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Installation:

To install Haskell, follow the instructions from the following site:

<https://www.haskell.org/platform/>

Afterwards, you should have ghc installed on your computer. This is all you will need.

**Preferred** Instructions (Unix machines only):

To compile the program, open the command line and run make in the root directory of the project. This will create the executable. Then, to start the program, run ./sudoku.

Instructions (Windows):

Go to <https://www.haskell.org/platform/windows.html> and install the minimal installer (modifying the cabal config in step 3 may not be necessary). Run WinGHCi, load the desired file (sudoku.hs), and click the red arrow to evaluate “main”.

Input:

The input file should reside in the root directory of the project. It should consist of 9 lines of text, each line containing 9 numbers delimited by spaces. Use 0 for blanks.

Example:

Davids-MacBook-Pro-2:haskell David$ ./sudoku

Please input file name of board:

sudokuTest.txt

Your board is:

0 4 3 | 0 8 0 | 2 5 0

6 0 0 | 0 0 0 | 0 0 0

0 0 0 | 0 0 1 | 0 9 4

------+-------+------

9 0 0 | 0 0 4 | 0 7 0

0 0 0 | 6 0 8 | 0 0 0

0 1 0 | 2 0 0 | 0 0 3

------+-------+------

8 2 0 | 5 0 0 | 0 0 0

0 0 0 | 0 0 0 | 0 0 5

0 3 4 | 0 9 0 | 7 1 0

Solution:

1 4 3 | 9 8 6 | 2 5 7

6 7 9 | 4 2 5 | 3 8 1

2 8 5 | 7 3 1 | 6 9 4

------+-------+------

9 6 2 | 3 5 4 | 1 7 8

3 5 7 | 6 1 8 | 9 4 2

4 1 8 | 2 7 9 | 5 6 3

------+-------+------

8 2 1 | 5 6 7 | 4 3 9

7 9 6 | 1 4 3 | 8 2 5

5 3 4 | 8 9 2 | 7 1 6

Time Elapsed:

0.044579s

Windows output:

:main

Please input file name of board:

sudokuTest.txt

Your board is:

0 4 3 | 0 8 0 | 2 5 0

6 0 0 | 0 0 0 | 0 0 0

0 0 0 | 0 0 1 | 0 9 4

------+-------+------

9 0 0 | 0 0 4 | 0 7 0

0 0 0 | 6 0 8 | 0 0 0

0 1 0 | 2 0 0 | 0 0 3

------+-------+------

8 2 0 | 5 0 0 | 0 0 0

0 0 0 | 0 0 0 | 0 0 5

0 3 4 | 0 9 0 | 7 1 0

Solution:

1 4 3 | 9 8 6 | 2 5 7

6 7 9 | 4 2 5 | 3 8 1

2 8 5 | 7 3 1 | 6 9 4

------+-------+------

9 6 2 | 3 5 4 | 1 7 8

3 5 7 | 6 1 8 | 9 4 2

4 1 8 | 2 7 9 | 5 6 3

------+-------+------

8 2 1 | 5 6 7 | 4 3 9

7 9 6 | 1 4 3 | 8 2 5

5 3 4 | 8 9 2 | 7 1 6

Time Elapsed:

0.2506688s