

# Milestone 1

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## 1. Usage

- a. to compile:  
make
- b. to test benchmark:  
./test\_benchmark
- c. to test sudoku puzzle encoded into cnf:  
./test\_sudoku
- d. to test some other cnf file:  
./yasat <filename.cnf>

## 2. Features

- a. VSIDS score strategy with integer type
- b. BCP with two literal watching
- c. Conflict Driven Clause Learning with Non-chronological backtracking
- d. Random Restart

## 3. Summary

- a. benchmark: all are correct
- b. sudoku: for the 9x9, 16x16 sudoku puzzles, all are correct. But for 25x25 case, sometimes (but rarely) get wrong result...

## 4. Difficulties Encountered

- a. figure out how to detect the UNSAT situation
- b. some of the learnt clauses are confusing... (e.g. 9 3 -9 1) I haven't figured out what's wrong with my code...