

Description

Solution

Discuss (999+)

Submissions

36. Valid Sudoku

Medium

1702

448

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Determine if a 9x9 Sudoku board is valid. Only the filled cells need to be validated **according to the following rules**:

1. Each row must contain the digits 1–9 without repetition.
2. Each column must contain the digits 1–9 without repetition.
3. Each of the 9 3x3 sub-boxes of the grid must contain the digits 1–9 without repetition.

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

A partially filled sudoku which is valid.

The Sudoku board could be partially filled, where empty cells are filled with the character '.'.

Example 1:

Input:

```
[  
  ["5","3",".",".","7",".",".",".","."],  
  ["6",".",".","1","9","5",".",".","."],  
  [".","9","8",".",".",".","6","."],  
  ["8",".",".","6",".",".","3","."],  
  ["4",".","8",".","3",".","."],  
  ["7",".","2",".",".","."],  
  [".","6",".","2","8","."],  
  [".","4","1","9",".","5"],  
  [".","8",".","7","9"]  
]
```

 Description Solution Discuss (999+) Submissions**Input:**

```
[
  ["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**Example 2:****Input:**

```
[
  ["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.

Note: