Project Summary

1. What is the goal of this project?

The goal is to practice working collaboratively on a project, using Git Hub in order to produce an efficient sudoku solving app. The collaboration includes all phases of the project, from choosing an overall method for solving the problem, deciding on a particular design architecture to implement the method, implementing the solution, and lastly doing testing for efficiency improvements.

2. What problem are you trying to solve and what will the program do?

The program will efficiently solve an unsolved sudoku board. Specifically, it will receive as input a standard sized 9 x 9 grid of cells that are either empty or contain numbers 1 - 9, then use the rules of sudoku to fill in the empty cells.

3. What design did you chose for this project, how was it chosen, and why?

We first applied a brute force approach to understand the complexities of the problem. Once we identified the key challenges, we researched and selected the a few types of algorithms that would be best suited to solve this problem. In the case of sudoku, the main problem is having to choose a path forward out of many possibilities, and then later “backtrack” to an earlier possibility set if the current path meets a “dead end.” We explored several methods of tackling the problem including using stacks, recursion etc…………………. And chose …….. because………….

4. What were the biggest challenges you faced during this project and how did you overcome them?

5. What were your key takeaways and what would you have done differently?