

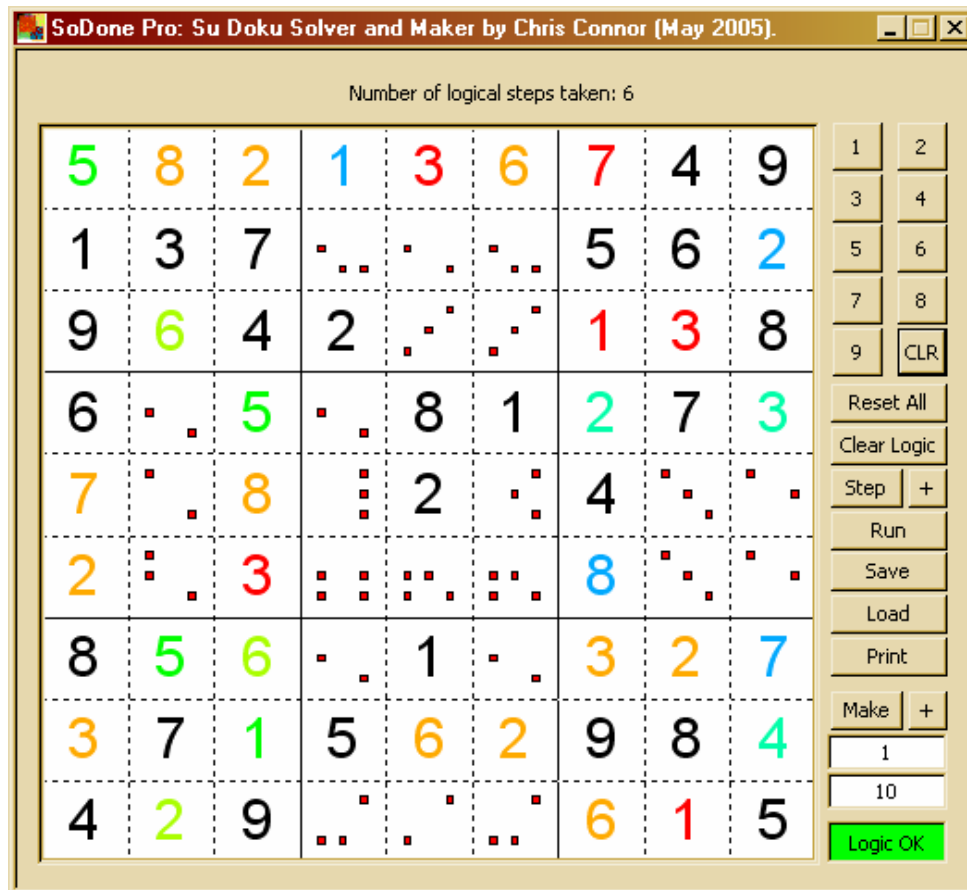
Simply fill in the grid so that every row, column, and 3-by-3 box contains the digits 1 through 9.

SoDone Pro

A Su Doku Solver and Maker

Introduction

SoDone is a program that is capable of solving most Su Doku puzzles in a logical, provable manner. It can also make Su Doku puzzles of its own to any desired level of difficulty: these puzzles may be particularly logically deep, or may require some intricate logical reasoning to solve.

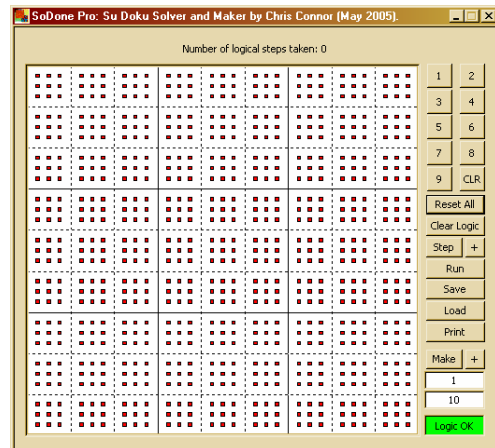


Here SoDone is part way through solving a puzzle. The initial clues to the puzzle are colored in black. SoDone reveals its progress by coloring the numbers it finds according to the order in which it discovered them. The numbers most recently found are colored red, changing into blue for the earliest numbers found. Squares that do not yet have a number are given a pattern of red dots showing which numbers are still considered logically possible for that square.

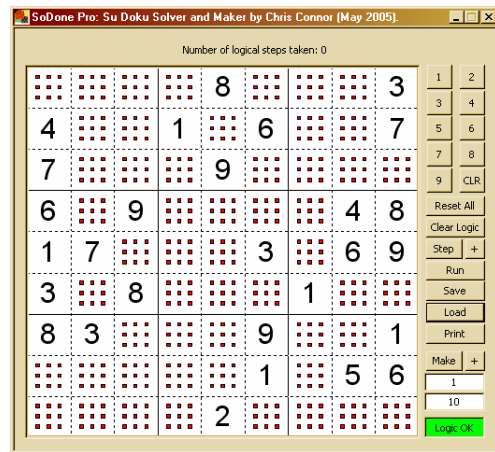
Simply fill in the grid so that every row, column, and 3-by-3 box contains the digits 1 through 9.

How To Work It

You'll start with the initial empty puzzle. You can either load a predefined puzzle with the "Load" button, or you can start putting numbers into the puzzle as clues. You put numbers into the puzzle by clicking the appropriate number button in the top right, and then clicking in the puzzle where the number goes. If you make a mistake, you can clear a number from the puzzle by clicking "CLR", then clicking on the number that's incorrect. If a puzzle becomes logically inconsistent, the "Logic OK" light will change from green to red. You can erase the whole puzzle at any time with "Reset All".



Now that you've set up a puzzle, you can "Save" it for safekeeping. You can try to solve it immediately by clicking "Run", or you can see how SoDone steps through the problem in a logical way by clicking on either "Step" or its neighbor "+". "Step" uses simple elimination to try to take a logical step forward. "Step +" uses more advanced logic to work out new numbers. If, at any time, you want to go back to the beginning of the puzzle, click "Clear Logic". "Print" will print the puzzle, showing all the numbers so far found.



Create your own puzzles with "Make" or "Make +". You can set the difficulty with the number boxes; setting 1 and 10 means the puzzle produced will take between 1 and 10 logical steps to solve. "Make" produces puzzles that can be solved by simple elimination. "Make +" puzzles are guaranteed not to be solvable by simple elimination: you'll have to use more advanced logical reasoning to get to the solution. All the puzzles produced are guaranteed to have only one correct solution, and to be solvable without guesswork.



SoDone never guesses; it only ever takes logically provable steps.