Sudoku Solver cont.

Input/Output requirements
The “hidden single” tactic

Options

We will test with no options –
Read a board from a file, print a (partly or fully solved) board
No other output is permitted for correct (complete or incomplete) boards

Options –display and –text help debugging
Use the Python “argparse” module
I also use –chatter for interactive control

Solver input/output with no options

Easy problem – my implemented tactics were enough

Harder problem – my implemented tactics solved only part

For the tournament

Optional – but I hope you’ll do it
Turn in full program code, one (correct) board
We will test on
4 problems for which ‘naked single’ and ‘hidden single’ are sufficient
All other student-submitted problems
Time limit 5 minutes total (on my machine)
Ranked by number solved; time taken is tie-breaker

Prizes: Gift certificates (shared by team members)
1st: $20 at Sweet Life Patisserie
2nd: $10 Red Wagon Creamery
3rd: $10 Red Wagon Creamery
Solver tips ...

I will make my checker available Monday after class (in case yours isn’t working, or you just want to see)
Robust puzzle reader method posted on class blog
   *can read .sdk files downloaded from the web*
Write a “determine” method for Tile

Debug a lot. Use partial puzzles like those on the SadMan site for debugging.

**Hidden single tactic**

A 2 has got to go somewhere in that middle block.
Can’t go in first column.
Can’t go in third column.
Must go in the only place it can.

Let’s turn this into design and pseudocode

http://www.sadmansoftware.com/sudoku/hiddensingle.htm