

# SUDOKU SOLVER

Sudoku solver is a solver for 9\*9 sudoku game

## Sudoku configuration

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1. Go into the dir "sudokuSolver/"
2. Save a sudoku game file under dir "test\_game/"

eg: test\_game/sudoku1.txt

```
$ cat test_game/sudoku1.txt
x 7 x x x x 3 x 1
x 3 x 5 7 2 x x 6
4 6 x x x x 5 x x
x 8 1 x x x x x x
x x x 3 x 5 x x x
x x x x x x 4 6 x
x x 6 x x x x 8 9
8 x x 1 4 6 x 5 x
2 x 7 x x x x 3 x
```

## Usage

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```
$ make solve test_game/sudoku1.txt
```

## Example

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```

$ make solve test_game/sudoku1.txt
===== [ Problem Statistics ] =====
|
|
PARSE ERROR! Unexpected char: x
===== [ Problem Statistics ] =====
|
|
WARNING! DIMACS header mismatch: wrong number of variables.
| Number of variables:          999
| Number of clauses:           3793
| Parse time:                   0.00 s
|
===== [ Search Statistics ] =====
| Conflicts | ORIGINAL | LEARNT | Progress |
|           | Vars  Clauses Literals | Limit  Clauses Lit/Cl |
=====
restarts      : 1
conflicts     : 1 (572 /sec)
decisions    : 276 (0.00 % random) (157895 /sec)
propagations  : 1039 (594394 /sec)
conflict literals : 1 (0.00 % deleted)
Memory used   : 0.30 MB
CPU time      : 0.001748 s
SATISFIABLE
9 7 5 6 8 4 3 2 1
1 3 8 5 7 2 9 4 6
4 6 2 9 3 1 5 7 8
3 8 1 4 6 7 2 9 5
6 2 4 3 9 5 8 1 7
7 5 9 2 1 8 4 6 3
5 4 6 7 2 3 1 8 9
8 9 3 1 4 6 7 5 2
2 1 7 8 5 9 6 3 4
make: `test_game/sudoku1.txt' is up to date.

```