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Professor Bankston

CMPS 1100

23 Sept 2024

Midterm Checkpoint 2

Repository:

https://github.com/CMPS1100-Sania-Ella-Final-Project/CMPS1100_FinalProject.git

Test suite:

Utilizes 3 types of puzzles: 3 with one unique solution, 2 with multiple unique solutions, and 4 with no solution.

Bugs/Obstacles:

Puzzles 4, 5, and 6 do not run or do not run correctly. 4 appears to be too difficult for the program as it keeps running for multiple minutes. 5 also overwhelms the program. While there is no correct solution to puzzle5, the program hangs instead of printing 'no solution exists.' Puzzle 6 does print, but the program fails to recognize when the input is wrong, meaning the given puzzle has same number in any give row, column, or sub grid. To fix puzzle 6's issue I think I should re-order the solve sudoku function to check if the grid isSafe first. I'm worried this may make the function less efficient and worsen the issues with puzzles 4 and 5. I'm not sure how to optimize this more, but I am currently researching that.

Most Time-Consuming:

It honestly probably took me the longest to understand why the program was just hanging, but I think that was more because I wasn't systematic with my debugging process.