

# SUDOKU SOLVER

## **1) PROBLEM STATEMENT -**

You must have seen many sudoku game now a days and many different solvers also but have you seen any combination of both? and the answer is NO. This is a combination of both Sudoku game and Sudoku Solver you can both play the provided Sudoku or You can insert your own Sudoku and play it. If you are not able to solve it there is inbuilt feature by using which you can get maximum of 3 hints. And, if then also you are not able to solve then you can view the solution of the provided Sudoku.

## **2) SOLUTION -**

Sudoku can be solved by one-by-one assigning numbers to empty cells. Before assigning a number, check whether it is safe to assign. Check that the same number is not present in the current row, current column and current 3X3 sub grid. After checking for safety, assign the number, and recursively check whether this assignment leads to a solution or not. If the assignment doesn't lead to a solution, then try the next number for the current empty cell. And if none of the number (1 to 9) leads to a solution, return false and print no solution exists.

## **3) TECHNICAL DETAILS:**

LANGUAGE:

- HTML
- CSS
- JAVASCRIPT

## FRAMEWORK:

- Node.js
- Bootstrap
- jQuery

## DEPLOYMENT:

- GitHub

## WEBSITE:

- <https://prtkjsl.github.io/>

## 4) SCREENSHOTS:



Sudoku Game

New Game

Start Again

Check

Submit

Hint(3/3)

Get Solution

Done

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

Sudoku Game

New Game

Start Again

Check

Submit

Hint(3/3)

Get Solution

Sudoku Solver

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



Sudoku Game

New Game

Start Again

Check

Incorrect!!

Hint(3/3)

Get Solution

Done

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

Sudoku Game

New Game

Start Again

Check

Correct!

Hint(0/3)

Get Solution

Done

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