CSC320 Project Report Yuwei Zhang V00805647 Zihan Ye V00793984

(See readMe.txt to find how to compile, and which version of SAT we use)

1. Get the puzzle from http://magictour.free.fr/top95, and we choose the fifth line

```
....14....3....2...7........9...3.6.1..........8.2.....1.4....5.6....7.8...
```

as our source number, which stored in test.txt

- 2. Run CNF, and it creates a SATinput.txt, by transforming the source test.txt
- 3. Run Sat Solver, and it summarizes the following information:

```
****the instance is satisfiable ****

****verification of solution is OK****

NB_MONO= 165, NB_UNIT= 3991, NB_BRANCHE= 135, NB_BACK= 65

Program terminated in 0.000 seconds.

satz41 SATinput.txt 0.000 135 65 7351 236 1 729 8846 -4326
```

Then a SAToutput.txt is created

- 4. Run Result, and it creates solution.txt, which contains the result of the puzzle 5. Puzzle
 - $000014000 \\ 030000200 \\ 070000000 \\ 000900030 \\ 601000000 \\ 0000000000 \\ 200000104 \\ 000050600 \\ 000708000$

Puzzle Solved: