

# Usage

> ./yasat <input\_sat>

the result solution should be under the same directory of <input\_sat>, with *.cnf* changed to *.sat*

## Features

1. DLIS

## Summary

I solve one more cnf(ii16a2.cnf), and solution time improve more than 15%.

result from ms2

```
~/Development/pratical-algorithm/proj-SAT_solver master*
> find ./data/ms3/3_hard -type f -name "*.cnf" -exec echo {} \; -exec gtimeout 300s time ./yasat_ms2 {} \;

./data/ms3/3_hard/ii16a1.cnf
150.92 real    142.02 user      1.14 sys
./data/ms3/3_hard/ii16a2.cnf
./data/ms3/3_hard/ii16b1.cnf
./data/ms3/3_hard/ii16b2.cnf
./data/ms3/3_hard/ii32b1.cnf
0.06 real    0.05 user      0.00 sys
./data/ms3/3_hard/ii32b2.cnf
11.60 real    10.96 user      0.03 sys
./data/ms3/3_hard/ii32b3.cnf
18.57 real    17.86 user      0.10 sys
./data/ms3/3_hard/ii32b4.cnf
28.28 real    26.60 user      0.10 sys
./data/ms3/3_hard/par16-1-c.cnf
19.04 real    18.26 user      0.13 sys
./data/ms3/3_hard/par16-2-c.cnf
4.10 real    3.44 user      0.02 sys
./data/ms3/3_hard/par16-3-c.cnf
1.28 real    1.26 user      0.00 sys
./data/ms3/3_hard/par16-4-c.cnf
1.77 real    1.51 user      0.00 sys
./data/ms3/3_hard/par32-1-c.cnf
./data/ms3/3_hard/par32-2-c.cnf
./data/ms3/3_hard/par32-3-c.cnf
./data/ms3/3_hard/par32-4-c.cnf
```

result from ms3

```
~/Development/practical-algorithm/proj-SAT_solver master*  
> find ./data/ms3/3_hard/ -type f -name "*.cnf" \  
-exec basename {} \; \  
-exec gtimeout 1m time ./yasat {} \; \  
  
ii16a1.cnf  
4.51 real 4.48 user 0.01 sys  
ii16a2.cnf  
4.24 real 4.22 user 0.01 sys  
ii16b1.cnf  
ii16b2.cnf  
ii32b1.cnf  
0.00 real 0.00 user 0.00 sys  
ii32b2.cnf  
0.70 real 0.70 user 0.00 sys  
ii32b3.cnf  
3.94 real 3.79 user 0.03 sys  
ii32b4.cnf  
3.58 real 3.02 user 0.05 sys  
par16-1-c.cnf  
5.03 real 4.97 user 0.01 sys  
par16-2-c.cnf  
8.29 real 8.03 user 0.04 sys  
par16-3-c.cnf  
11.87 real 11.13 user 0.09 sys  
par16-4-c.cnf  
4.99 real 4.96 user 0.01 sys  
par32-1-c.cnf  
par32-2-c.cnf  
par32-3-c.cnf  
par32-4-c.cnf  
^C
```