

Sudoku Final AI Report

Team number ³⁴_____

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Member #2 (name/id)_____

I. Minimal AI

I.A. Briefly describe your Minimal AI algorithm. What did you do that was fun, clever, or creative?

I.B Describe your Minimal AI algorithm's performance:

E.g. Generate around 60 boards of different difficulties and run your Minimal AI algorithm. Then provide a few words and a table like the following:

| Board Size | Sample Size (n) | Boards Solved | Average # of backtracks |
|----------------------|-----------------|---------------|-------------------------|
| 9x9 (easy) | | | |
| 12x12 (intermediate) | | | |
| 16x16 (hard) | | | |
| 25x25 (Expert) | | | |
| Total Summary | | | |

II. Final AI

II.A. How did integrating advanced techniques (LCV, MRV, MAD, or NOR) into the Final AI change its solving strategy compared to Minimal AI?

II.B. Which of the advanced heuristics (LCV, MRV, MAD, or NOR) had the most significant impact on the performance, and why do you think that was?

II.C Describe your Final AI algorithm's performance:

E.g. Use the same generated 60 boards from earlier and run your Final AI algorithm. Compare your results with Minimal AI performance, then provide a few words and a table like the following:

| Board Size | Sample Size (n) | Boards Solved | Average # of backtracks |
|----------------------|-----------------|---------------|-------------------------|
| 9x9 (easy) | | | |
| 12x12 (intermediate) | | | |
| 16x16 (hard) | | | |
| 25x25 (Expert) | | | |
| Total Summary | | | |

III. Has this project altered your interest or perspective towards artificial intelligence? If so, how?

III. In about 1/4 page of text or less, provide suggestions for improving this project (*this section does NOT count as past of your two-page total limit.*)