1. The solution I have already write in the solution.txt file

2. During the AI lab on Sudoku puzzle, I had the chance to dive into algorithms and logical thinking. Solving Sudoku puzzles enhanced my analytical and reasoning skills, and deepened my understanding of Constraint Satisfaction Problems (CSPs) and Backtracking. However, the lab presented challenges, including handling edge cases and optimizing code for performance. I also spent significant time debugging environment configuration errors (like 'Python was not found') and syntax issues ('unrecognized arguments'). Through perseverance, I overcame these obstacles and improved my problem-solving abilities. This was a valuable learning experience, enhancing my AI knowledge, programming skills, and critical thinking.

3. I had spent around 3 hours to fix the bug I have mentioned above and more than 2 hours to implement the code for the puzzle.

4. First we need to cd to the folder, then just type “python3 sudoku.py --inputFile” + choose ether “data/euler.txt” or “magictour.txt” to compile the application.