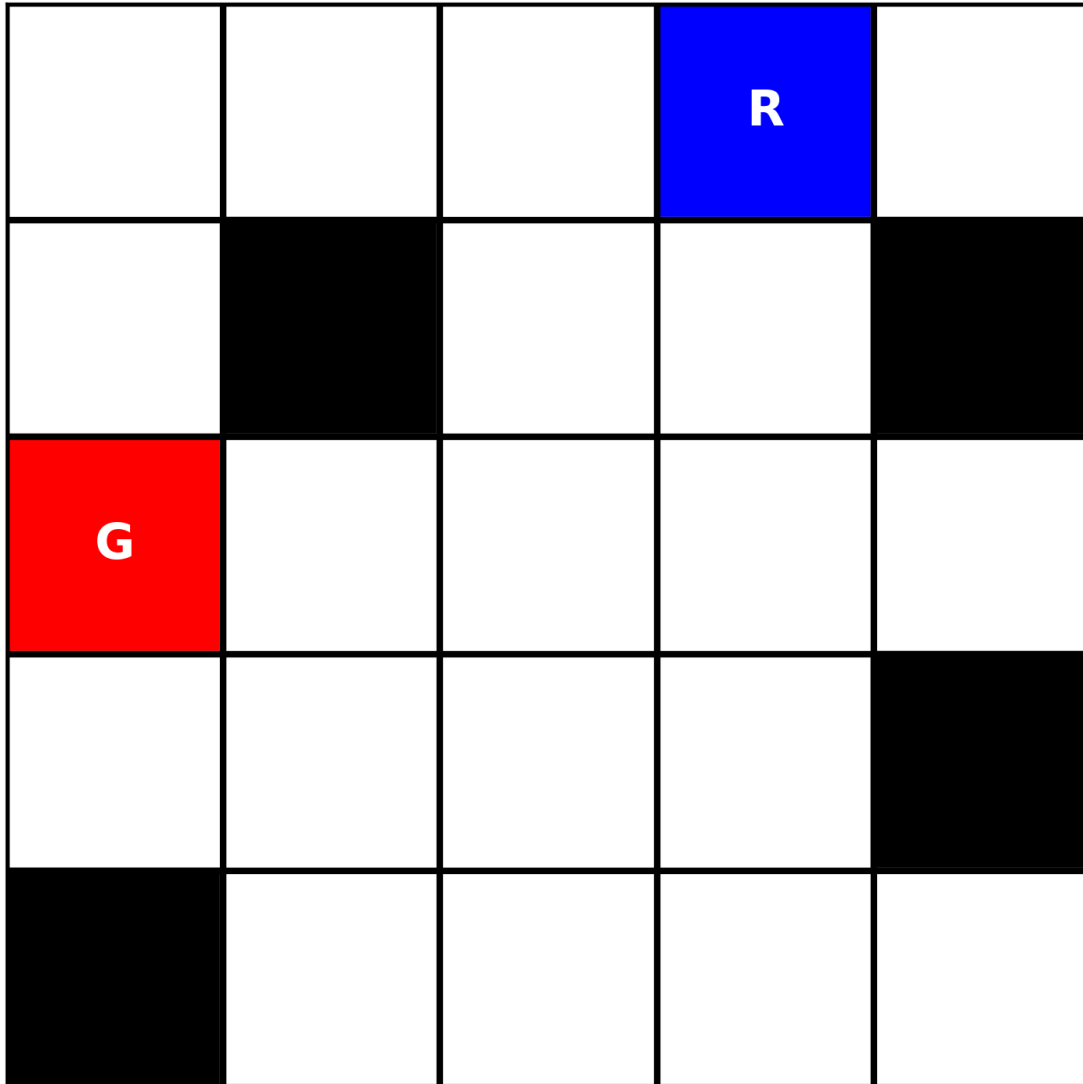
(MOVE-LEFT-FROM-TO ROBOT1 (1, 4) (1, 3))

(MOVE-LEFT-FROM-TO ROBOT1 (1, 3) (1, 2))

(MOVE-LEFT-FROM-TO ROBOT1 (1, 2) (1, 1))

(MOVE-LEFT-FROM-TO ROBOT1 (1, 1) (1, 0))

(MOVE-TOP-FROM-TO ROBOT1 (1, 0) (0, 0))



Grid has 5 rows, 5 columns

Start position: (0, 3)

Goal position: (2, 0)

Obstacle positions: (1, 1), (4, 0), (3, 4), (1, 4)

SOLUTION:

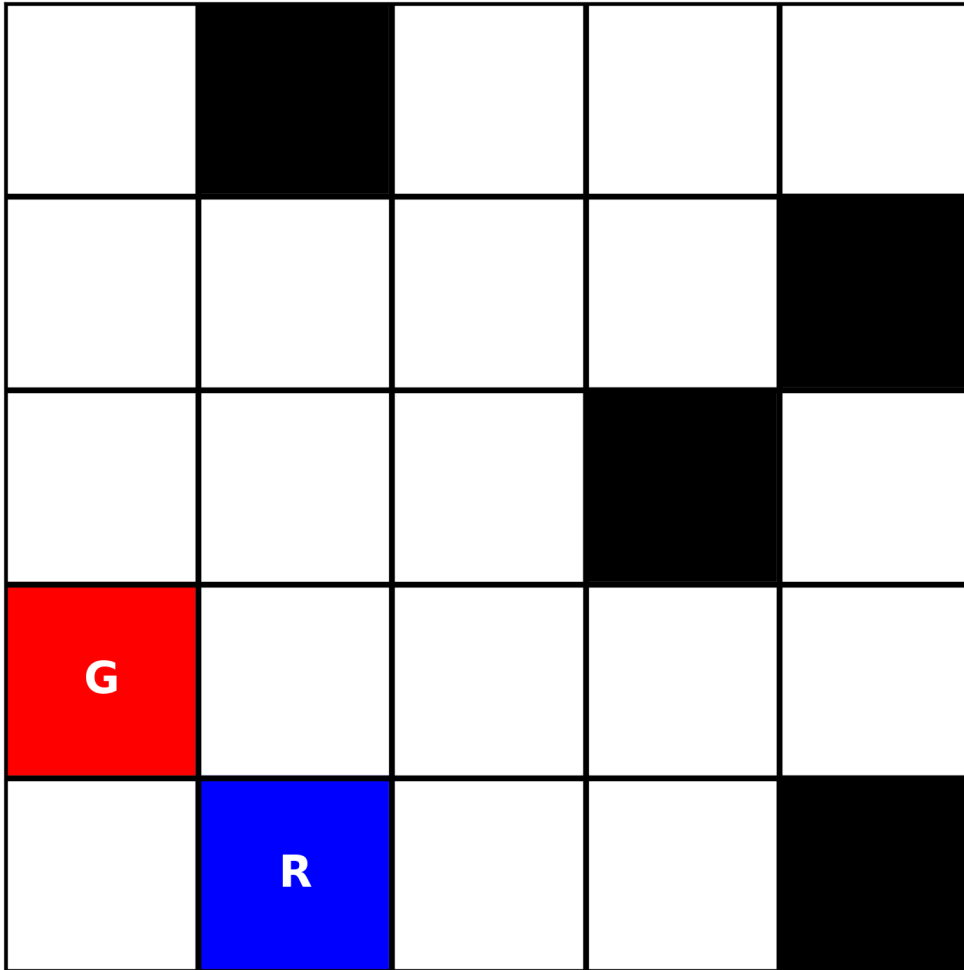
(MOVE-BOTTOM-FROM-TO ROBOT1 (0, 3) (1, 3))

(MOVE-BOTTOM-FROM-TO ROBOT1 (1, 3) (2, 3))

(MOVE-LEFT-FROM-TO ROBOT1 (2, 3) (2, 2))

(MOVE-LEFT-FROM-TO ROBOT1 (2, 2) (2, 1))

(MOVE-LEFT-FROM-TO ROBOT1 (2, 1) (2, 0))



Grid has 5 rows, 5 columns

Start position: (4, 1)

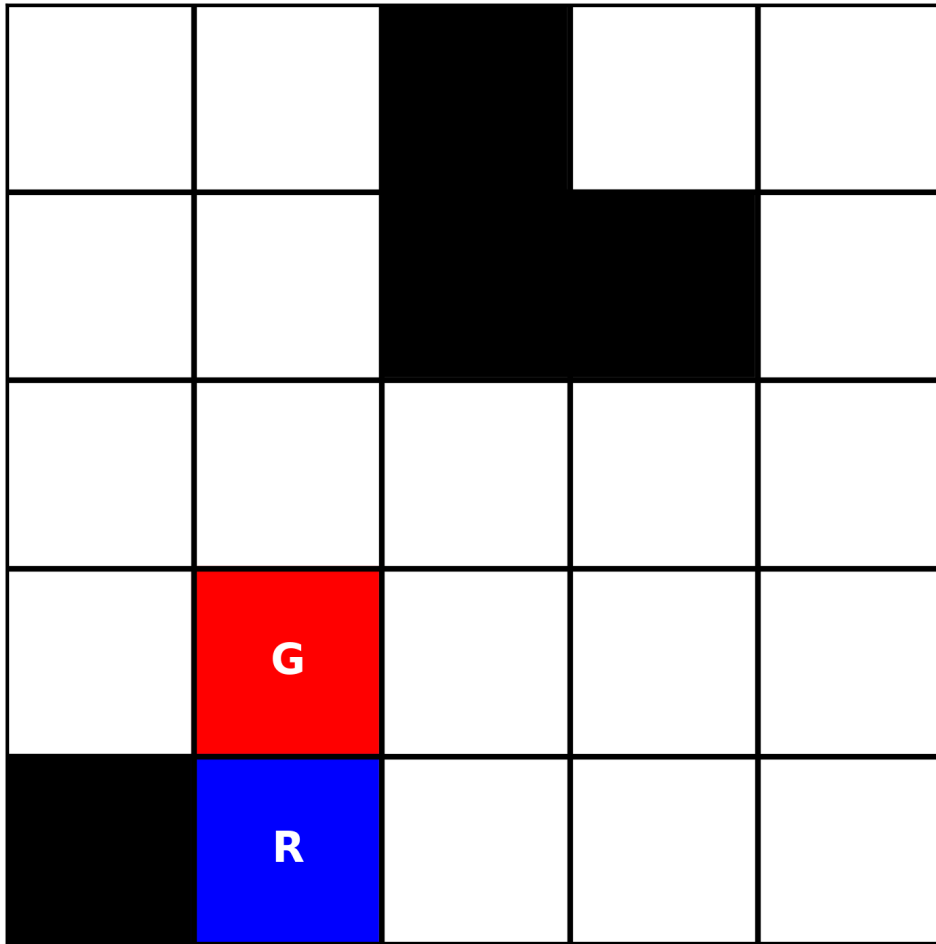
Goal position: (3, 0)

Obstacle positions: (4, 4), (2, 3), (1, 4), (0, 1)

SOLUTION:

(MOVE-LEFT-FROM-TO ROBOT1 (4, 1) (4, 0))

(MOVE-TOP-FROM-TO ROBOT1 (4, 0) (3, 0))



Grid has 5 rows, 5 columns

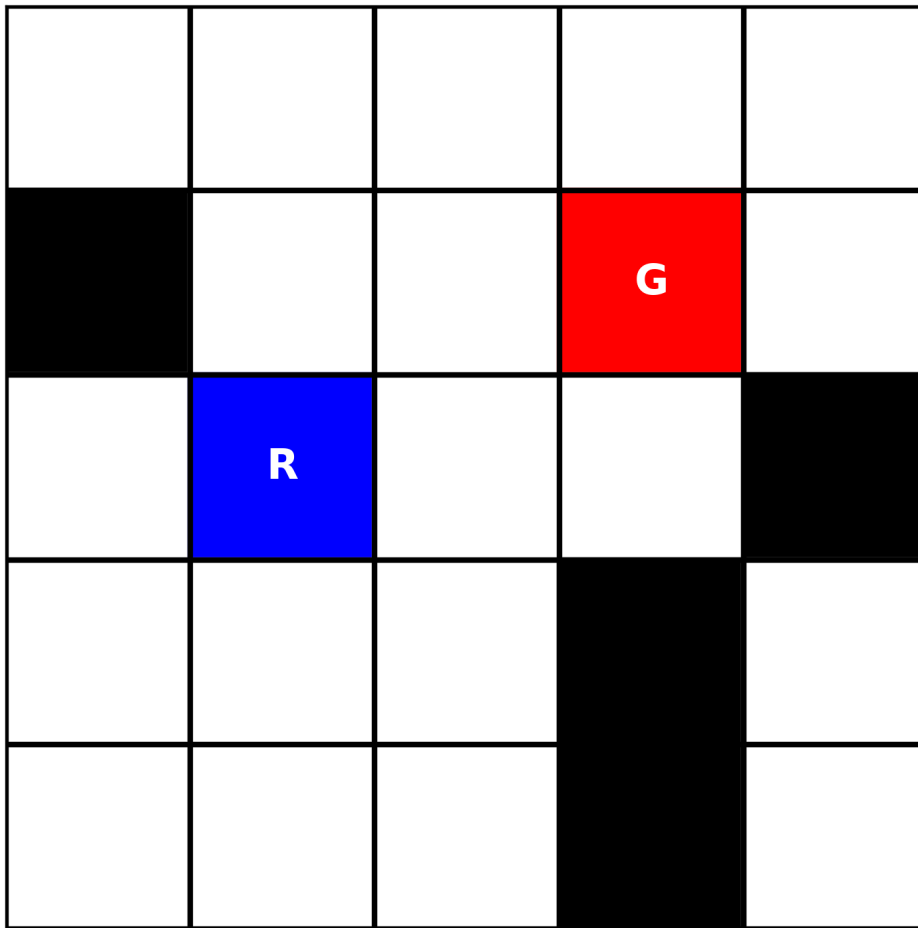
Start position: (4, 1)

Goal position: (3, 1)

Obstacle positions: (4, 0), (0, 2), (1, 2), (1, 3)

SOLUTION:

(MOVE-TOP-FROM-TO ROBOT1 (4, 1) (3, 1))



Grid has 5 rows, 5 columns

Start position: (2, 1)

Goal position: (1, 3)

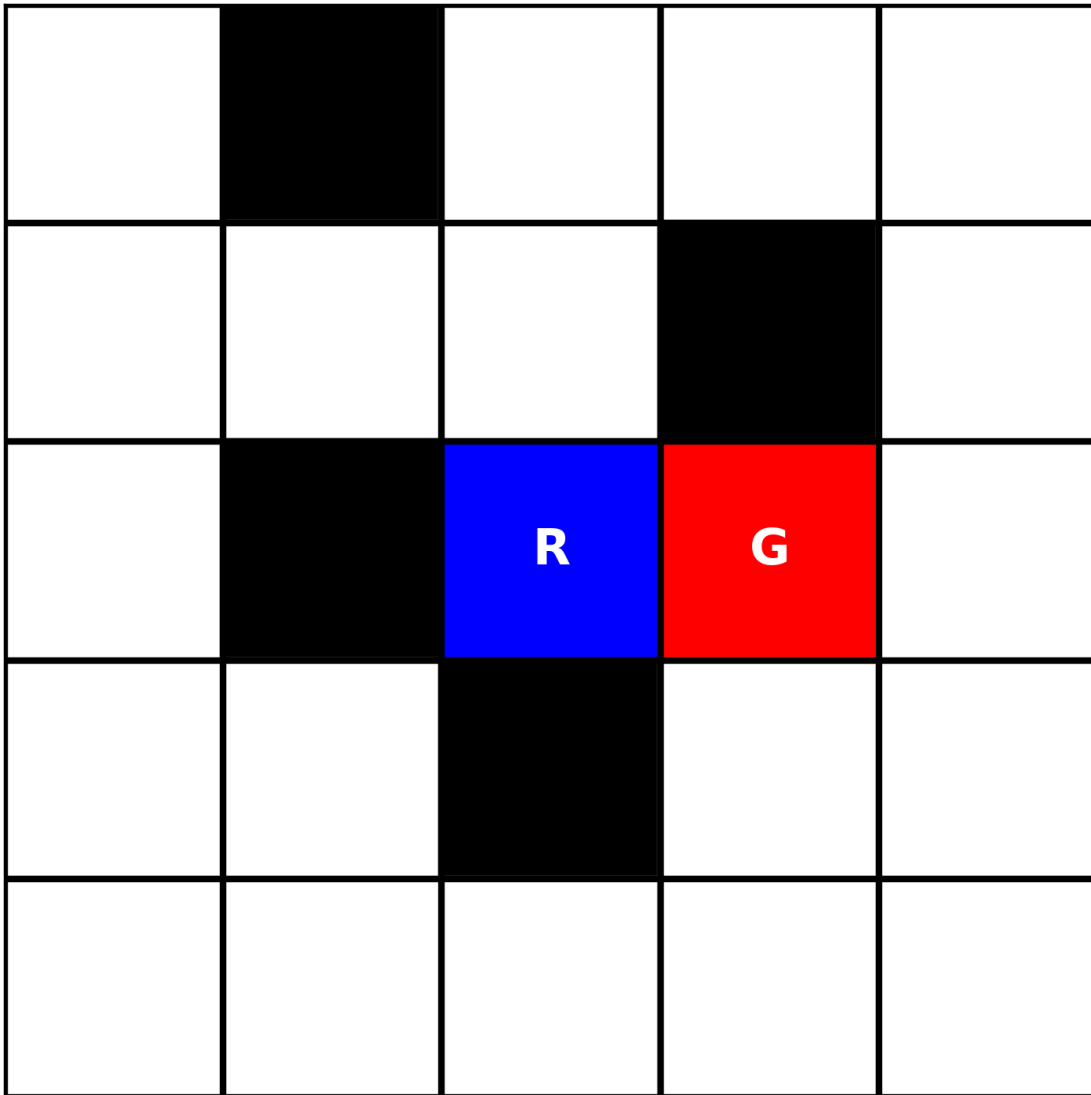
Obstacle positions: (1, 0), (2, 4), (3, 3), (4, 3)

SOLUTION:

(MOVE-TOP-FROM-TO ROBOT1 (2, 1) (1, 1))

(MOVE-RIGHT-FROM-TO ROBOT1 (1, 1) (1, 2))

(MOVE-RIGHT-FROM-TO ROBOT1 (1, 2) (1, 3))



Grid has 5 rows, 5 columns

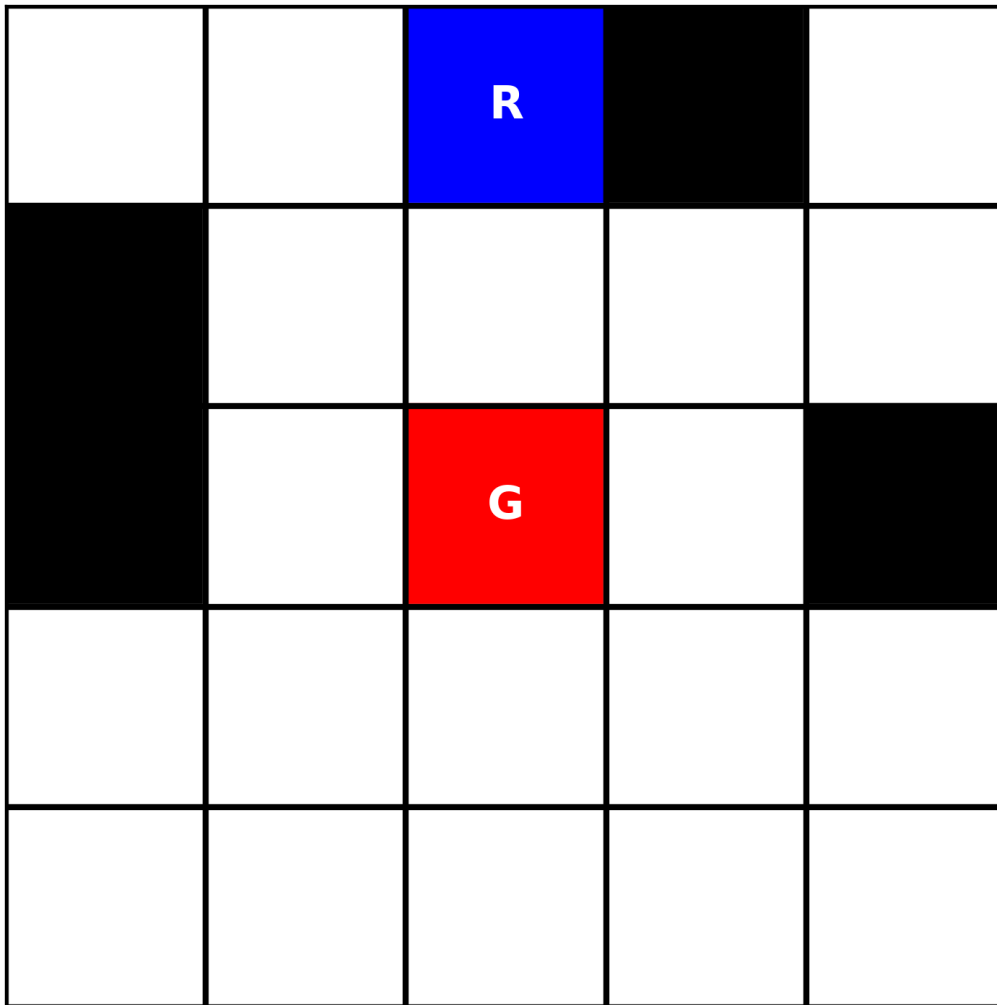
Start position: (2, 2)

Goal position: (2, 3)

Obstacle positions: (0, 1), (3, 2), (1, 3), (2, 1)

SOLUTION:

(MOVE-RIGHT-FROM-TO ROBOT1 (2, 2) (2, 3))



Grid has 5 rows, 5 columns

Start position: (0, 2)

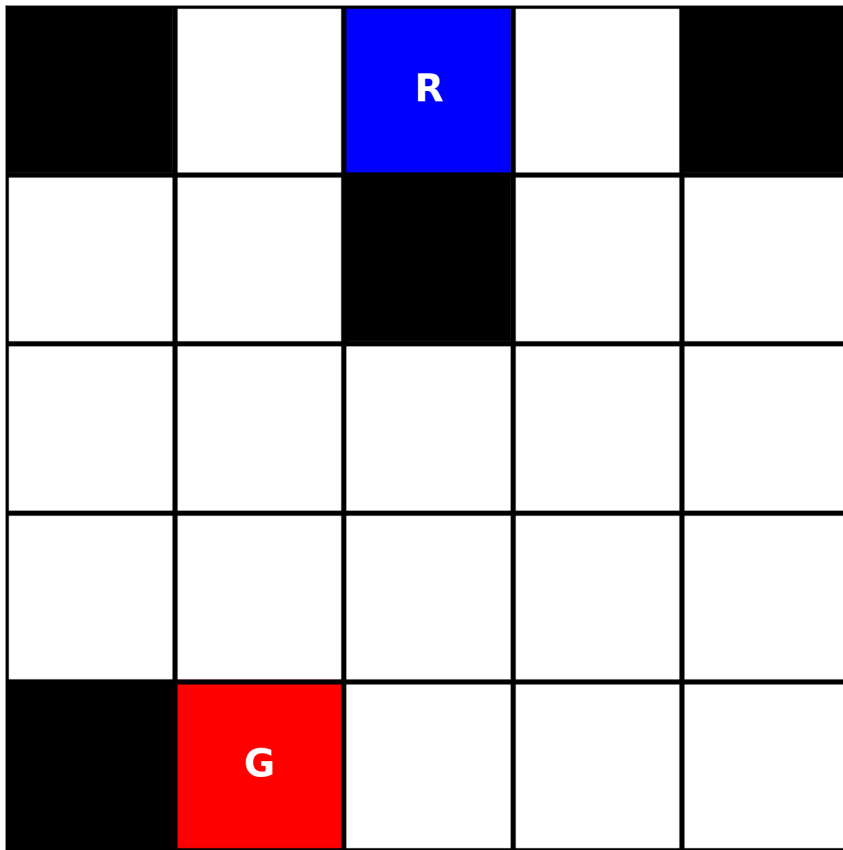
Goal position: (2, 2)

Obstacle positions: (1, 0), (2, 4), (0, 3), (2, 0)

SOLUTION:

(MOVE-BOTTOM-FROM-TO ROBOT1 (0, 2) (1, 2))

(MOVE-BOTTOM-FROM-TO ROBOT1 (1, 2) (2, 2))



Grid has 5 rows, 5 columns

Start position: (0, 2)

Goal position: (4, 1)

Obstacle positions: (1, 2), (4, 0), (0, 4), (0, 0)

SOLUTION:

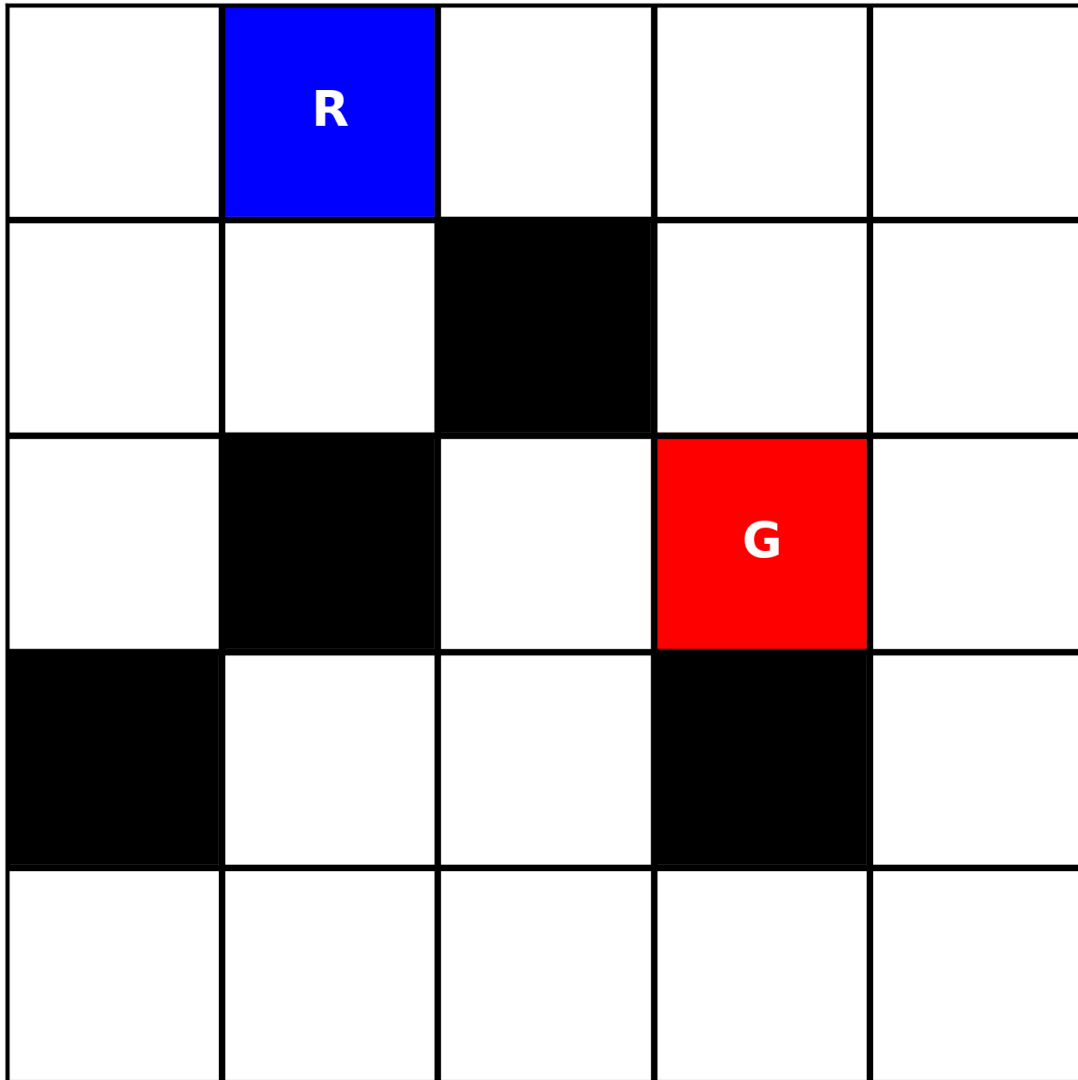
(MOVE-LEFT-FROM-TO ROBOT1 (0, 2) (0, 1))

(MOVE-BOTTOM-FROM-TO ROBOT1 (0, 1) (1, 1))

(MOVE-BOTTOM-FROM-TO ROBOT1 (1, 1) (2, 1))

(MOVE-BOTTOM-FROM-TO ROBOT1 (2, 1) (3, 1))

(MOVE-BOTTOM-FROM-TO ROBOT1 (3, 1) (4, 1))



Grid has 5 rows, 5 columns

Start position: (0, 1)

Goal position: (2, 3)

Obstacle positions: (3, 3), (1, 2), (2, 1), (3, 0)

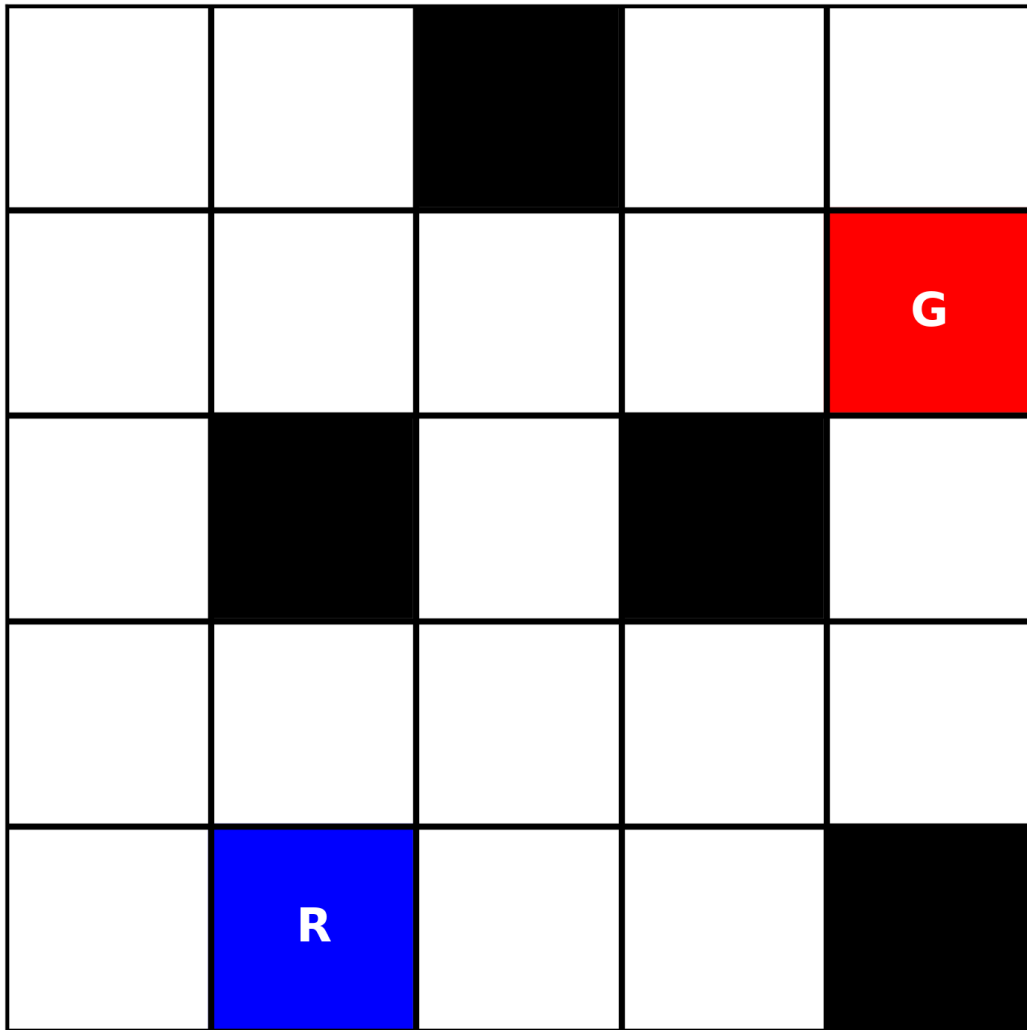
SOLUTION:

(MOVE-RIGHT-FROM-TO ROBOT1 (0, 1) (0, 2))

(MOVE-RIGHT-FROM-TO ROBOT1 (0, 2) (0, 3))

(MOVE-BOTTOM-FROM-TO ROBOT1 (0, 3) (1, 3))

(MOVE-BOTTOM-FROM-TO ROBOT1 (1, 3) (2, 3))



Grid has 5 rows, 5 columns

Start position: (4, 1)

Goal position: (1, 4)

Obstacle positions: (2, 3), (0, 2), (2, 1), (4, 4)

SOLUTION:

(MOVE-RIGHT-FROM-TO ROBOT1 (4, 1) (4, 2))

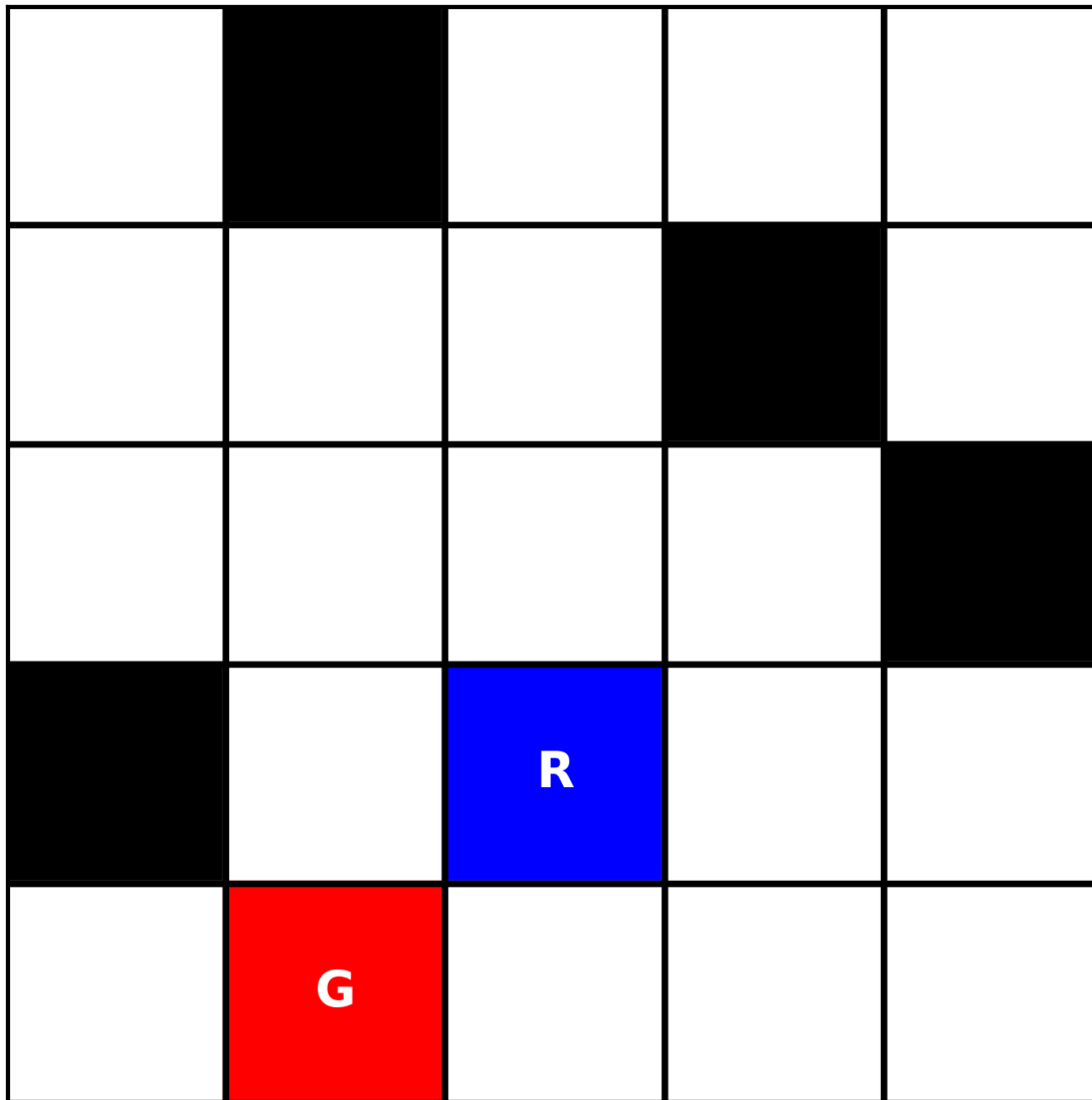
(MOVE-RIGHT-FROM-TO ROBOT1 (4, 2) (4, 3))

(MOVE-TOP-FROM-TO ROBOT1 (4, 3) (3, 3))

(MOVE-RIGHT-FROM-TO ROBOT1 (3, 3) (3, 4))

(MOVE-TOP-FROM-TO ROBOT1 (3, 4) (2, 4))

(MOVE-TOP-FROM-TO ROBOT1 (2, 4) (1, 4))



Grid has 5 rows, 5 columns

Start position: (1, 3)

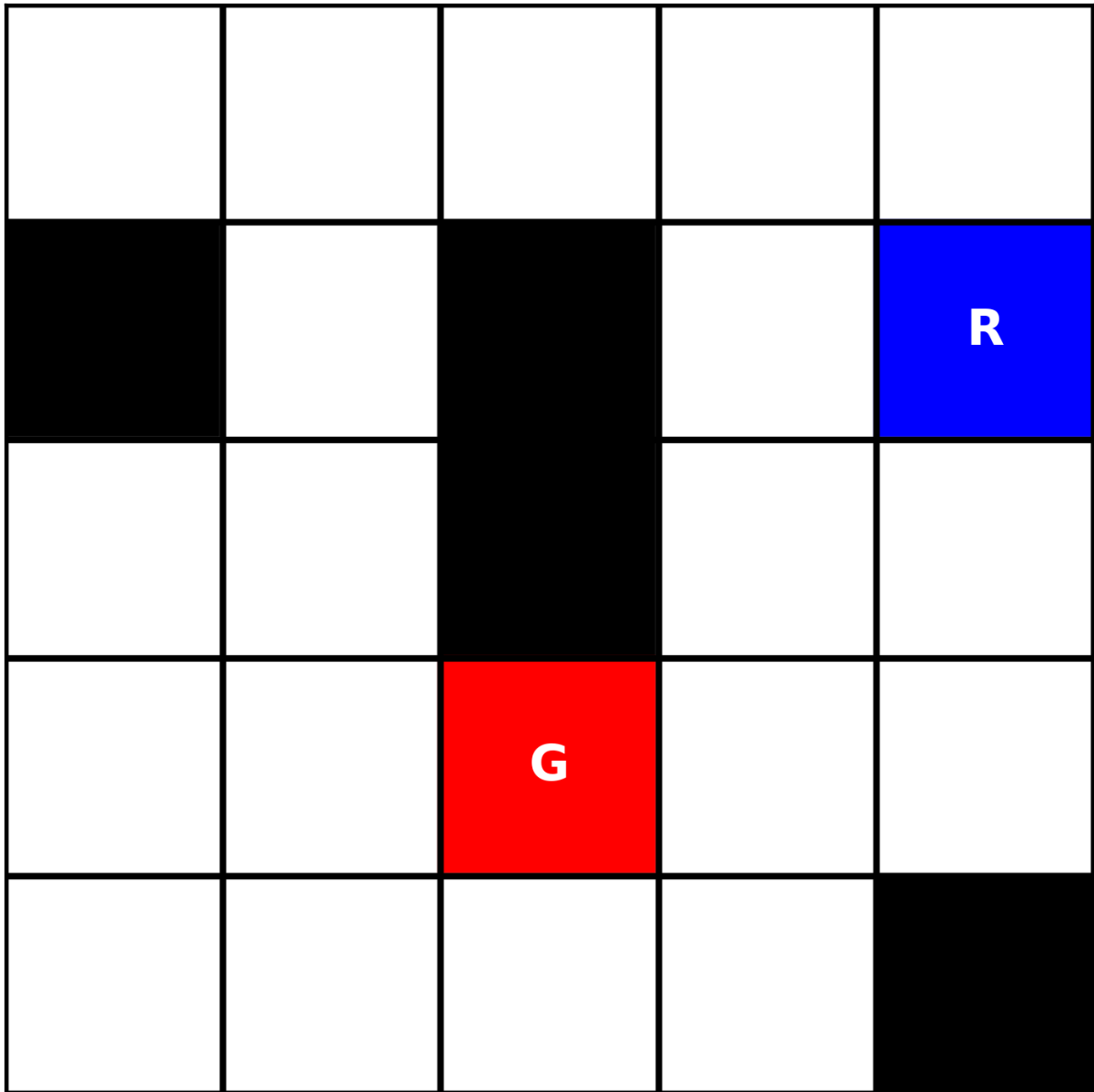
Goal position: (0, 4)

Obstacle positions: (4, 4), (2, 4), (3, 4), (4, 3)

SOLUTION:

(MOVE-BOTTOM-FROM-TO ROBOT1 (3, 2) (4, 2))

(MOVE-LEFT-FROM-TO ROBOT1 (4, 2) (4, 1))



Grid has 5 rows, 5 columns

Start position: (1, 4)

Goal position: (3, 2)

Obstacle positions: (4, 4), (1, 0), (1, 2), (2, 2)

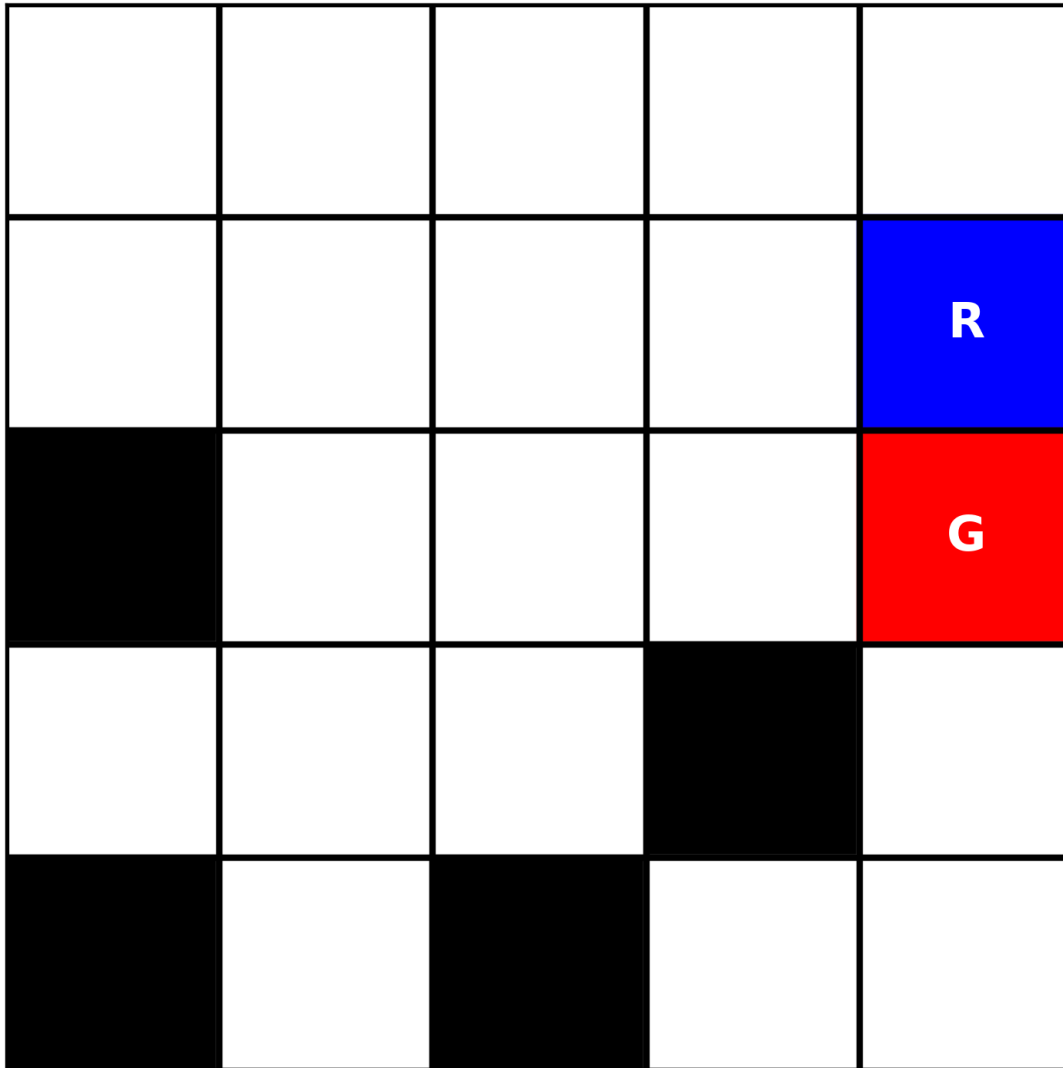
SOLUTION:

(MOVE-BOTTOM-FROM-TO ROBOT1 (1, 4) (2, 4))

(MOVE-BOTTOM-FROM-TO ROBOT1 (2, 4) (3, 4))

(MOVE-LEFT-FROM-TO ROBOT1 (3, 4) (3, 3))

(MOVE-LEFT-FROM-TO ROBOT1 (3, 3) (3, 2))



Grid has 5 rows, 5 columns

Start position: (1, 4)

Goal position: (2, 4)

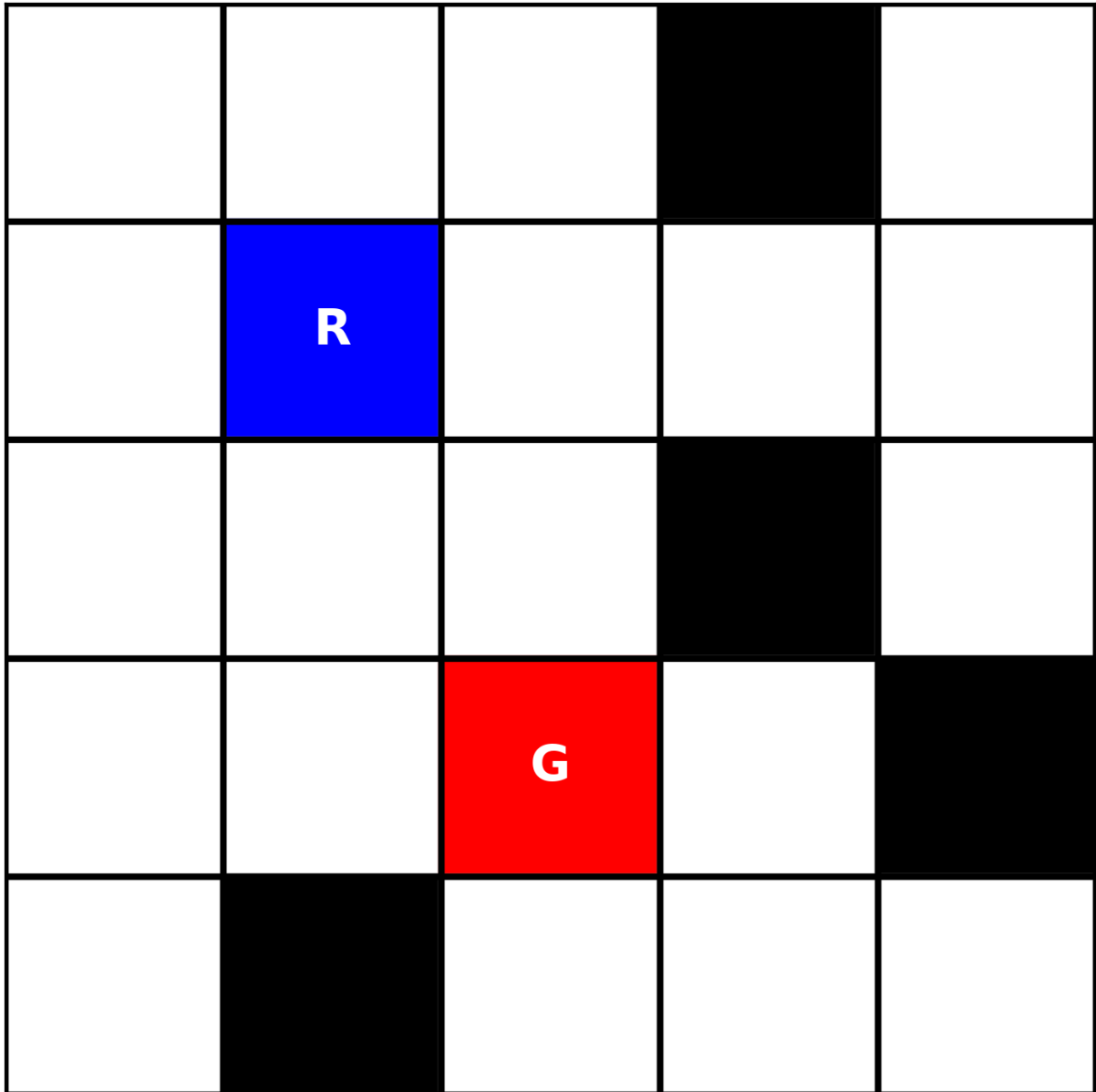
Obstacle positions: (4, 0), (3, 3), (2, 0), (4, 2)

SOLUTION:

(MOVE-BOTTOM-FROM-TO ROBOT1 (1, 1) (2, 1))

(MOVE-BOTTOM-FROM-TO ROBOT1 (2, 1) (3, 1))

(MOVE-RIGHT-FROM-TO ROBOT1 (3, 1) (3, 2))



Grid has 5 rows, 5 columns

Start position: (1, 1)

Goal position: (3, 2)

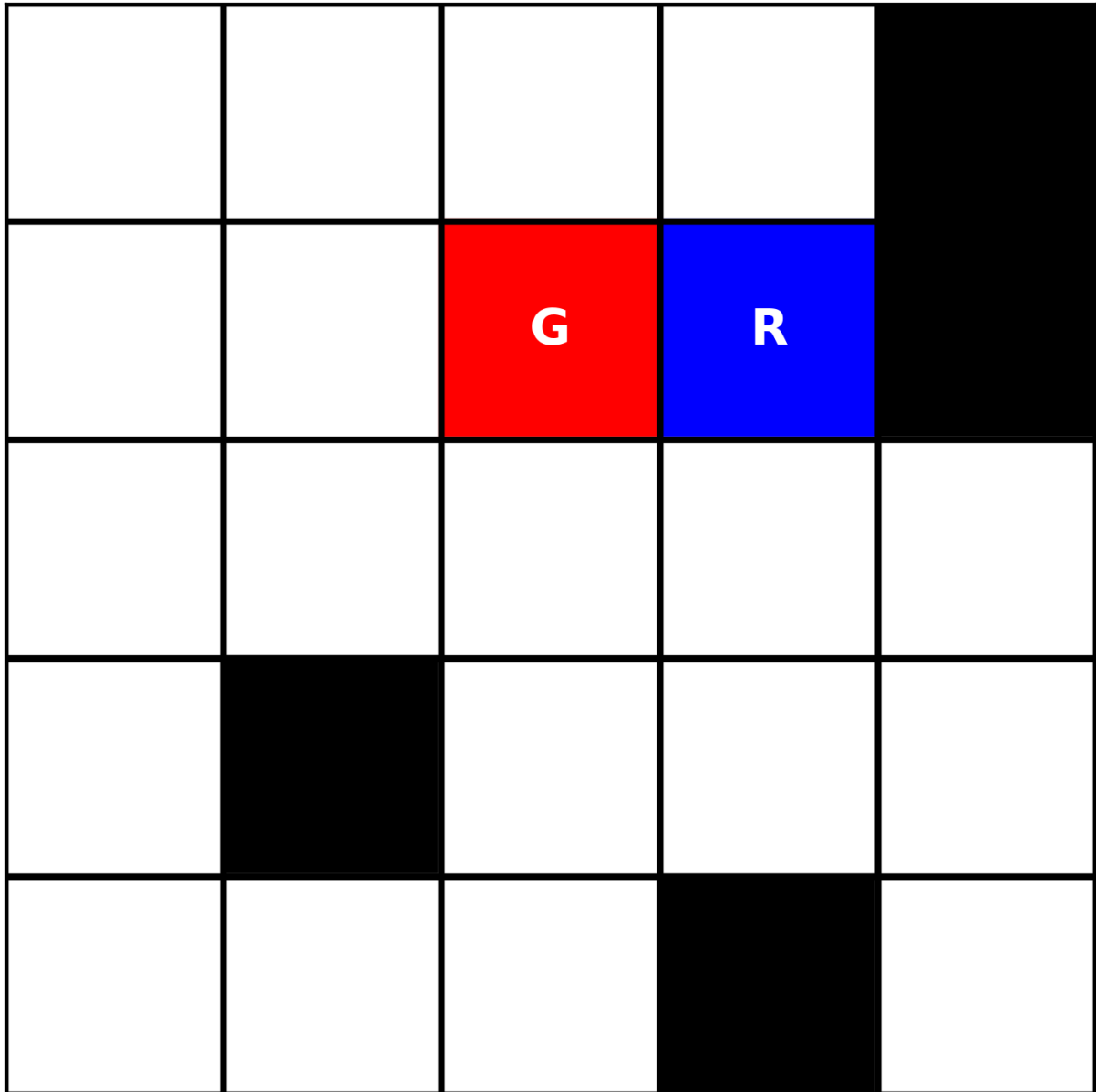
Obstacle positions: (2, 3), (0, 3), (4, 1), (3, 4)

SOLUTION:

(MOVE-BOTTOM-FROM-TO ROBOT1 (1, 1) (2, 1))

(MOVE-BOTTOM-FROM-TO ROBOT1 (2, 4) (3, 1))

(MOVE-RIGHT-FROM-TO ROBOT1 (3, 1) (3, 2))



Grid has 5 rows, 5 columns

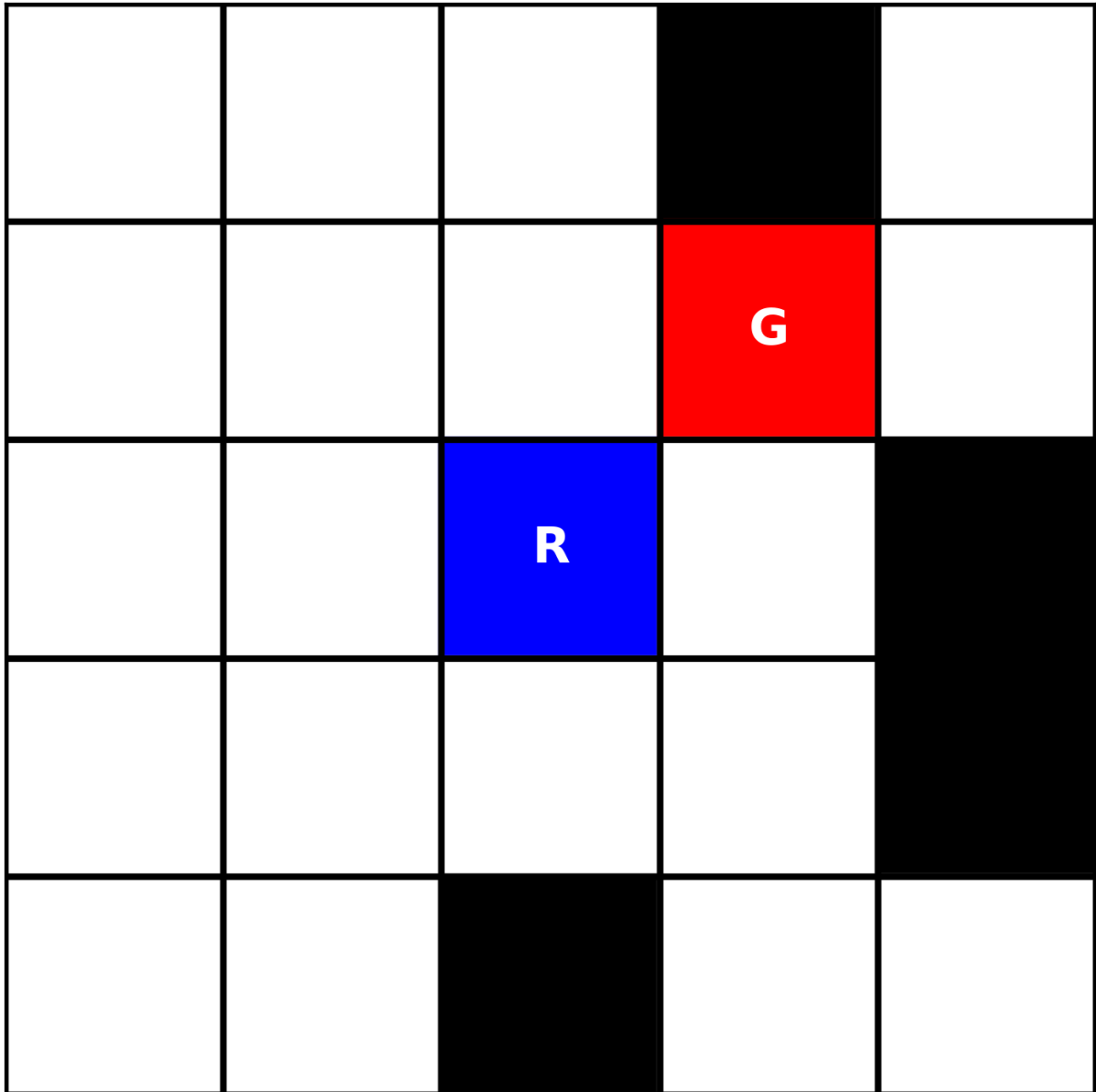
Start position: (1, 3)

Goal position: (1, 2)

Obstacle positions: (3, 1), (0, 4) (1, 4), (4, 3)

SOLUTION:

(MOVE-LEFT-FROM-TO ROBOT1 (1, 3) (1, 2))



Grid has 5 rows, 5 columns

Start position: (2, 2)

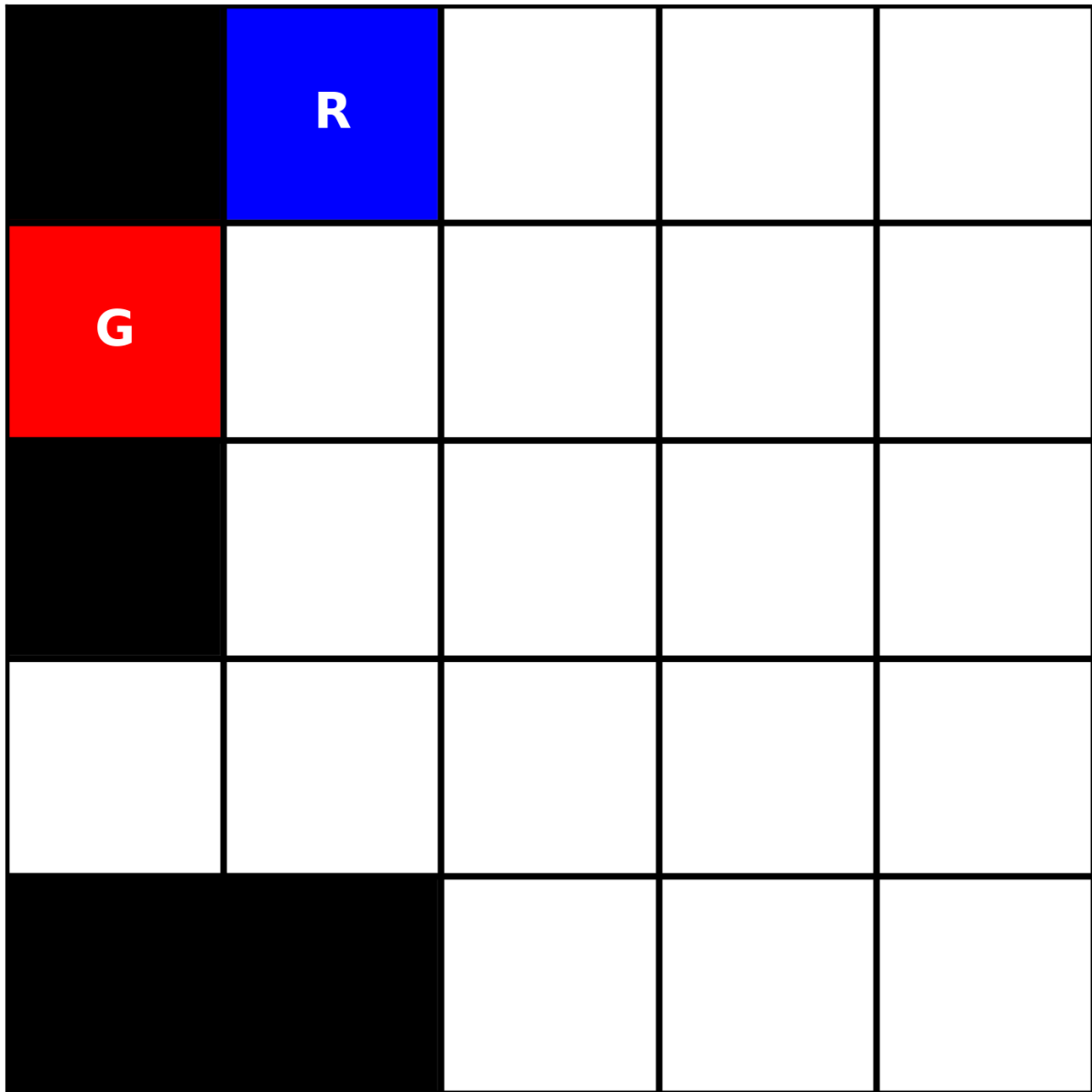
Goal position: (1, 3)

Obstacle positions: (2, 4), (0, 3), (3, 4), (4, 2)

SOLUTION:

(MOVE-RIGHT-FROM-TO ROBOT1 (2, 2) (2, 3))

(MOVE-TOP-FROM-TO ROBOT1 (2, 3) (1, 3))



Grid has 5 rows, 5 columns

Start position: (0, 1)

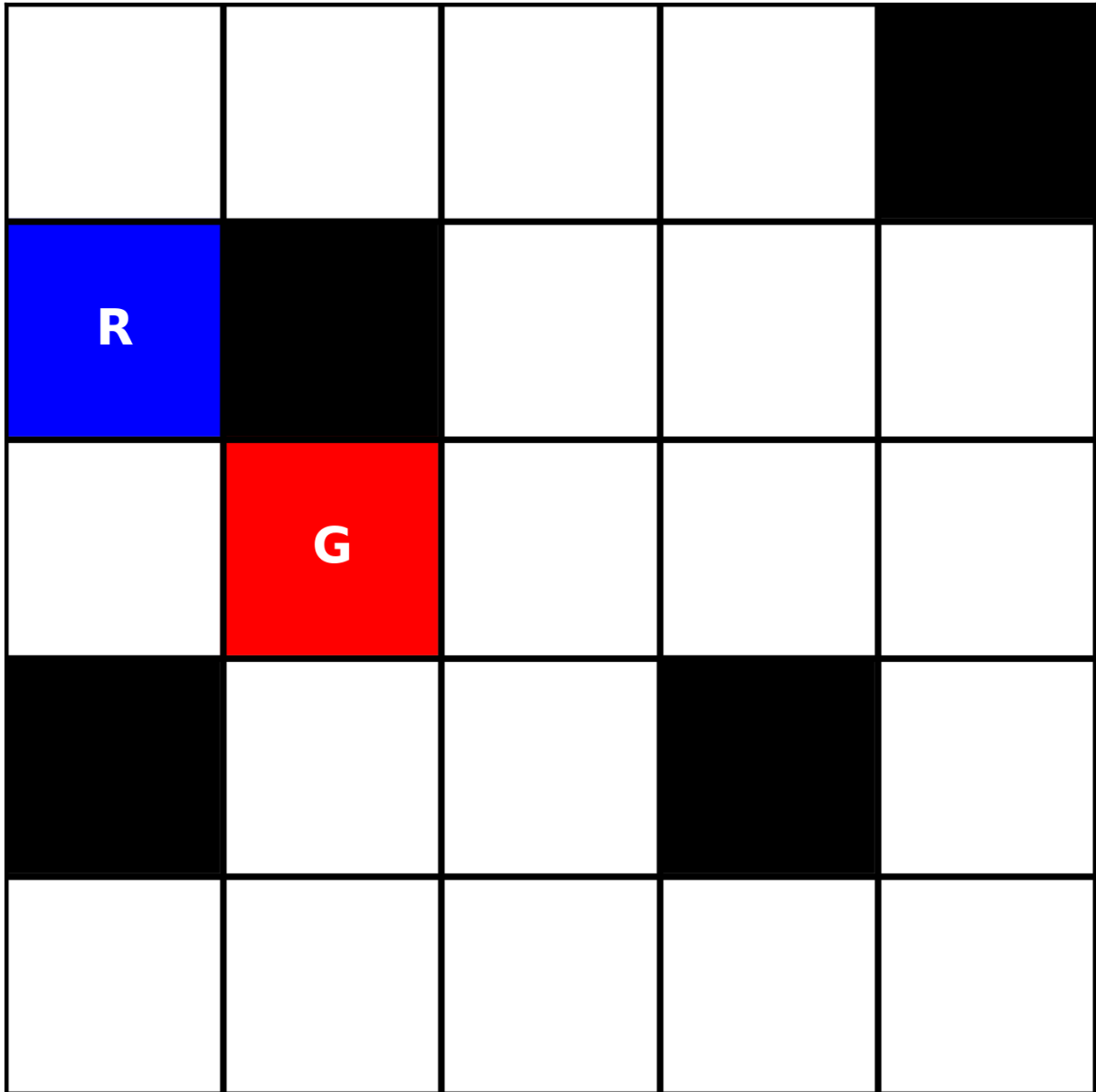
Goal position: (1, 0)

Obstacle positions: (4, 0), (2, 0), (4, 1), (0, 0)

SOLUTION:

(MOVE-BOTTOM-FROM-TO ROBOT1 (0, 1) (1, 1))

(MOVE-LEFT-FROM-TO ROBOT1 (1, 1) (1, 0))



Grid has 5 rows, 5 columns

Start position: (1, 0)

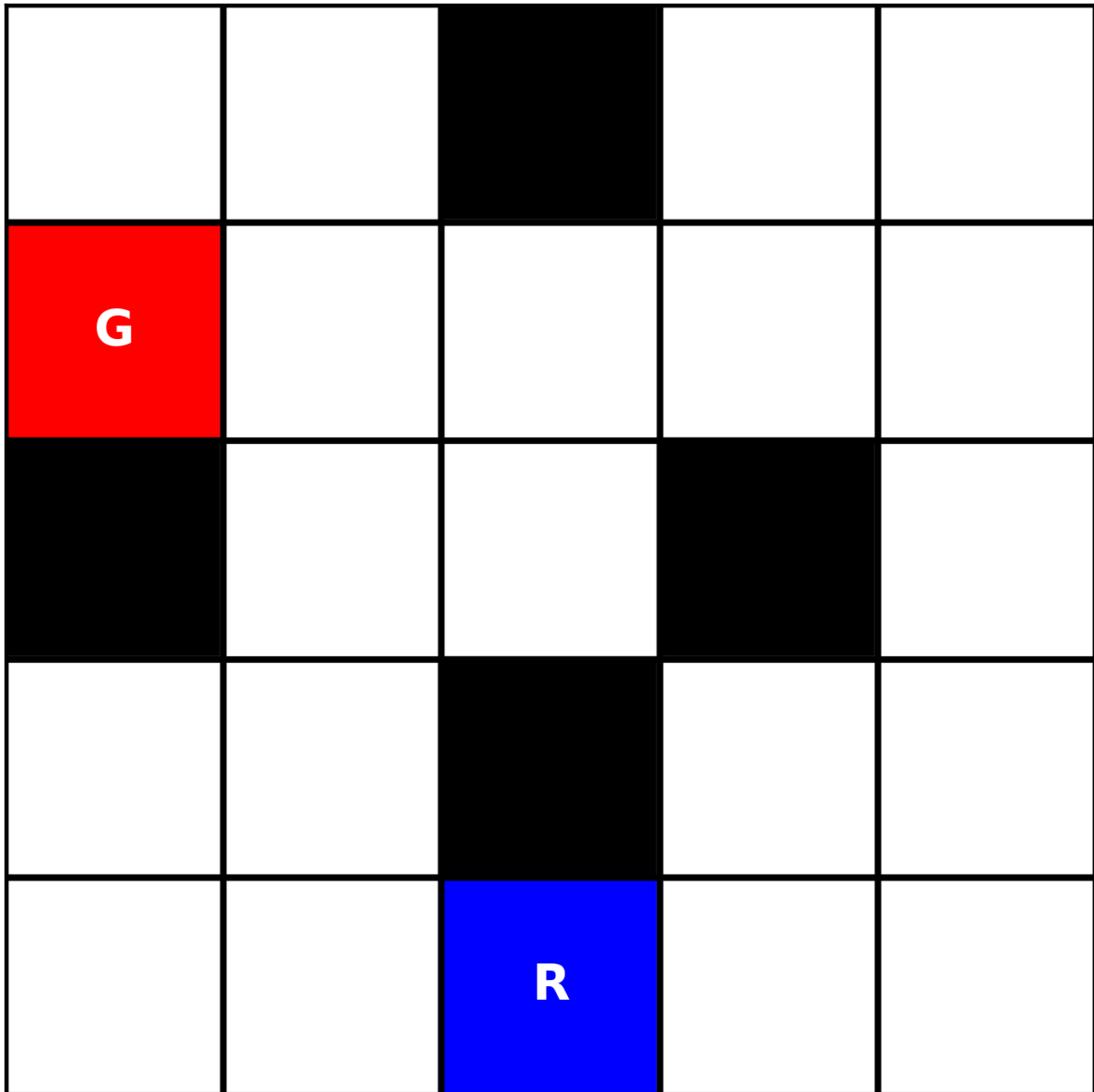
Goal position: (2, 1)

Obstacle positions: (1, 1), (3, 3), (0, 4), (3, 0)

SOLUTION:

(MOVE-BOTTOM-FROM-TO ROBOT1 (1, 0) (2, 0))

(MOVE-RIGHT-FROM-TO ROBOT1 (2, 0) (2, 1))



Grid has 5 rows, 5 columns

Start position: (4, 2)

Goal position: (1, 0)

Obstacle positions: (2, 3), (3, 2), (2, 0), (0, 2)

SOLUTION:

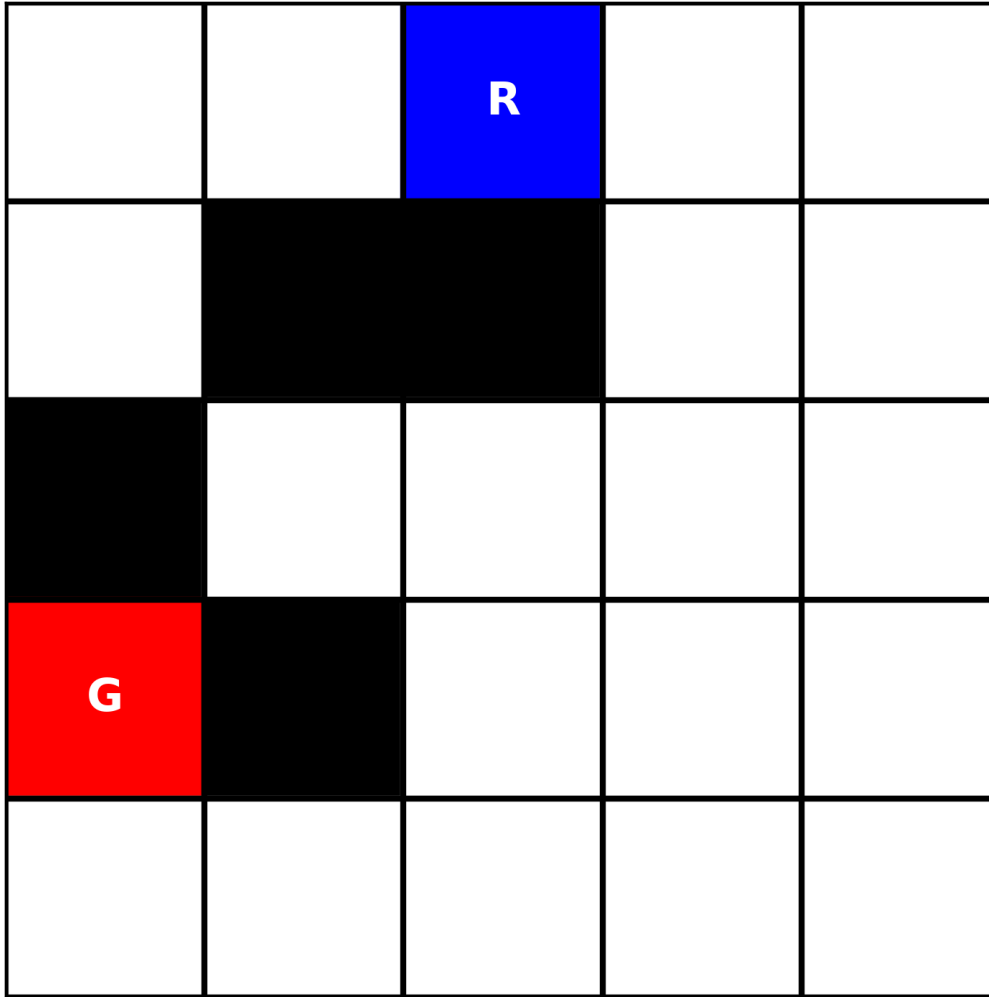
(MOVE-LEFT-FROM-TO ROBOT1 (4, 2) (4, 1))

(MOVE-TOP-FROM-TO ROBOT1 (4, 1) (3, 1))

(MOVE-TOP-FROM-TO ROBOT1 (3, 1) (2, 1))

(MOVE-TOP-FROM-TO ROBOT1 (2, 1) (1, 1))

(MOVE-LEFT-FROM-TO ROBOT1 (1, 1) (0, 1))



Grid has 5 rows, 5 columns

Start position: (0, 2)

Goal position: (3, 0)

Obstacle positions: (3, 1), (1, 1), (1, 2), (2, 0)

SOLUTION:

(MOVE-RIGHT-FROM-TO ROBOT1 (0, 2) (0, 3))

(MOVE-BOTTOM-FROM-TO ROBOT1 (0, 3) (1, 3))

(MOVE-BOTTOM-FROM-TO ROBOT1 (1, 3) (2, 3))

(MOVE-BOTTOM-FROM-TO ROBOT1 (2, 3) (3, 3))

(MOVE-BOTTOM-FROM-TO ROBOT1 (3, 3) (4, 3))

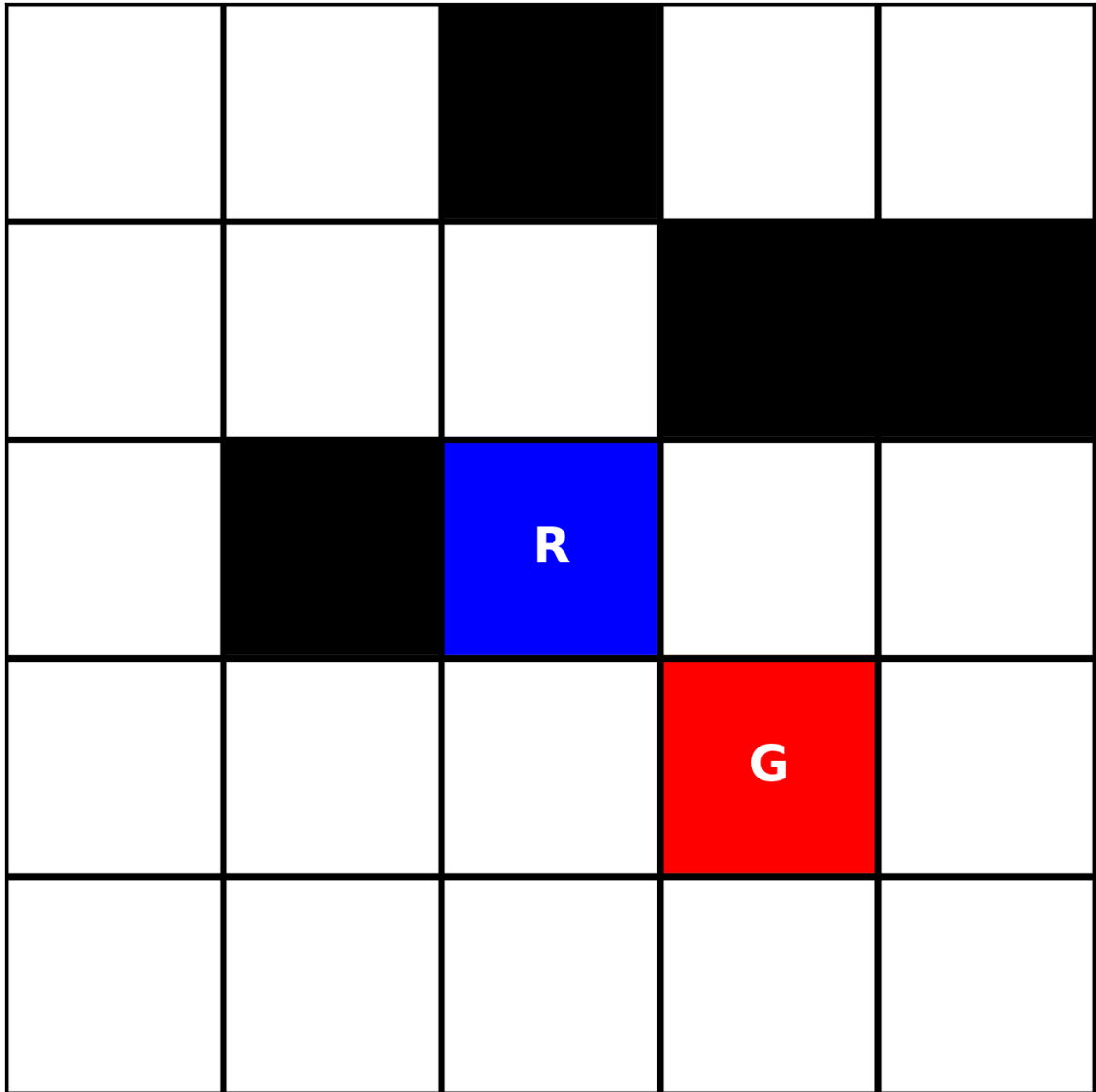
(MOVE-BOTTOM-FROM-TO ROBOT1 (3, 3) (4, 3))

(MOVE-LEFT-FROM-TO ROBOT1 (4, 3) (4, 2))

(MOVE-LEFT-FROM-TO ROBOT1 (4, 2) (4, 1))

(MOVE-LEFT-FROM-TO ROBOT1 (4, 1) (4, 0))

(MOVE-LEFT-FROM-TO ROBOT1 (4, 0) (3, 0))



Grid has 5 rows, 5 columns

Start position: (2, 2)

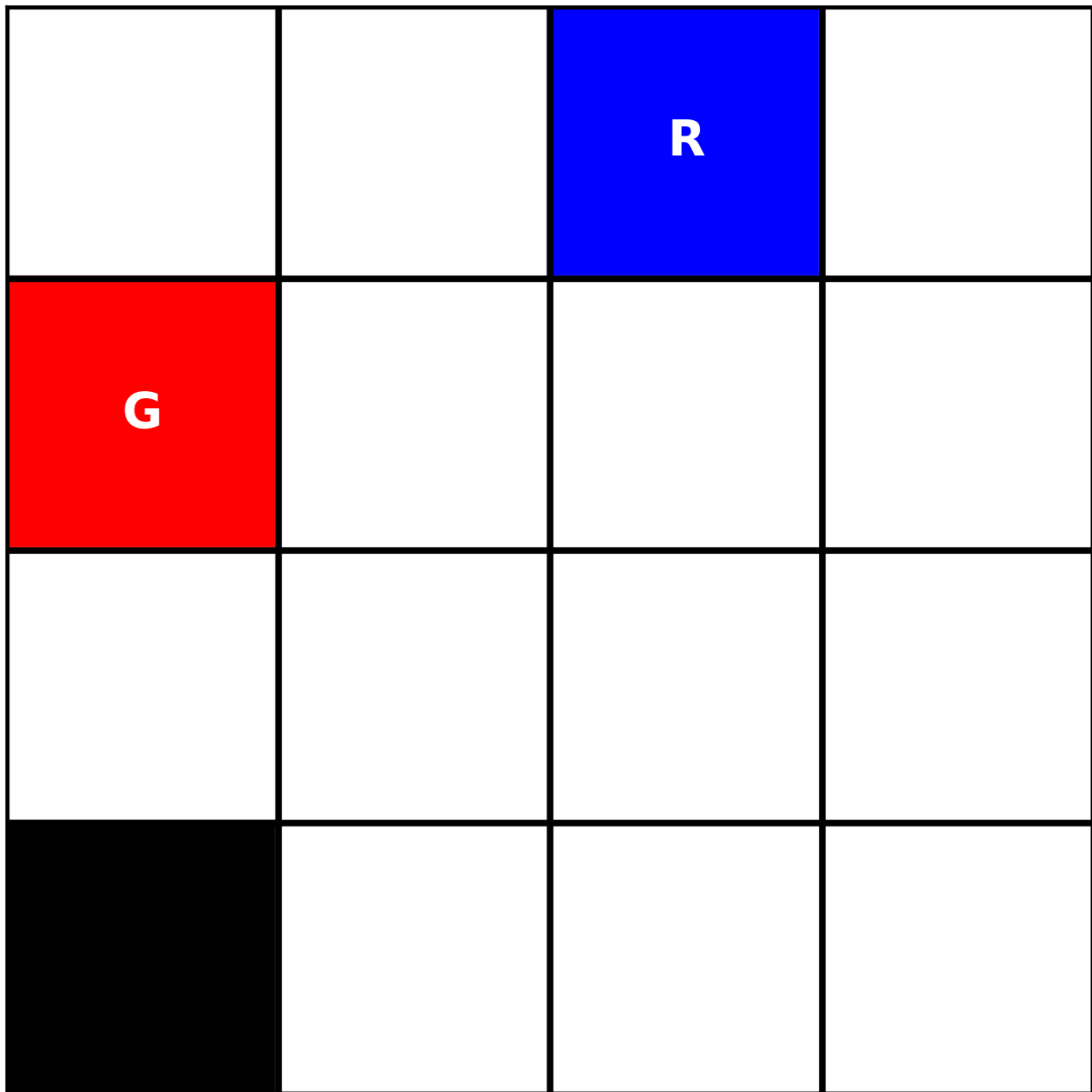
Goal position: (3, 3)

Obstacle positions: (0, 2), (1, 3), (2, 1), (1, 4)

SOLUTION:

(MOVE-BOTTOM-FROM-TO ROBOT1 (2, 2) (3, 2))

(MOVE-RIGHT-FROM-TO ROBOT1 (3, 2) (3, 3))



Grid has 4 rows, 4 columns

Start position: (1, 3)

Goal position: (3, 0)

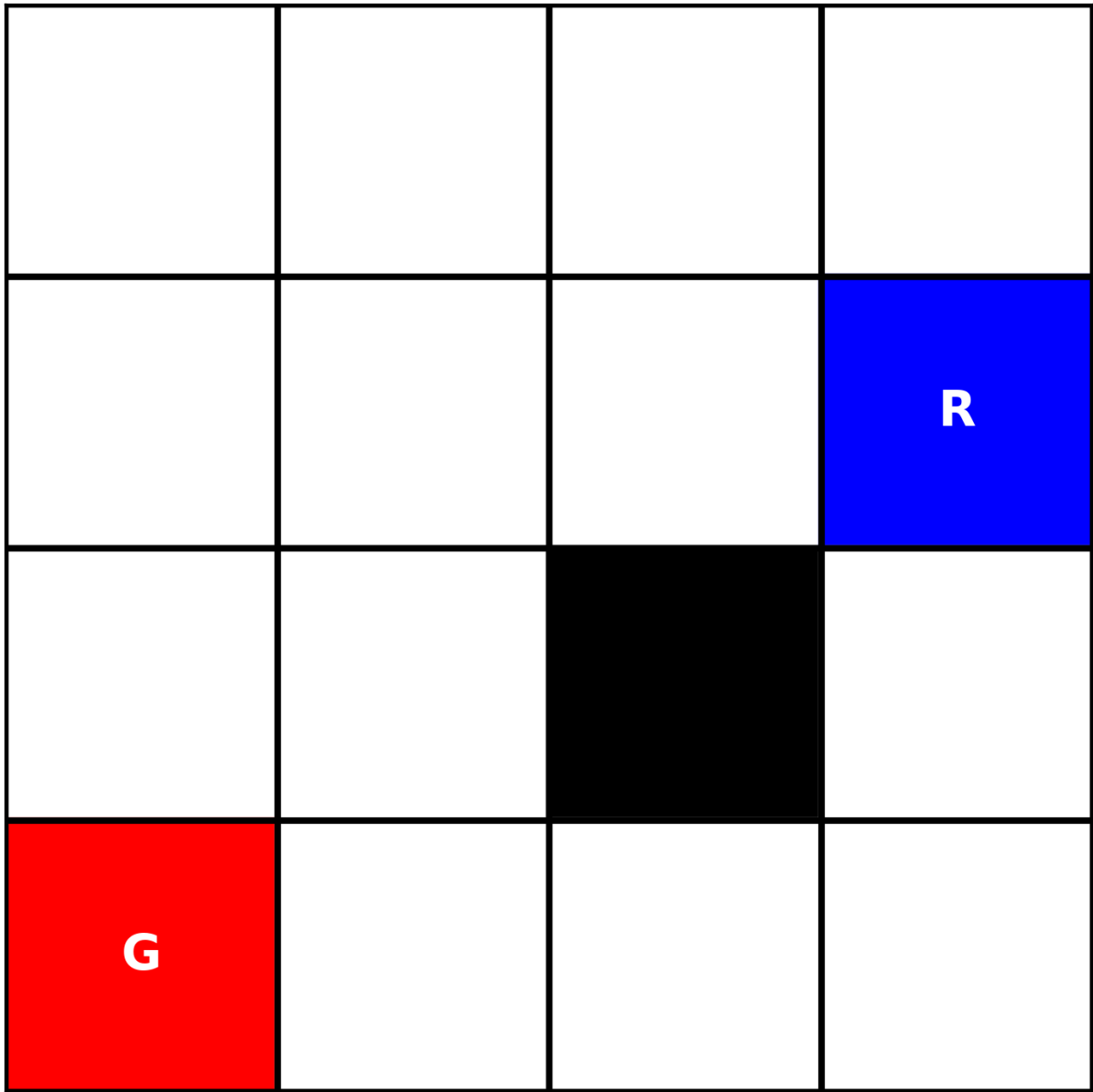
Obstacle positions: (2, 2)

SOLUTION:

(MOVE-BOTTOM-FROM-TO ROBOT1 (0, 2) (1, 2))

(MOVE-LEFT-FROM-TO ROBOT1 (1, 2) (1, 1))

(MOVE-LEFT-FROM-TO ROBOT1 (1, 1) (1, 0))



Grid has 4 rows, 4 columns

Start position: (1, 3)

Goal position: (3, 0)

Obstacle positions (2, 2)

SOLUTION:

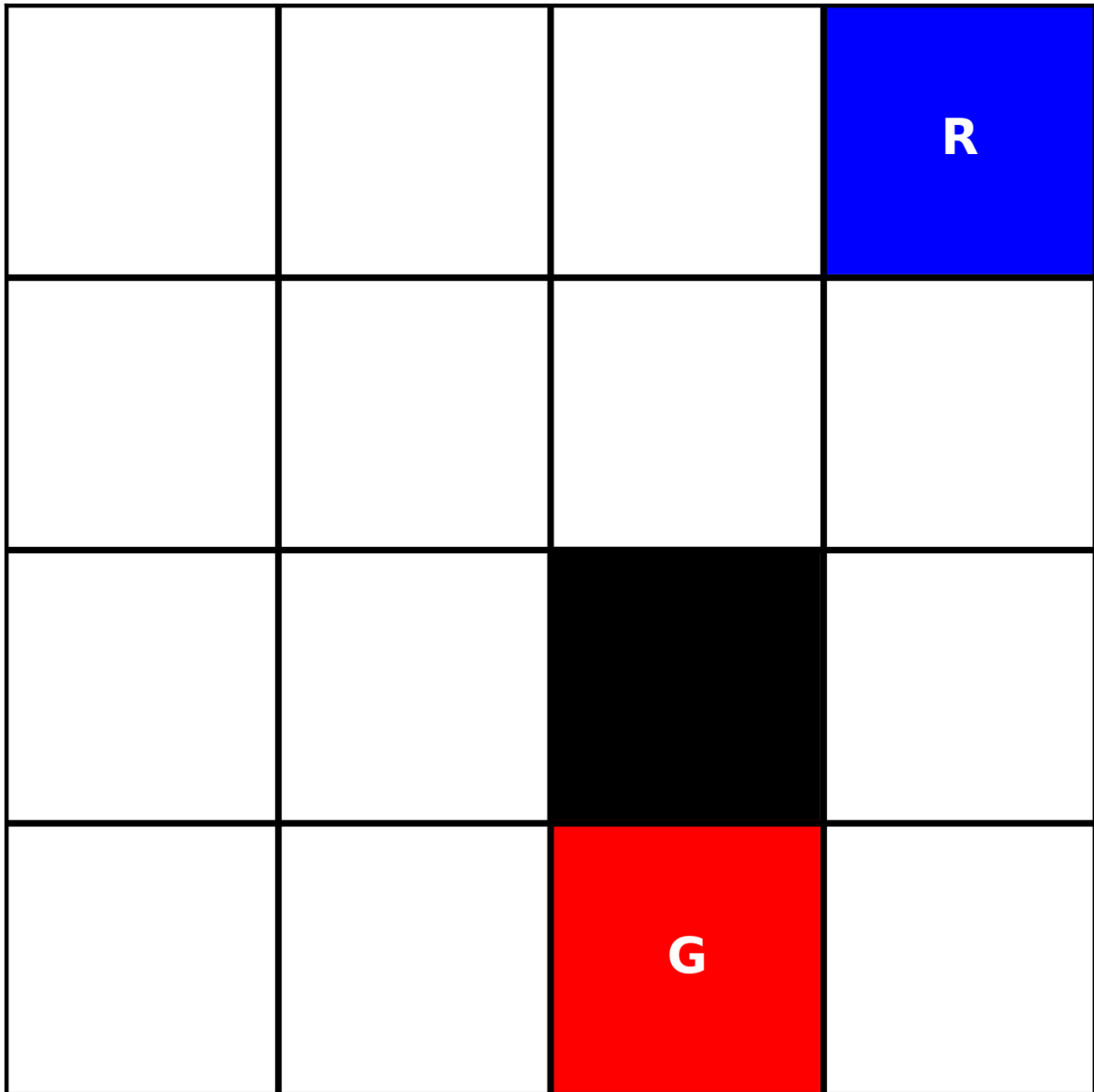
(MOVE-BOTTOM-FROM-TO ROBOT1 (1, 3) (2, 3))

(MOVE-BOTTOM-FROM-TO ROBOT1 (2, 3) (3, 3))

(MOVE-LEFT-FROM-TO ROBOT1 (3, 3) (2, 3))

(MOVE-LEFT-FROM-TO ROBOT1 (2, 3) (1, 3))

(MOVE-LEFT-FROM-TO ROBOT1 (1, 3) (0, 3))



Grid has 4 rows, 4 columns

Start position: (0, 3)

Goal position: (3, 2)

Obstacle positions: (2, 2)

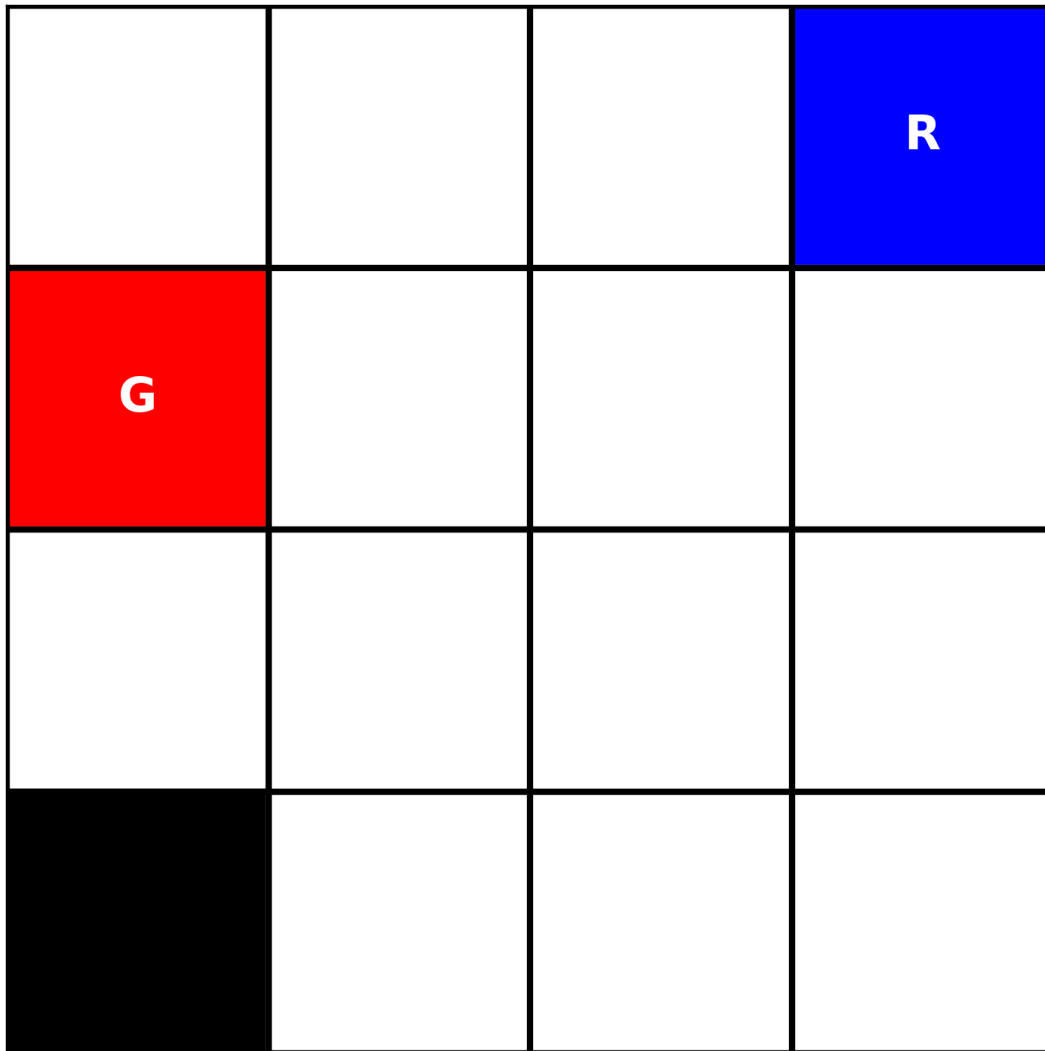
SOLUTION:

(MOVE-BOTTOM-FROM-TO ROBOT1 (0, 3) (1, 3))

(MOVE-BOTTOM-FROM-TO ROBOT1 (1, 3) (2, 3))

(MOVE-BOTTOM-FROM-TO ROBOT1 (2, 3) (3, 3))

(MOVE-LEFT-FROM-TO ROBOT1 (3, 3) (3, 2))



Grid has 4 rows, 4 columns

Start position: (0, 3)

Goal position: (1, 0)

Obstacle positions: (3, 0)

SOLUTION:

(MOVE-RIGHT-FROM-TO ROBOT1 (0, 2) (0, 3))

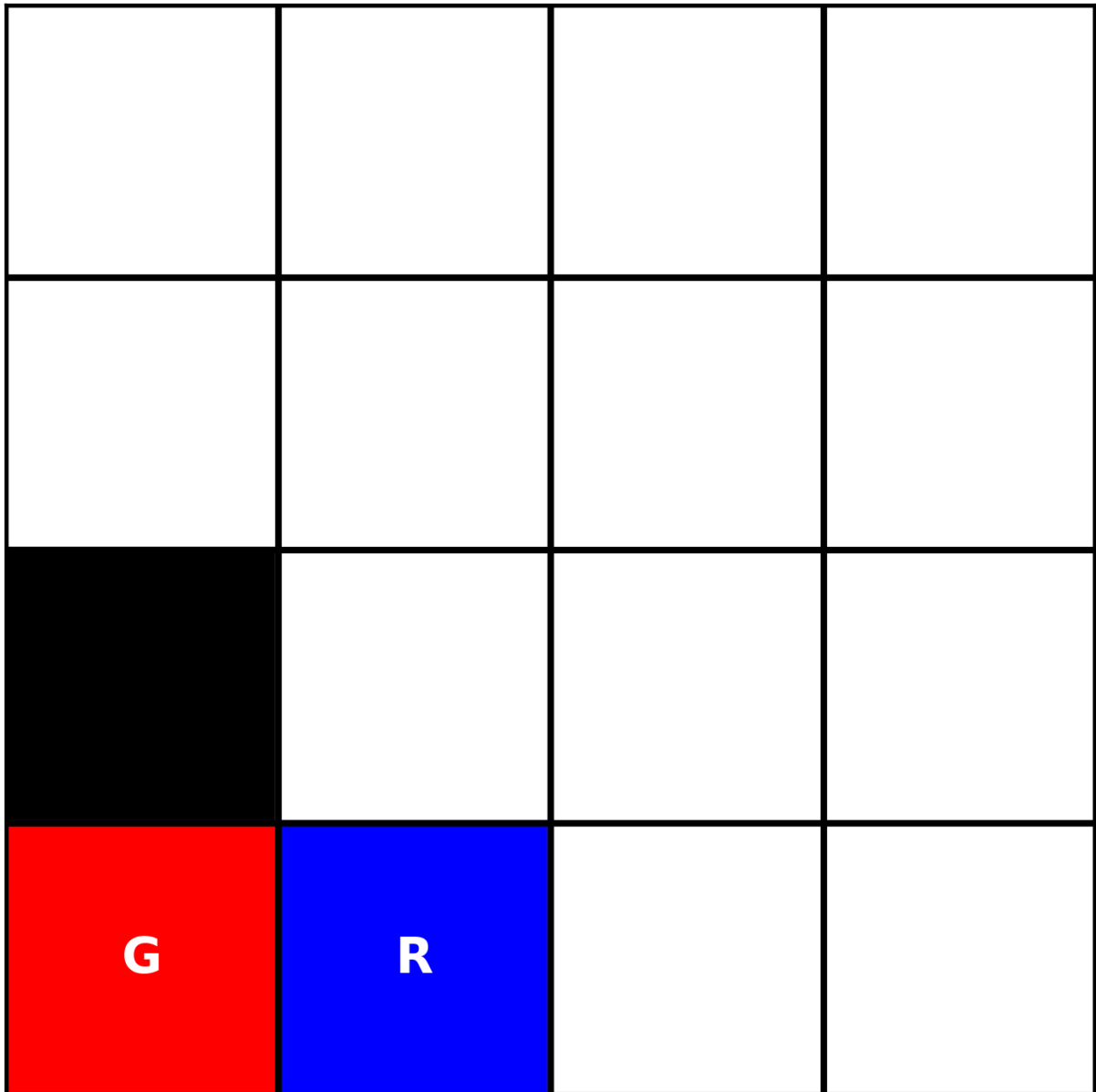
(MOVE-BOTTOM-FROM-TO ROBOT1 (0, 3) (1, 3))

(MOVE-BOTTOM-FROM-TO ROBOT1 (1, 3) (2, 3))

(MOVE-BOTTOM-FROM-TO ROBOT1 (2, 3) (3, 3))

(MOVE-LEFT-FROM-TO ROBOT1 (3, 3) (2, 3))

(MOVE-LEFT-FROM-TO ROBOT1 (2, 3) (1, 3))



Grid has 4 rows, 4 columns

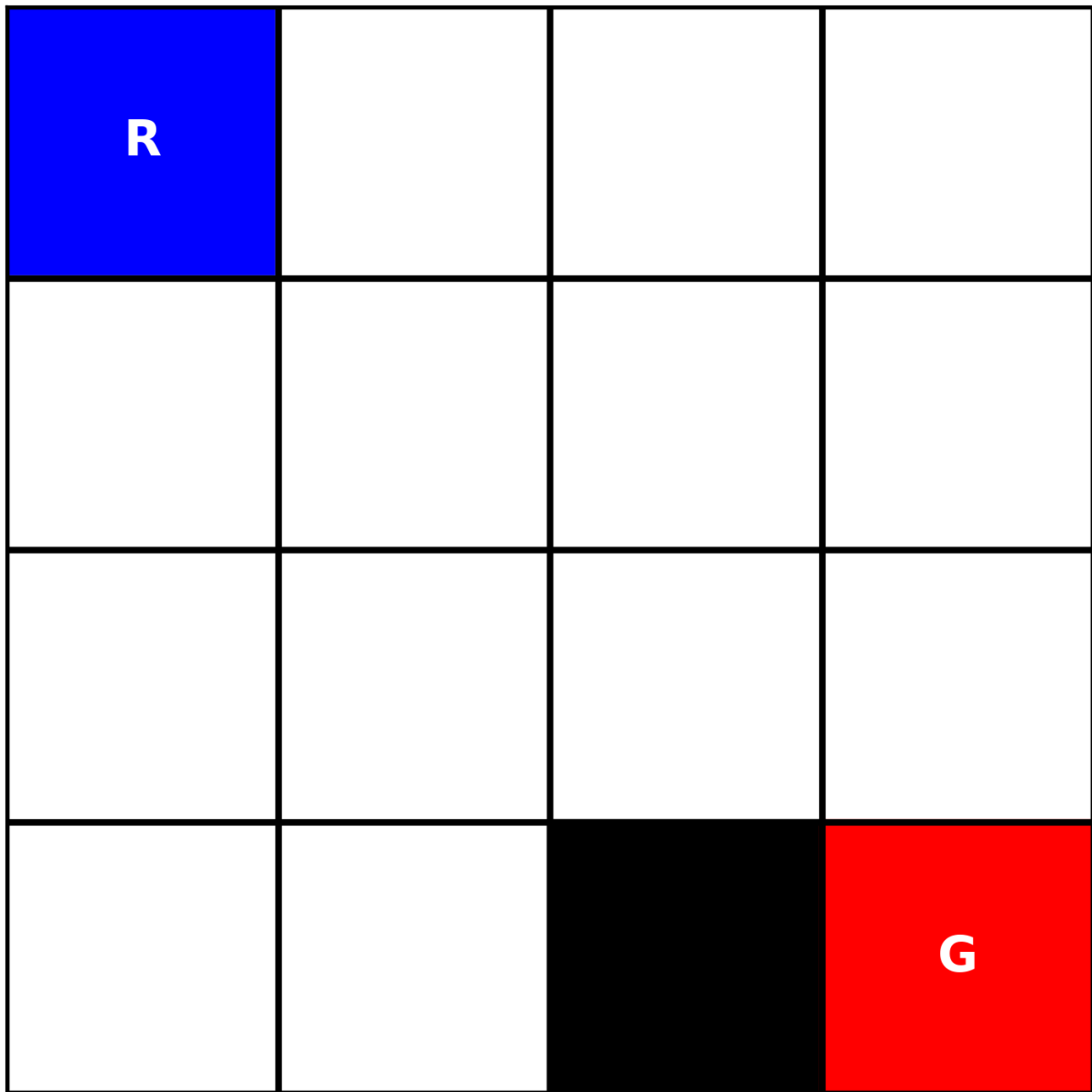
Start position: (3, 1)

Goal position: (3, 0)

Obstacle positions: (2, 0)

SOLUTION:

(MOVE-LEFT-FROM-TO ROBOT1 (3, 1) (3, 0))



Grid has 4 rows, 4 columns

Start position: (0, 0)

Goal position: (3, 3)

Obstacle positions: (3, 2)

SOLUTION:

(MOVE-RIGHT-FROM-TO ROBOT1 (0, 0) (0, 1))

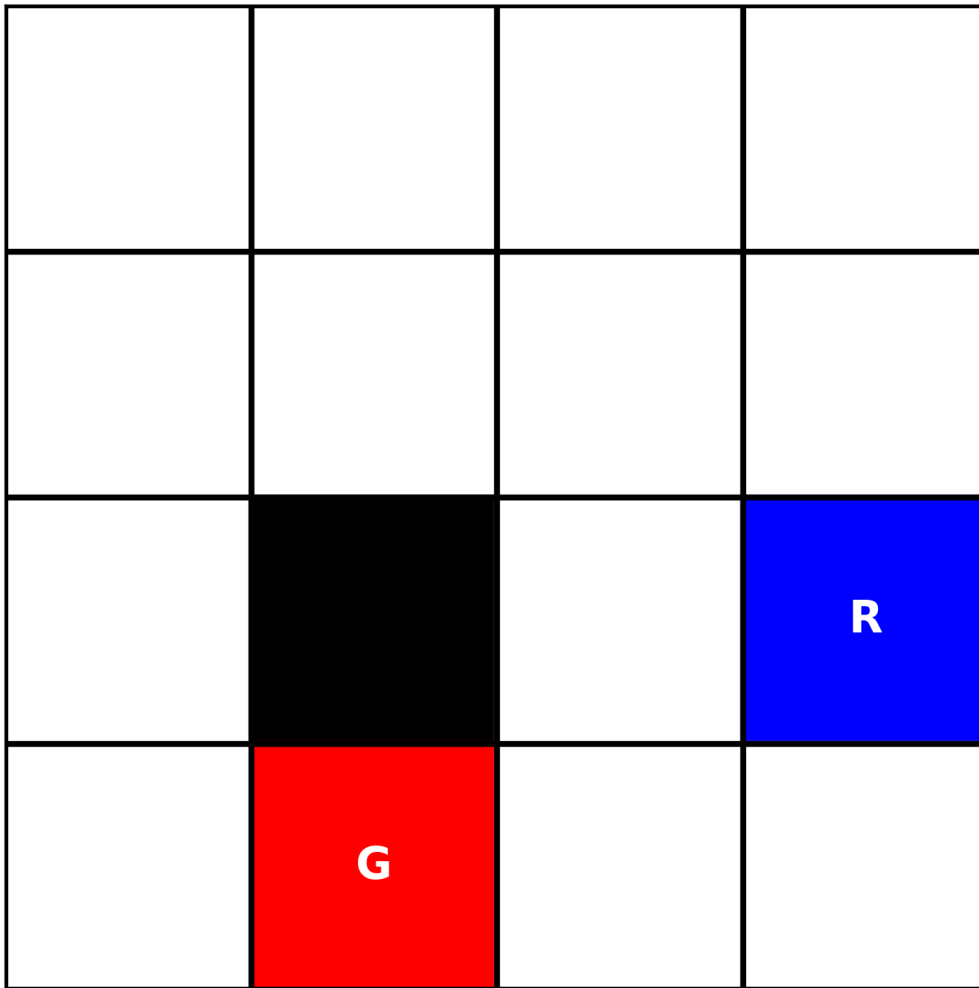
(MOVE-RIGHT-FROM-TO ROBOT1 (0, 1) (0, 2))

(MOVE-RIGHT-FROM-TO ROBOT1 (0, 2) (0, 3))

(MOVE-BOTTOM-FROM-TO ROBOT1 (0, 3) (1, 3))

(MOVE-BOTTOM-FROM-TO ROBOT1 (1, 3) (2, 3))

(MOVE-BOTTOM-FROM-TO ROBOT1 (2, 3) (3, 3))



Grid has 4 rows, 4 columns

Start position: (2, 3)

Goal position: (3, 1)

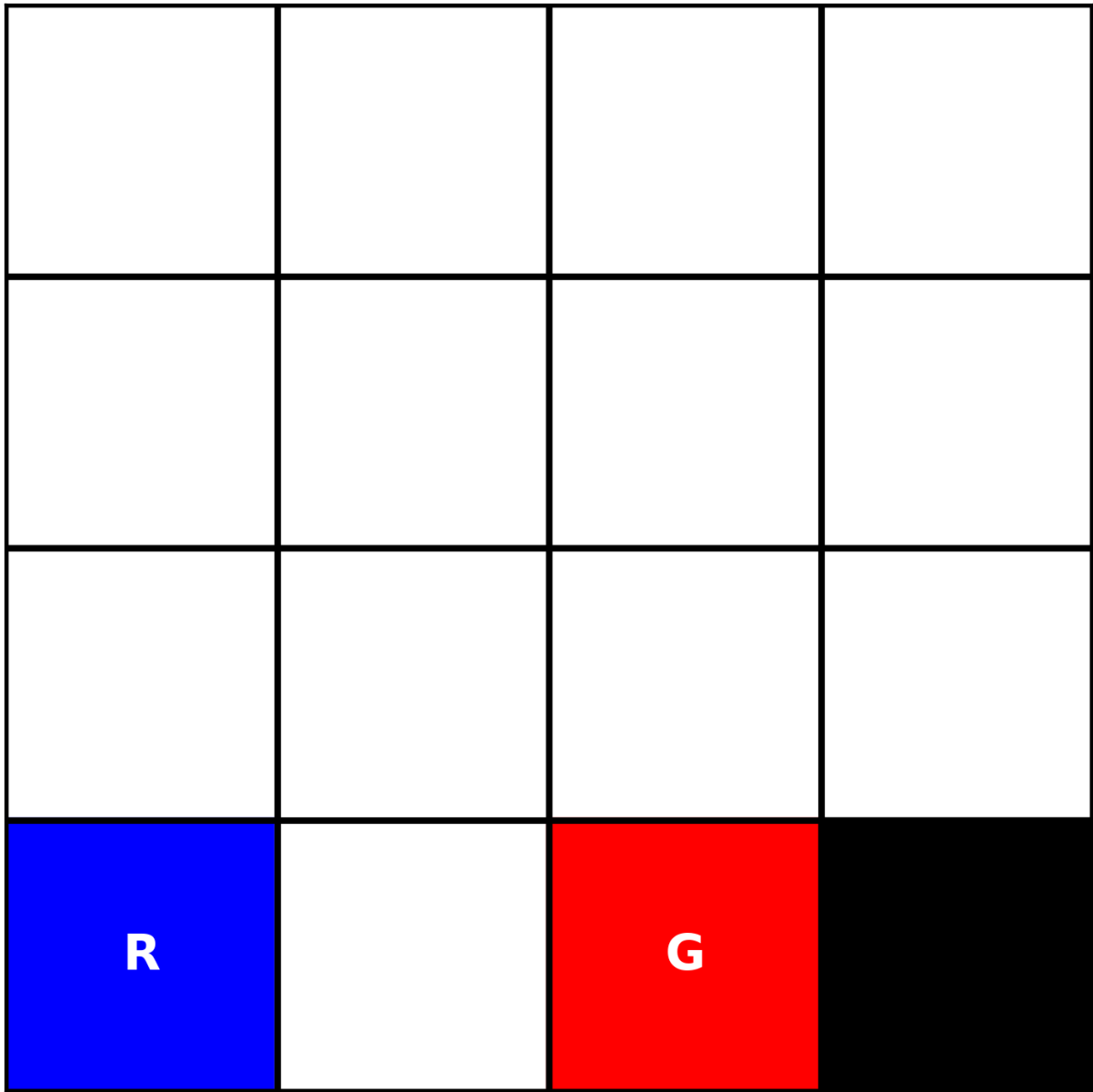
Obstacle positions: (2, 1)

SOLUTION:

(MOVE-BOTTOM-FROM-TO ROBOT1 (2, 3) (3, 3))

(MOVE-LEFT-FROM-TO ROBOT1 (3, 3) (2, 3))

(MOVE-LEFT-FROM-TO ROBOT1 (2, 3) (1, 3))



Grid has 4 rows, 4 columns

Start position: (3, 0)

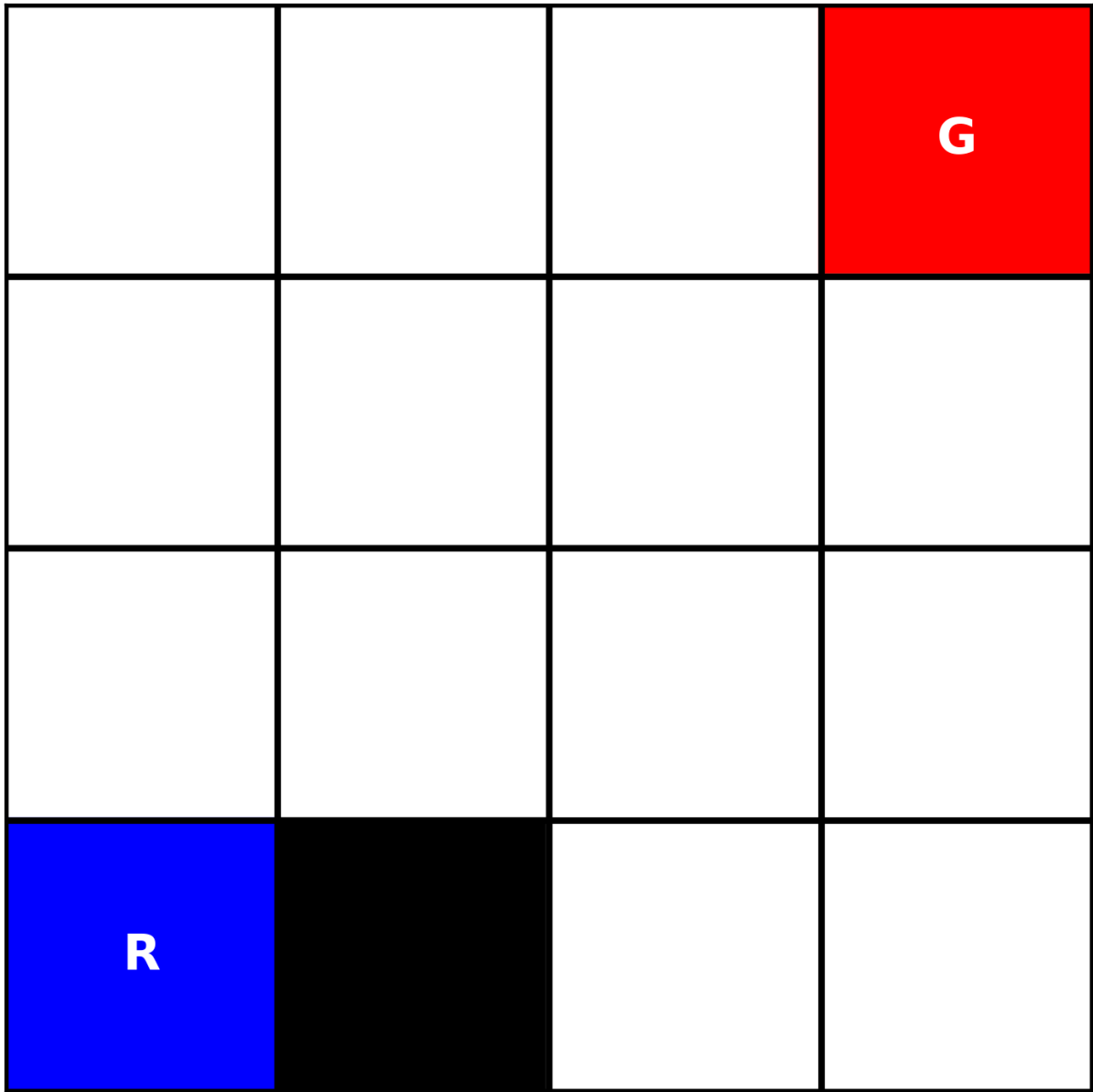
Goal position: (3, 2)

Obstacle positions: (3, 3)

SOLUTION:

(MOVE-RIGHT-FROM-TO ROBOT1 (3, 0) (3, 1))

(MOVE-RIGHT-FROM-TO ROBOT1 (3, 1) (3, 2))



Grid has 4 rows, 4 columns

Start position: (3, 0)

Goal position: (0, 3)

Obstacle positions: (3, 1)

SOLUTION:

(MOVE-TOP-FROM-TO ROBOT1 (3, 0) (2, 0))

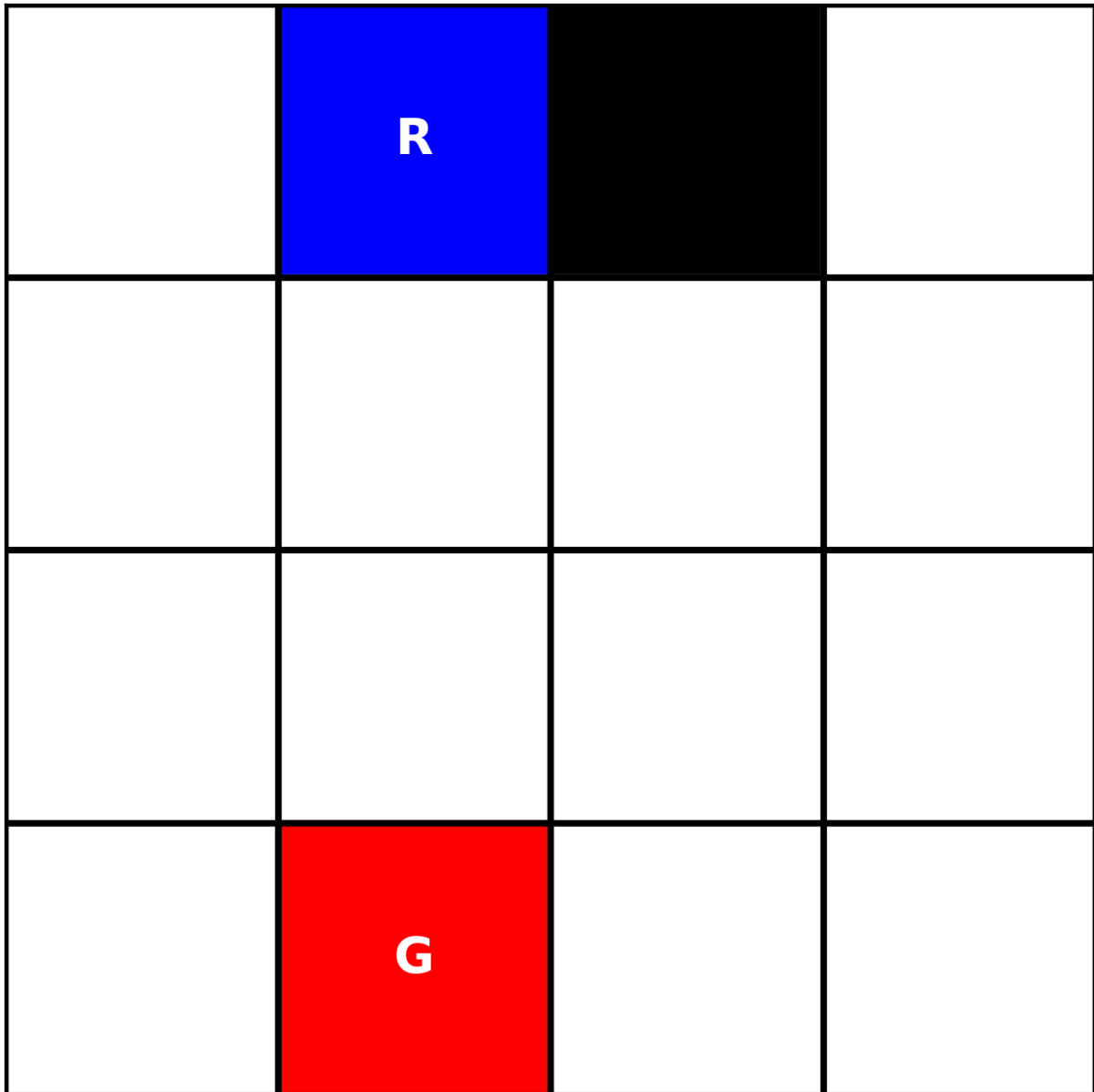
(MOVE-RIGHT-FROM-TO ROBOT1 (2, 0) (2, 1))

(MOVE-RIGHT-FROM-TO ROBOT1 (2, 1) (2, 2))

(MOVE-RIGHT-FROM-TO ROBOT1 (2, 2) (2, 3))

(MOVE-TOP-FROM-TO ROBOT1 (2, 3) (1, 3))

(MOVE-TOP-FROM-TO ROBOT1 (1, 3) (0, 3))



Grid has 4 rows, 4 columns

Start position: (0, 1)

Goal position: (3, 1)

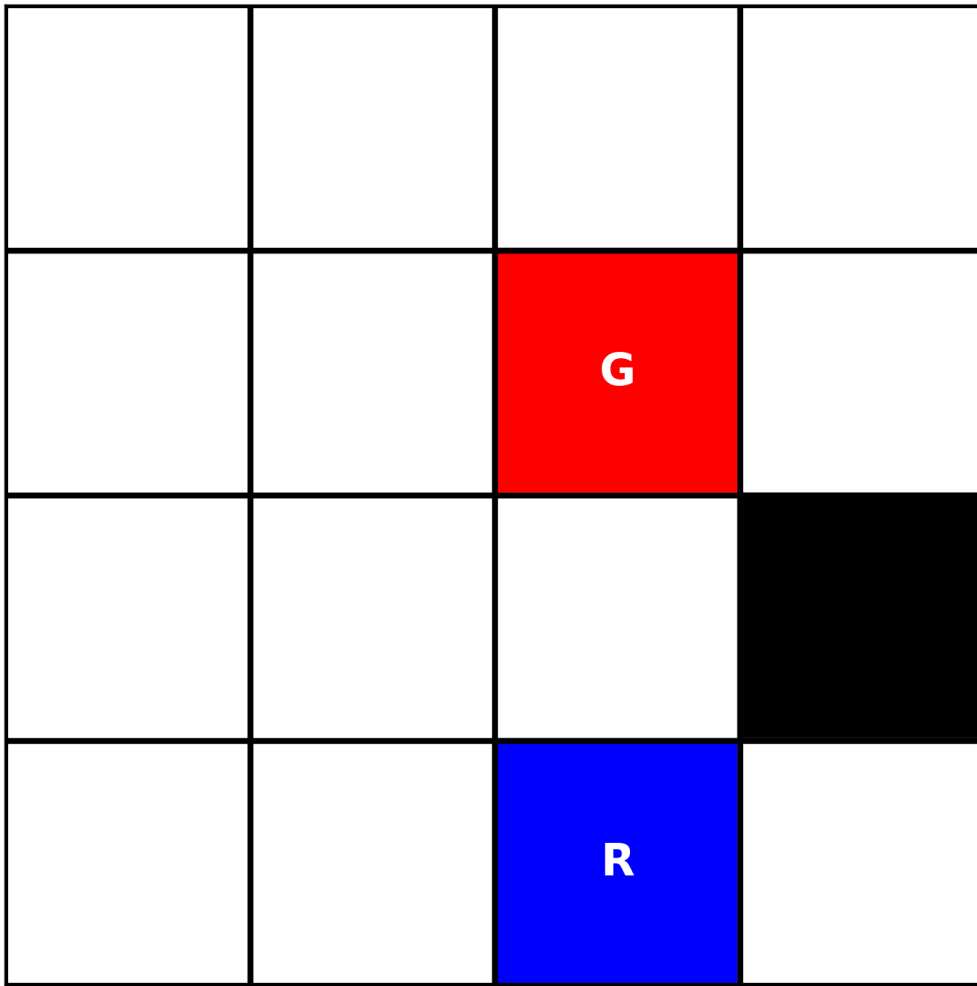
Obstacle positions: (0, 2)

SOLUTION:

(MOVE-BOTTOM-FROM-TO ROBOT1 (0, 1) (1, 1))

(MOVE-BOTTOM-FROM-TO ROBOT1 (1, 1) (2, 1))

(MOVE-BOTTOM-FROM-TO ROBOT1 (2, 1) (3, 1))



Grid has 4 rows, 4 columns

Start position: (3, 2)

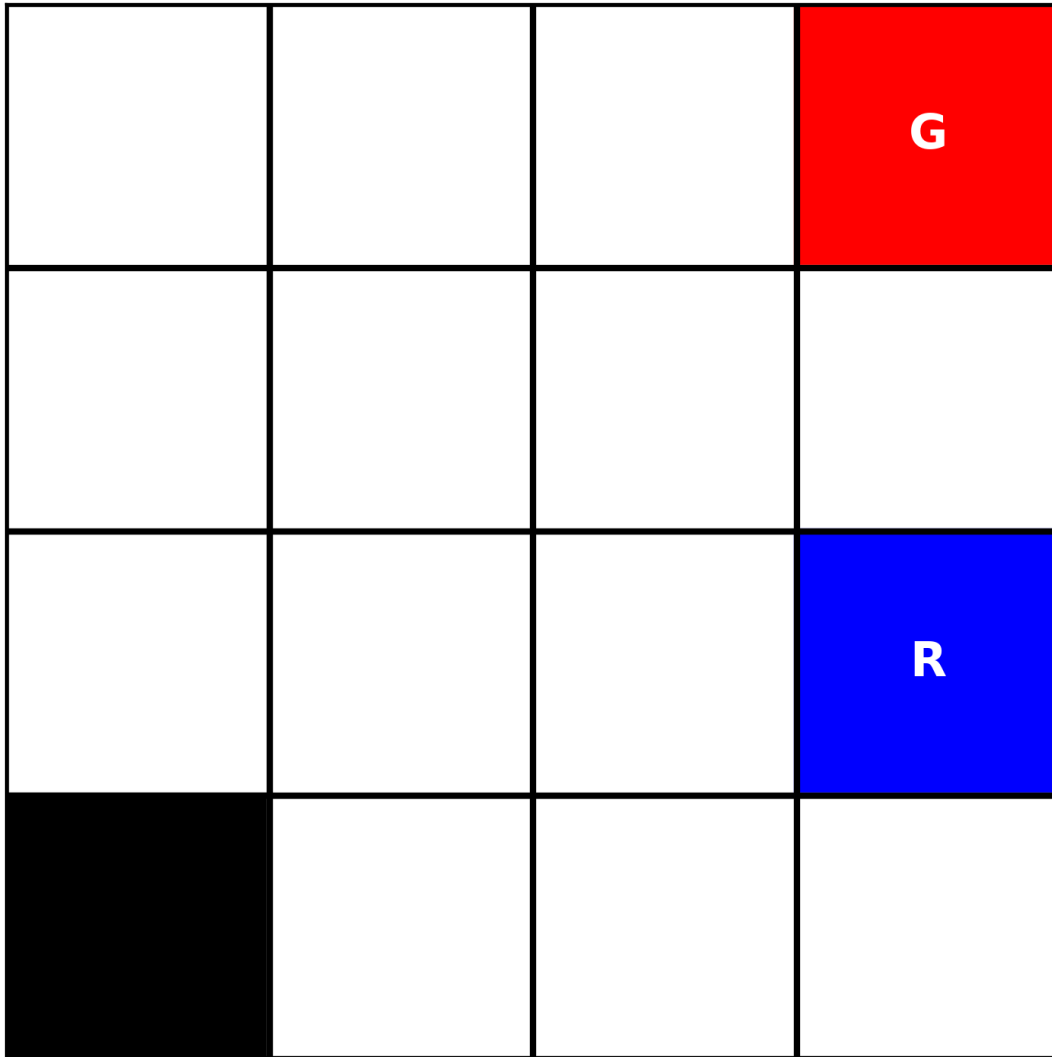
Goal position: (1, 2)

Obstacle positions: (2, 3)

SOLUTION:

(MOVE-TOP-FROM-TO ROBOT1 (3, 2) (2, 2))

(MOVE-TOP-FROM-TO ROBOT1 (2, 2) (2, 1))



Grid has 4 rows, 4 columns

Start position: (2, 3)

Goal position: (0, 3)

Obstacle positions: (3, 0)

SOLUTION:

(MOVE-TOP-FROM-TO ROBOT1 (2, 3) (1, 3))

(MOVE-TOP-FROM-TO ROBOT1 (1, 3) (0, 3))