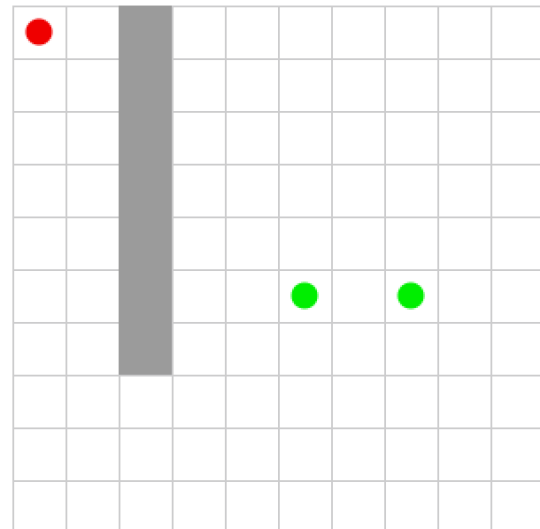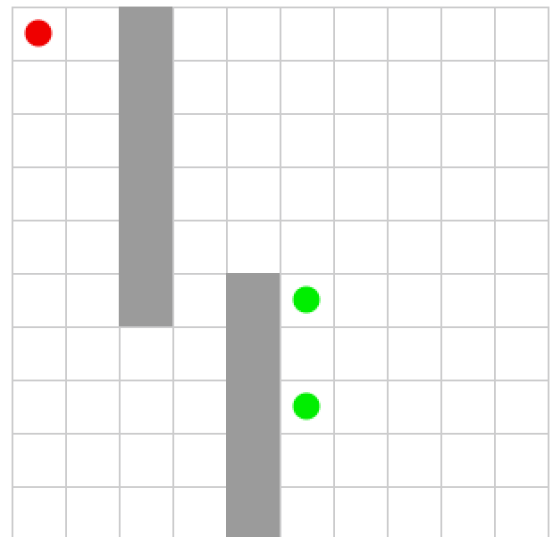Puzzle 1



down
down
down
down
down
down
down
right
right
right
right
right
up
up
right
right

*Actions:*    UP • DOWN • LEFT • RIGHT • GETCOLOR • SETCOLOR
*Memory:*    save: VAR *NAME* = GETCOLOR • remember: SETCOLOR(*NAME*)
*Control:*    IF • REPEAT IF (aka WHILE)

Puzzle 2

down
down
down
down
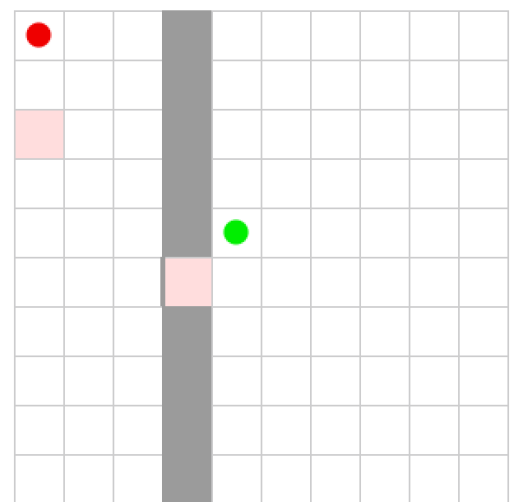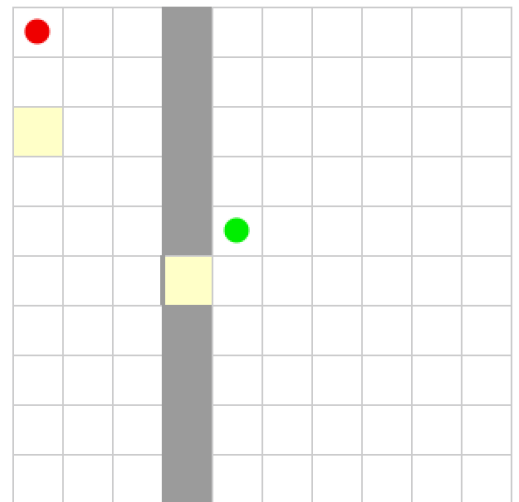down
down
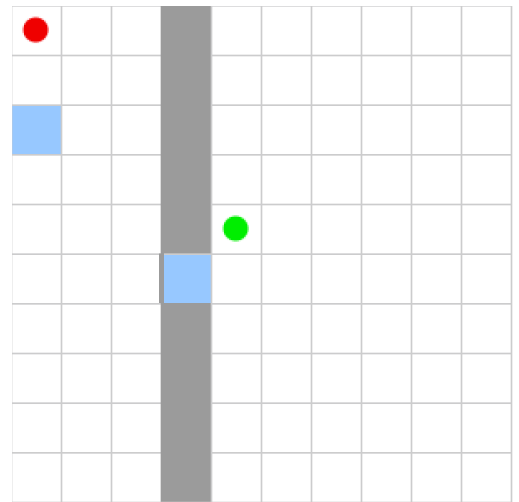right
right
right
up
up
right
right
down
down
down

## Puzzle 3

down
down
var colormem = getcolor
down
down
down
right
right
setcolor(colormem)
right
right
up

Puzzle 4

down
down
down
down
right
var colormem = getcolor
down
setcolor(colormem)
right
right
up
right
var colormem2 = getcolor
down
setcolor(colormem2)
right
right

Puzzle 5

```
function ColorProcedure {
        if (getcolor == blue) {
                down
                right
                right
        }
        if (getcolor == red) {
                up
                right
                right
        }
}

right
right
ColorProcedure
ColorProcedure
ColorProcedure
right
```
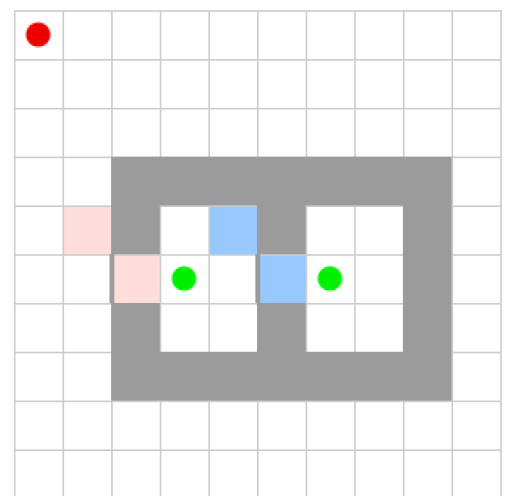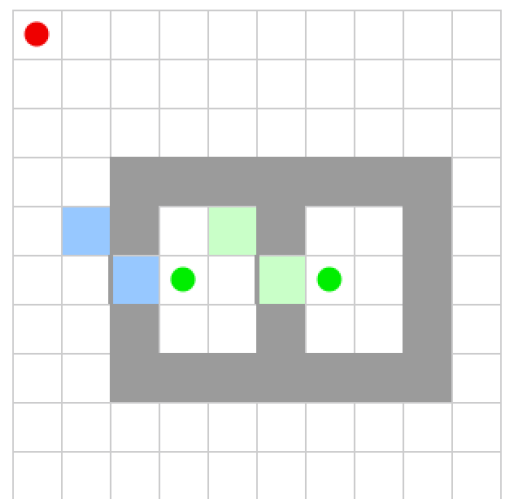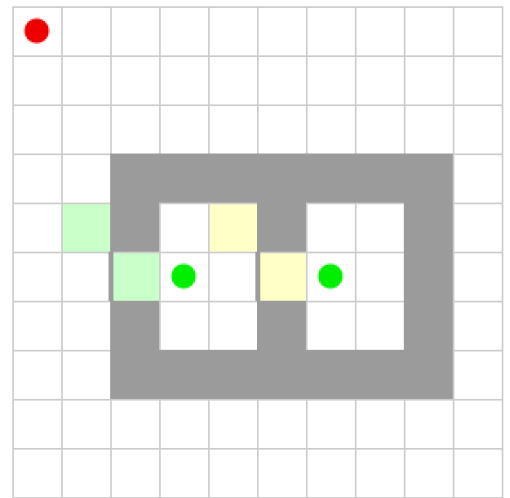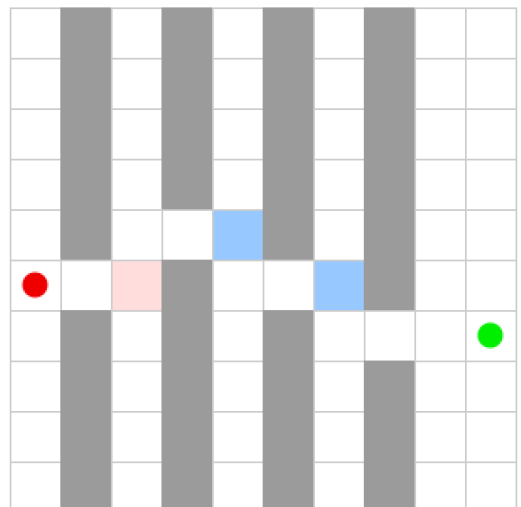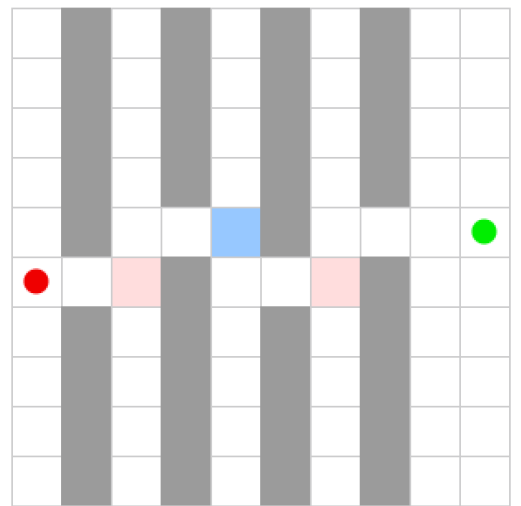






*Actions:*    UP • DOWN • LEFT • RIGHT • GETCOLOR • SETCOLOR
*Memory:*    save: VAR *NAME* = GETCOLOR • remember: SETCOLOR(*NAME*)
*Control:*    IF • REPEAT IF (aka WHILE)

Puzzle 6

```
right
if (getcolor == red) {
        up
        up
        up
        if (getcolor == red) {
                left
                up
        }
        if (getcolor == blue) {
                right
                up
        }
}
if (getcolor == blue) {
        down
        down
        down
        if (getcolor == red) {
                left
                down
        }
}
```
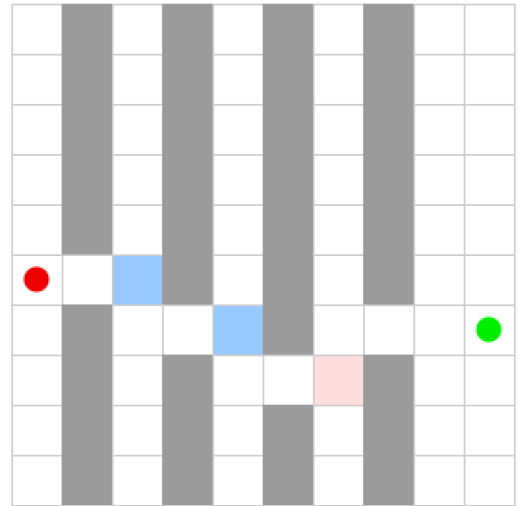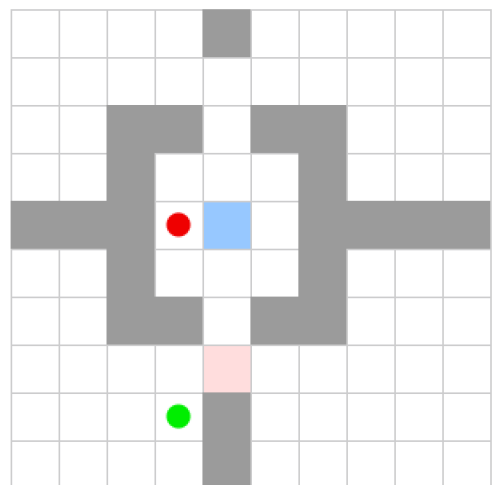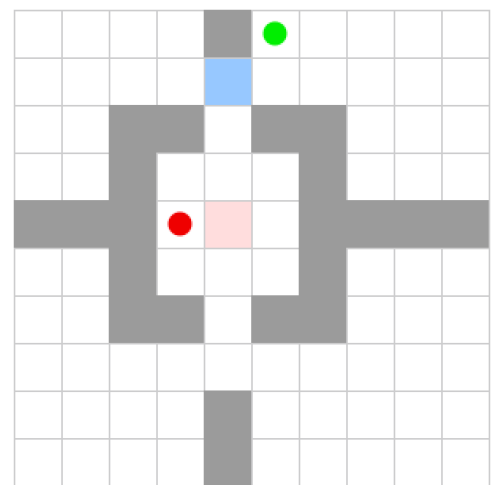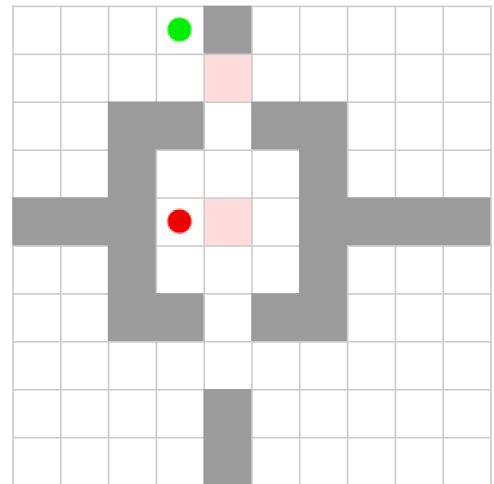


*Actions:* UP • DOWN • LEFT • RIGHT • GETCOLOR • SETCOLOR
*Memory:* save: VAR *NAME* = GETCOLOR • remember: SETCOLOR(*NAME*)
*Control:* IF • REPEAT IF (aka WHILE)

Puzzle 7

```
while (getcolor != red) {
        down
}
right
right
while (getcolor != red) {
        up
}
right
right
while (getcolor != red) {
        down
}
right
right
while (getcolor != red) {
        up
}
right
right
while (getcolor != red) {
        down
}
right
```
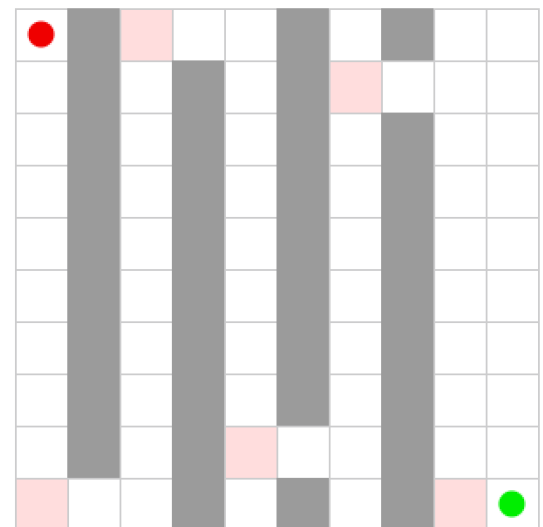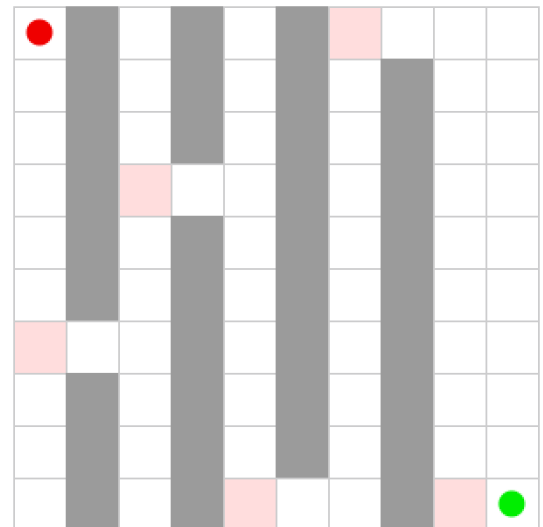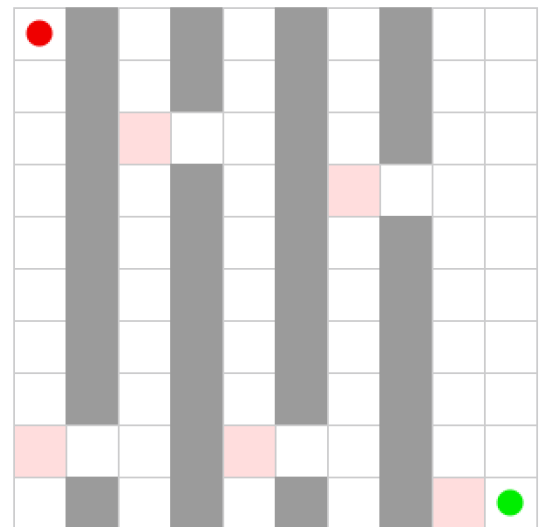
Puzzle 8

```
function down8 {
        var count = 8
        while (count > 0) {
        down
        count = count - 1
        }
function up7 {
        var count = 7
        while (count > 0) {
        up
        count = count - 1
        }
```

down8
right
right
up7
right
right
down8
right
right
up7
right
right
down8
right

Puzzle 9



Write code that draws the
border of a rectangle.

```
function DrawDown {
        count = 9
        while (count > 0) {
                setcolor(BLUE)
                down
                count = count - 1
        }
}
function DrawRight {
        count = 9
        while (count > 0) {
                setcolor(BLUE)
                right
                count = count - 1
        }
}
function DrawUp {
        count = 9
        while (count > 0) {
                setcolor(BLUE)
                up
                count = count - 1
        }
}
function DrawLeft {
        count = 9
        while (count > 0) {
                setcolor(BLUE)
                left
                count = count - 1
        }
}

DrawDown
DrawRight
DrawUp
DrawLeft
```
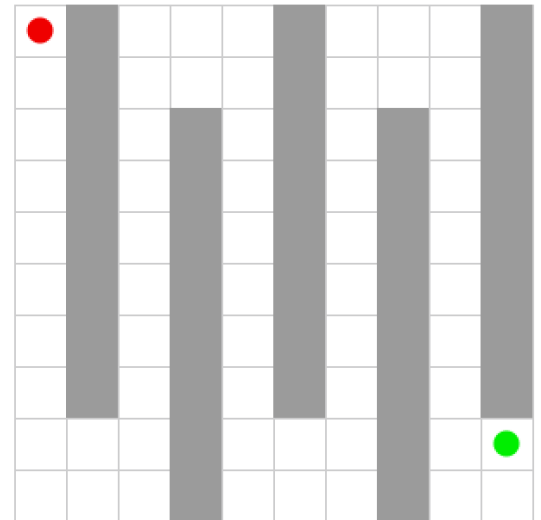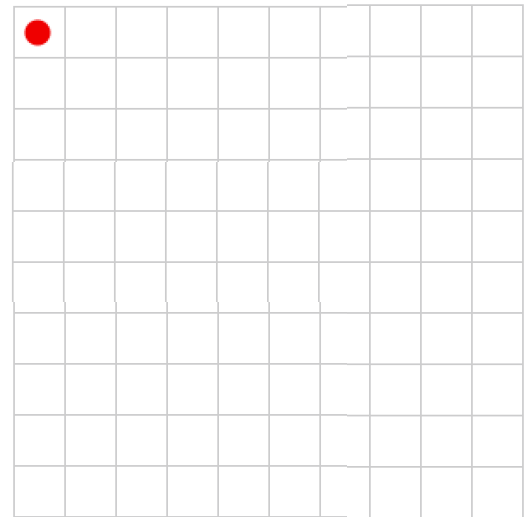
*Actions:*     UP • DOWN • LEFT • RIGHT • GETCOLOR • SETCOLOR
*Memory:*     save: VAR *NAME* = GETCOLOR • remember: SETCOLOR(*NAME*)
*Control:*     IF • REPEAT IF (aka WHILE)