

CS194: Smarter Sudoku Generator

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Checkpoint 2:

- Solver has been completed and can solve nearly any problems without guessing.
 - Generator made that uses the solver.
 - Applet uploaded.
 - Created a simple difficulty estimator.
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Solver

- After reading input, solver is called.
 - Each method is repeatedly called until no cells are changed.
 - Repeat this loop until no cells at all are changed.
 - If done, return so.
 - If not, make a guess, and then attempt to solve it again.
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Generator

- Method:
 - Randomly guesses a number and cell.
 - Try to insert the number into the cell. If it is impossible, try again.
 - Try to solve the puzzle without guessing.
 - Repeat until puzzle can be solved.
 - Mostly generates simple puzzle.
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Applet

- Uploaded to my personal webspace.
- Simply uses the Generator + Solver to solve the puzzle based on the numbers within text fields.



Difficulty Estimator

- Uses the solver and counts number of times each method is used.
- Returned difficulty is the result of the following equation:

$$\sum \text{METHOD_BIAS} * \text{numTimesMethodsCalled}$$
