MATH 100 : Project on 'Sudoku'[1]

Description: You must be familiar with the popular mathematical puzzle Sudoku. If not, then just search online for many many examples of it, in particular look up the wikipedia article. In this project you will investigate solving such puzzles and investigating their properties.

The project requirements are:

1. Read and Understand Chapter 14 (Sudoku) of Cleve Moler's Experiments with MATLAB. Explain every bit of the text and write your own notes for that.
2. All project members will be able to give a demonstration of solving a Sudoku puzzle using the tools illustrated in Chapter 14.
3. Some exercises from Chapter 14 will probably be assigned, and/or supplementary questions to focus on symmetry, multiplicity/uniqueness/non-existence of solutions, etc. This will be based on interests of the students also.
4. Write a detailed report explaining the above items with examples, etc.
5. Give a presentation to your classmates on your project to communicate techniques and algorithmic issues for solving Sudoku puzzles.

Advisor: Prof. Hemanshu Kaul, (kaul@iit.edu).

[1] Adapted from Robert Ellis, IIT