

Sudokus!

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What is a Sudoku?

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

The objective is to fill a $D \times D$, where D is a perfect square (ie $D = d^2$ where d is an integer, most often $D = 9$ and $d = 3$), grid with digits so that each column, each row, and each of the $D, d \times d$ subsquares or regions that compose the Sudoku grid contains all of the digits 1 to D .

I made a Sudoku game!

- Interactive Sudoku grid.
- Checks for valid entries (integers $1, 2, 3, \dots, D$).
- Checks for obvious conflicts (double values in a row, column, or region).
- Checks that there is a valid solution.
- Allows you to select from 4 options.
- Blank entries are represented by 0's.

"Options?" You ask?

- 'Play'
- 'How To Play'
- 'Hint'
- 'Show Solution'

What kind of input can I use to start a new game?

In order to start a new game, assuming you have loaded the .sage file, Input for `Play_Sudoku(Input)` can be one of the following sage classes:

- Integer - Creates a blank grid
- A string - 'How To Play' examples
- A list
- A Matrix
- A Sudoku

Now that we have discussed this game, let's
Play!