Blocked Maze

	0	1	2	3
0	TDLR Mark	✕	TDLR Mark	TDLR Mark
1	TDLR Mark	TDLR Mark	TDLR Mark	TDLR Mark
2	TDLR Mark	✕	✕	TDLR Mark
3	TDLR Mark	TDLR Mark	✕	•

4 options: 4 Rec calls

Mark cells to avoid infinite Recursion
↳ visited boolean array

DRRTRDDD

To get all 3 answers: Undo

Sudoku Solver

5	3	1	2	7	4	8	9	
6			1	9	5			
	9	8					6	
8				6				3
4			8		3			1
7				2				6
	6					2	8	
			4	1	9			5
				8			7	9

For each empty cell: 9 options
1 ⟶ 9
Give 9 calls

Check if it is safe to place the no.
↓
each row
each column
3×3 grid

By keeping 12489 in previous cells, now there is no option left for current cell. So go back and change the previous numbers.

1 2 4 8 9
       ↓
But no other no. after 9 is possible. So, go further back.

1 2 4 8
      ↓

change it to 9

5	3	1	2	7	4	9	_	
6			1	9	5			
	9	8					6	
8				6				3
4			8		3			1
7				2				6
	6					2	8	
			4	1	9			5
				8			7	9

→ By keeping 1 2 4 9, no number
can be placed at _ . Hence,
there is some problem with
previous arrangement. So, go back.

$$1 \quad 2 \quad 4 \quad \overset{9}{\underset{\downarrow}{}}$$

no other no. after 9
is possible. So, change it 0
and go back.

$$1 \quad 2 \quad \overset{4}{\underset{\downarrow}{}}$$

change it to 5: but 5 is in same
column.
change it to 6.

5	3	1	2	7	6			
6			1	9	5			
	9	8					6	
8				6				3
4			8		3			1
7				2				6
	6					2	8	
			4	1	9			5
				8			7	9

Keep on doing this till the
entire grid is filled.