36. Valid Sudoku

Determine if a 9 x 9 Sudoku board is valid. Only the filled cells need to be validated according to the following rules:

Each row must contain the digits 1-9 without repetition.

Each column must contain the digits 1-9 without repetition.

Each of the nine 3 x 3 sub-boxes of the grid must contain the digits 1-9 without repetition.

Note:

A Sudoku board (partially filled) could be valid but is not necessarily solvable.

Only the filled cells need to be validated according to the mentioned rules.

Example 1:

5	3			7				
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

Input: board =

[["5","3",".",".","7",".",".",".","."]

,["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"]]

Output: true

Input: board =

[["8","3",".",".","7",".",".",".","."]

,["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"]]

Output: false

Explanation: Same as Example 1, except with the 5 in the top left corner being modified to 8. Since there are two 8's in the top left 3x3 sub-box, it is invalid.

Constraints:

board.length == 9

board[i].length == 9

board[i][j] is a digit 1-9 or '.'.