

*Sudoku* is a number-placement puzzle. The objective is to fill a  $9 \times 9$  grid with digits so that each column, each row, and each of the nine  $3 \times 3$  sub-grids that compose the grid contains all of the digits from 1 to 9.

This algorithm should check if the given grid of numbers represents a correct solution to Sudoku.

Example

For the first example below, the output should be `true`. For the other grid, the output should be `false`: each of the nine  $3 \times 3$  sub-grids should contain all of the digits from 1 to 9.

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

Input/Output

- [execution time limit] 4 seconds (js)
- [input] `array.array.integer` grid
  - A matrix representing  $9 \times 9$  grid already filled with numbers from 1 to 9.
- [output] `boolean`
  - `true` if the given grid represents a correct solution to Sudoku, `false` otherwise.

[JavaScript (ES6)] Syntax Tips

```
// Prints help message to the console
// Returns a string
function helloWorld(name) {
  console.log("This prints to the console when you Run Tests");
  return "Hello, " + name;
}
```