

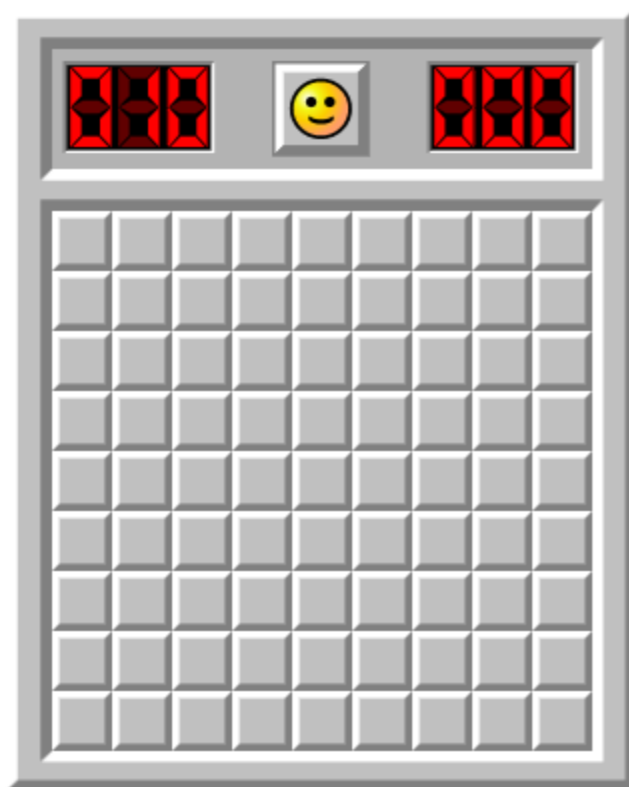
Minesweeper

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Rules

Start



Boom!!

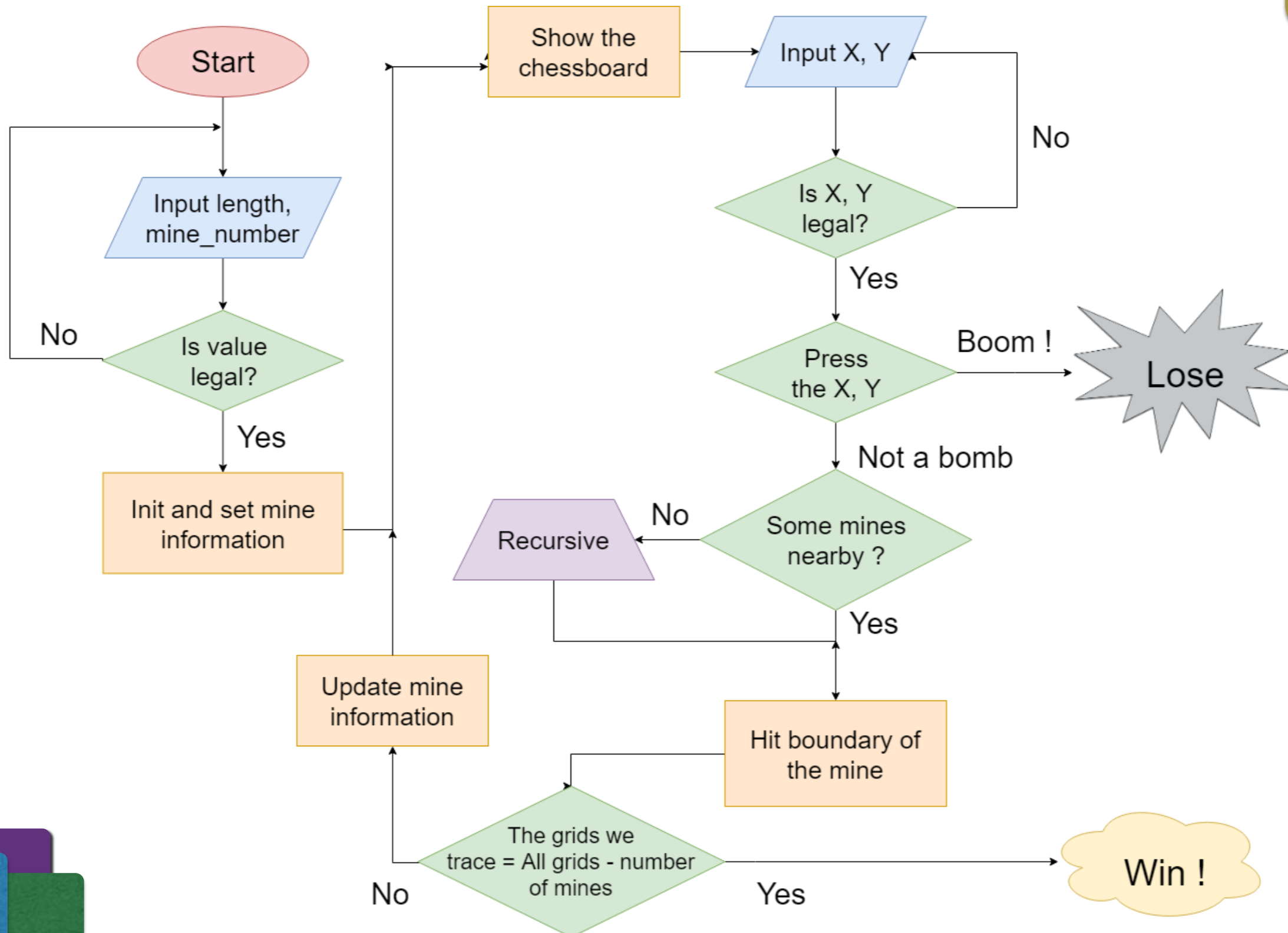


Win!!

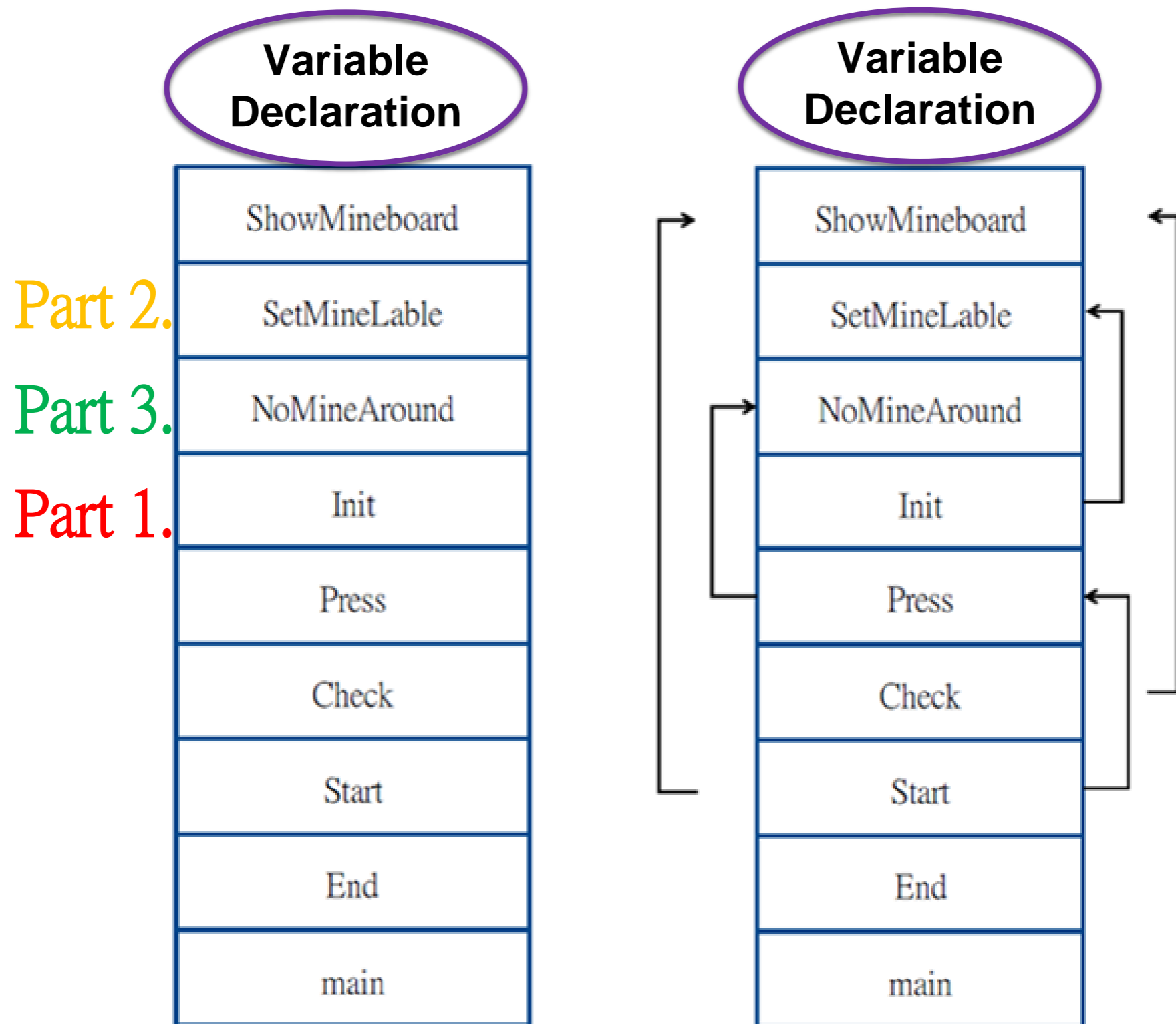


- Try to play : <https://minesweeper.online/en/>

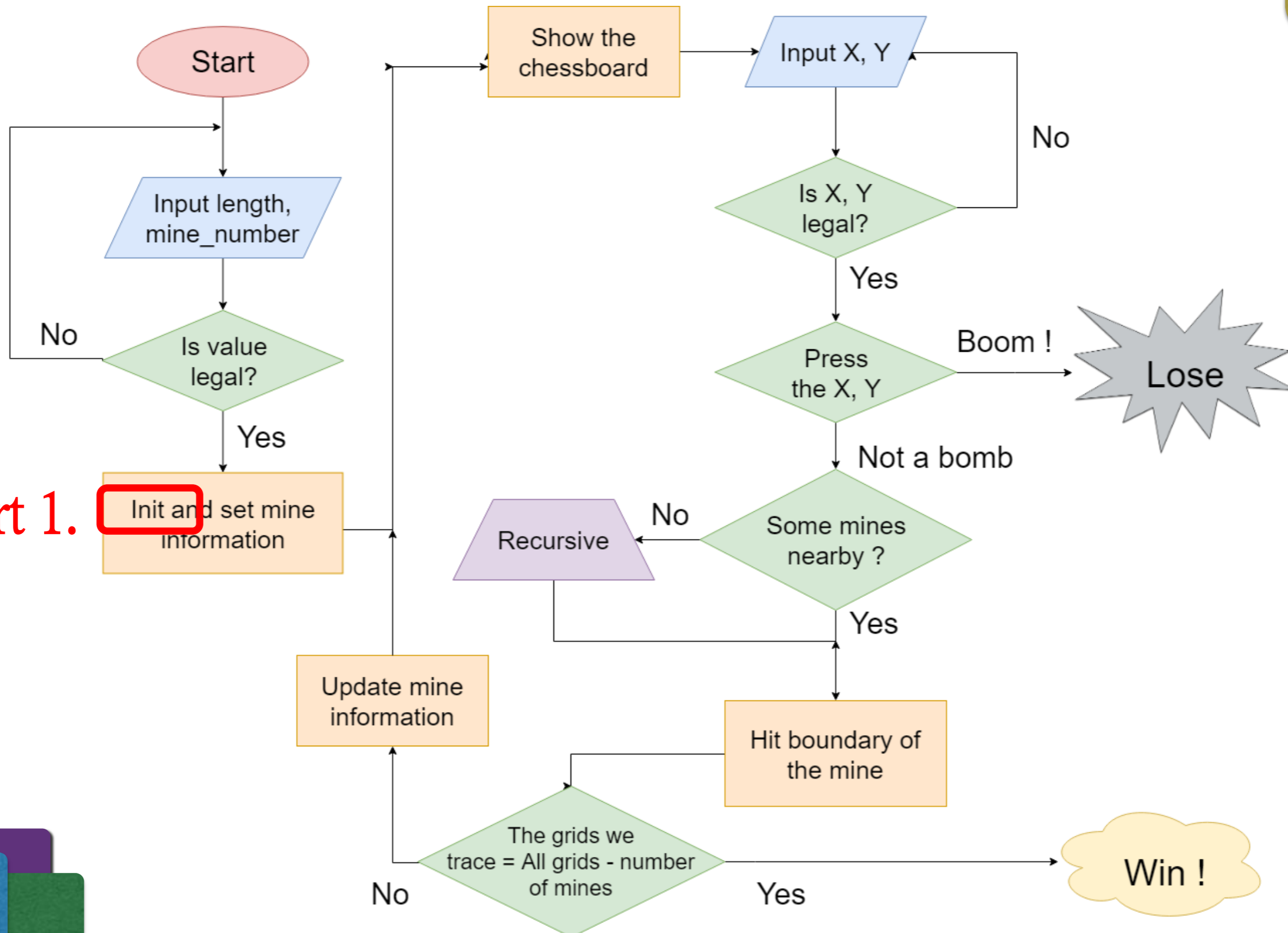
Flow Chart



Code Structure



Init



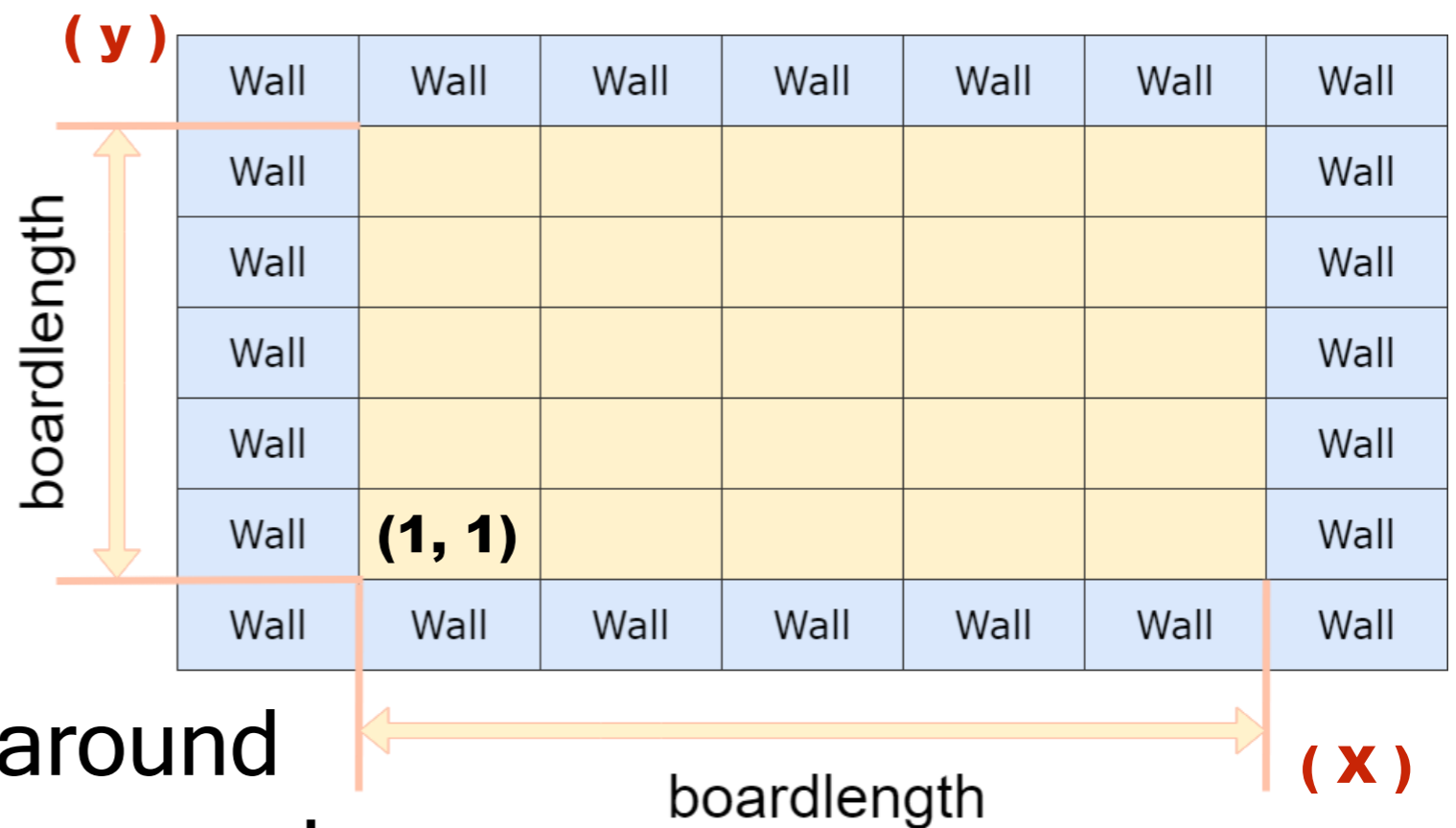
Part 1.

Init and set mine information

Init

Ex : boardlength = 5

- mine_info[x][y]
 - 2 : Wall
 - 1 : mine
 - 0 : there is no mine around
 - >0 : how many mines around



- map_press[x][y]
 - 0 : unstepped
 - 1 : stepped

mine_info[x][y]

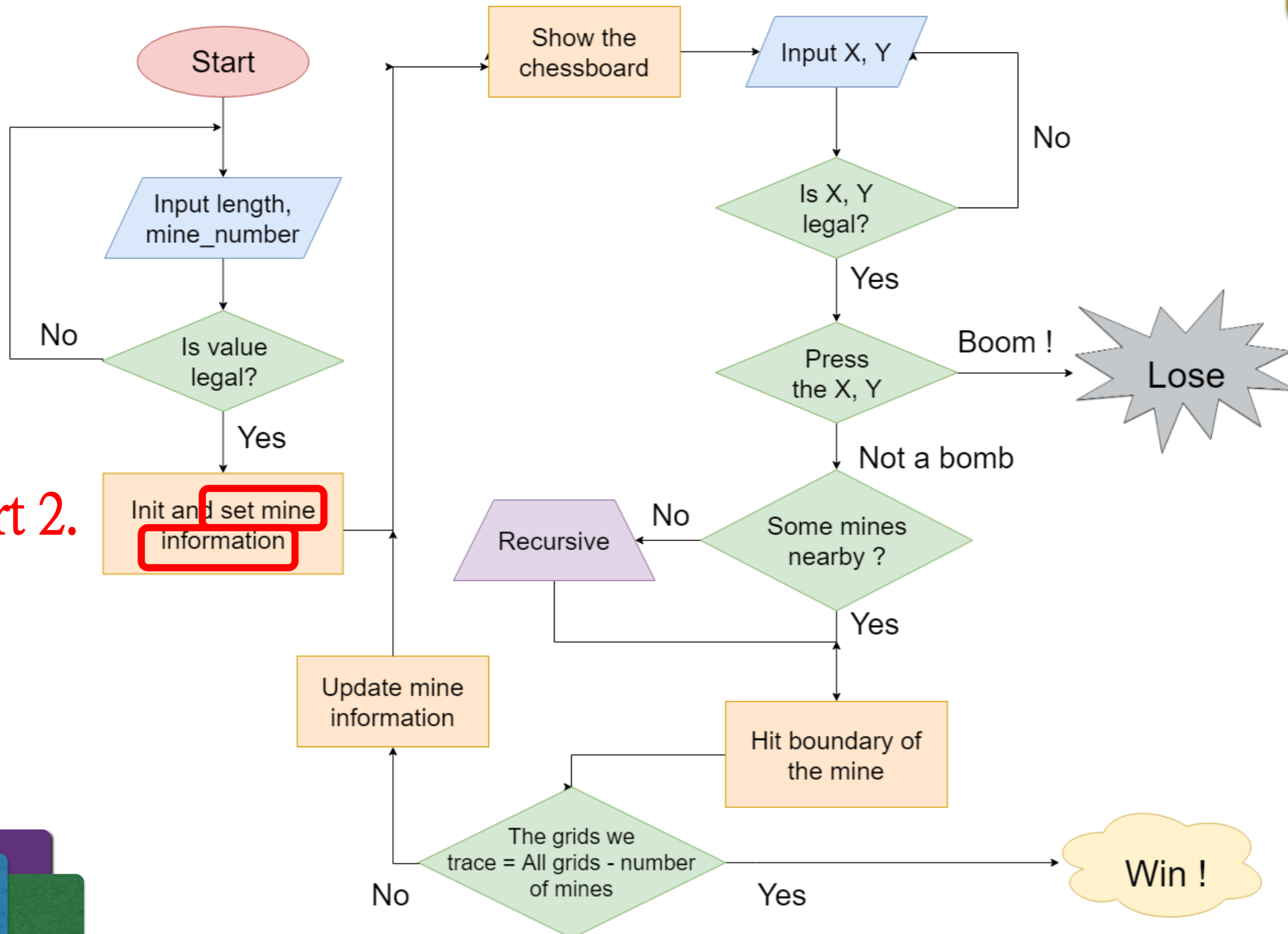
	6	-2	-2	-2	-2	-2	-2	-2
boardlength	5	-2	1	1	1	0	0	-2
	4	-2	1	-1	2	1	1	-2
	3	-2	1	1	2	-1	1	-2
	2	-2	0	0	1	1	1	-2
	1	-2	0	0	0	0	0	-2
	0	-2	-2	-2	-2	-2	-2	-2
		0	1	2	3	4	5	6
		boardlength						

Ex : mine_info[2][4] = -1

表示 X = 2, Y = 4 的位置埋了一顆地雷。



SetMineLable



Part 2.



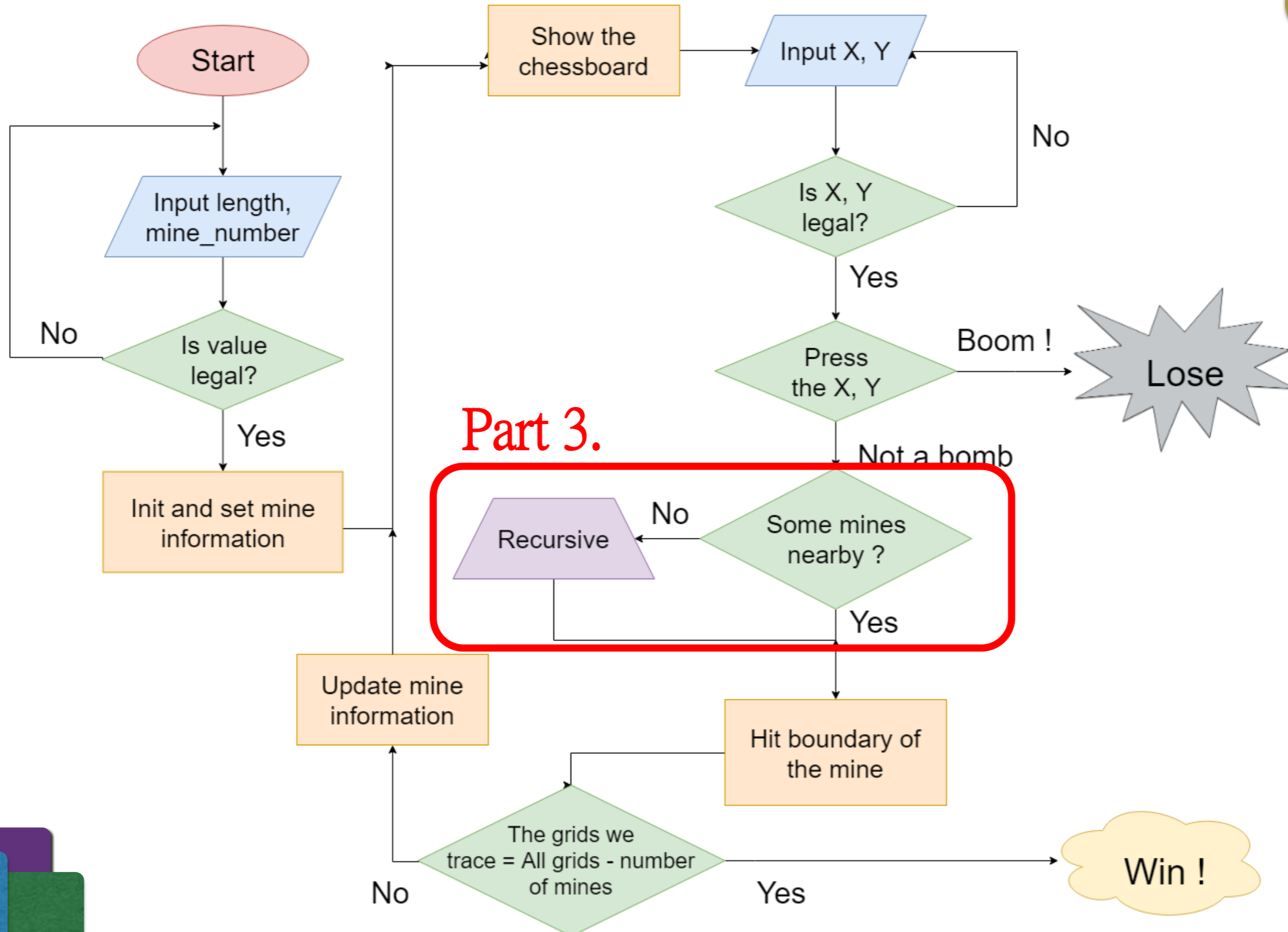
SetMineLable

	1	1	1		
	1	雷	1		
	1	1	1		

1	2	1	1		
雷	2	雷	1		
1	2	1	1		

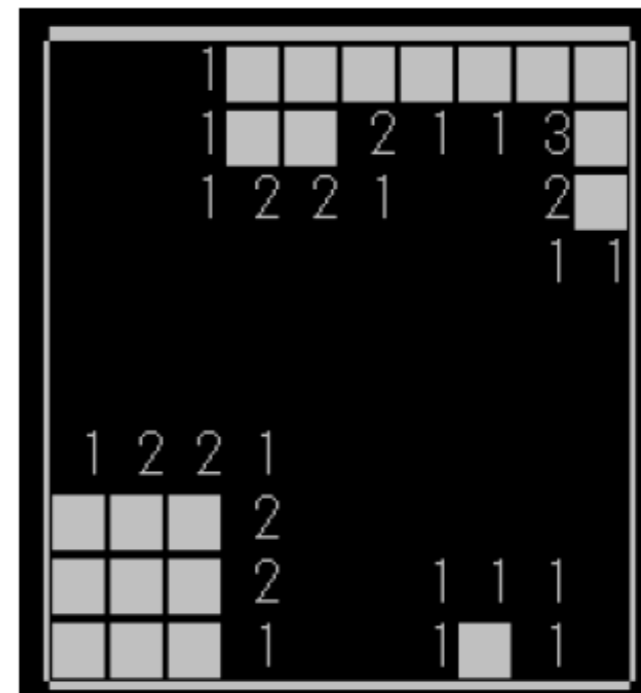
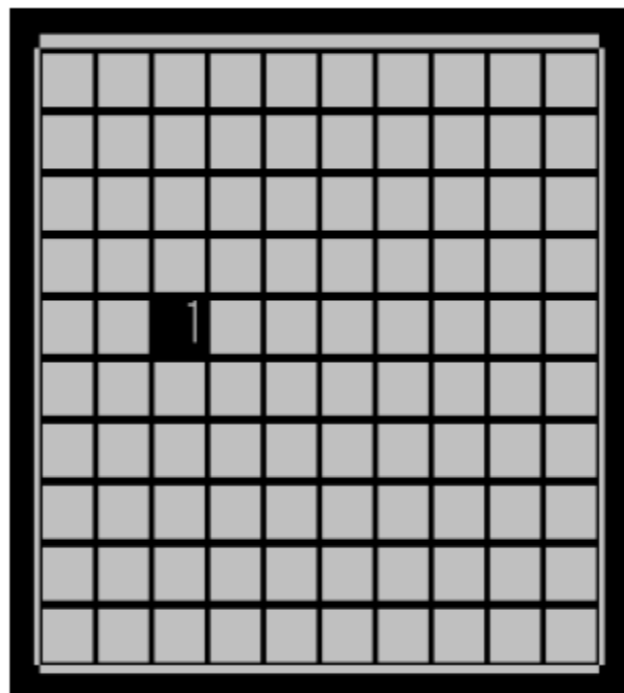
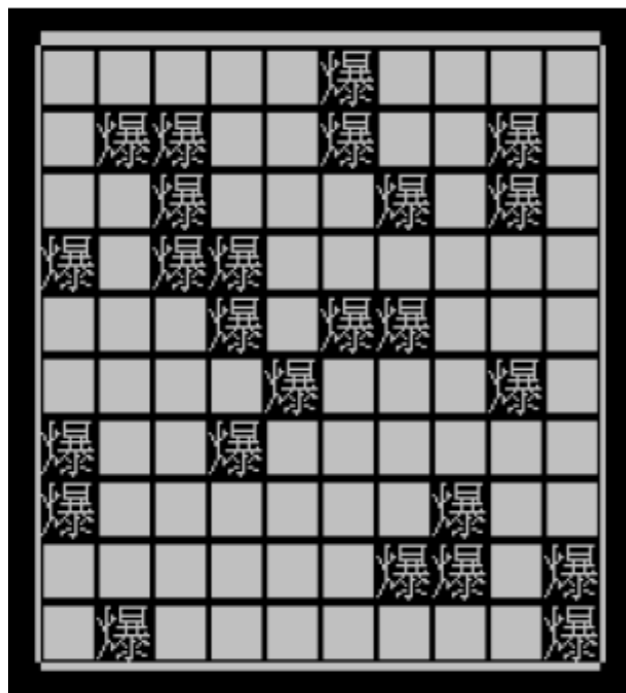


NoMineAround



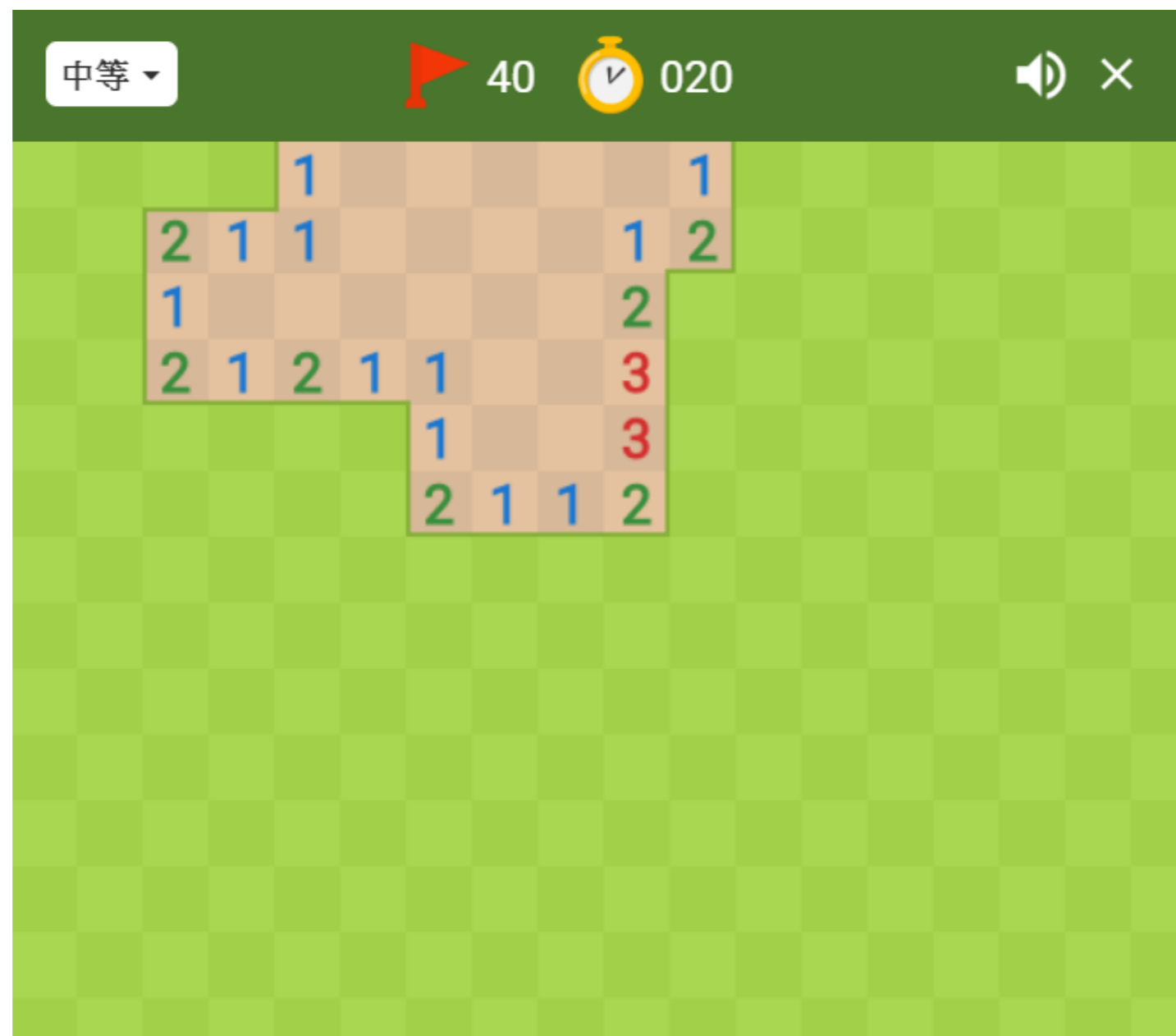
Three Case when Press

- Hit a bomb
- No explosion, but there are bombs nearby
- No explosion, no bomb nearby

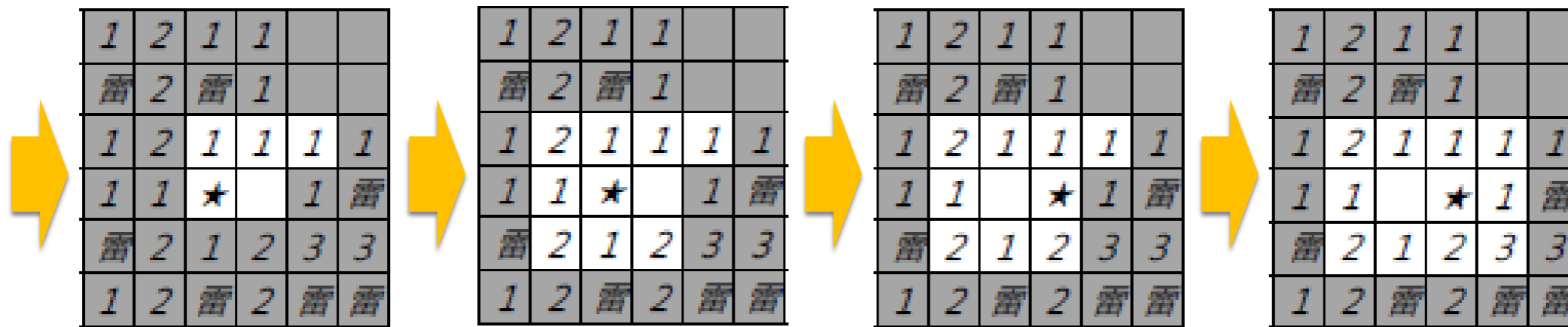
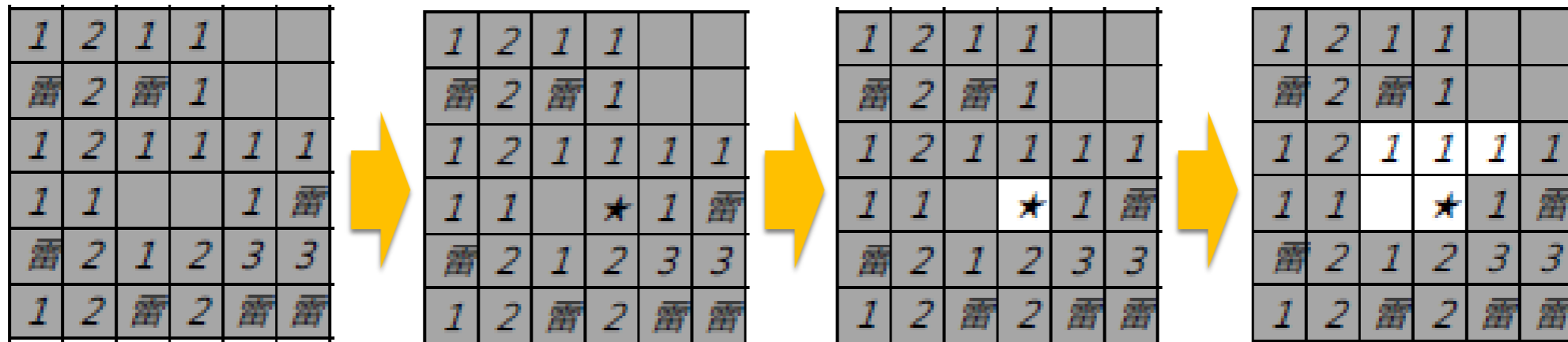
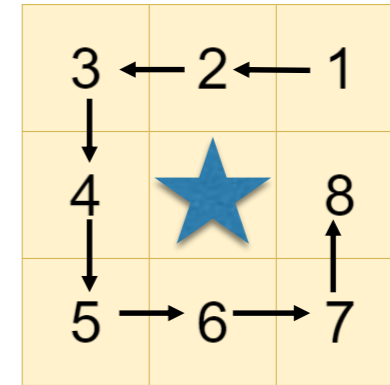


Result

翻開的大格子中間是空白，周圍是數字



Recursion



★ = position of (x, y)

