

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**:

- 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 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
```

Example 2:

```
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 '.'.