README FILE

CSC 320 Project

Sudoku Solver

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INSTRUCTIONS:

The project consists of two java files:

sud2sat.java and sat2sud.java

First, compile both java files.

Second, to run a puzzle file (called puzzle\_name), run:

$ java sud2sat puzzle\_name.txt > generated\_input\_to\_minisat.txt

Pipe the generated clauses into a txt file.

Third, run the minisat program, run:

$ minisat generated\_input\_to\_minisat.txt results.txt

Where results.txt is the outputted results from the minisat.

Fourth, translate the minisat output data with sat2sud.java, run:

$ java sat2sud results.txt

This will then print out the solved sudoku puzzle.

NOTES:

The puzzle file must be an a simple 9x9 txt file such as this one:

005080700

700204005

320000084

060105040

008000500

070803010

450000091

The program will count .'s \*'s or ?'s as empty spaces or wildcard slots.

Within the code, comments above the method detail each group member's contributions to the project.

Attached files for this project include this file - README.txt and Report.pdf which outlines our findings in our experiments with the Minisat solver.