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Project 1

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The goal of the project is to make a program that reads in solutions to a sudoku puzzle and decides whether the answer is a possible solution.

I will need data files to hold the solutions. the C++ file will open the solution files and use a function to read the solutions into a 2-dimensional array.

The function to fill the array will need nested loops to switch between locations in the array (rows and columns)

Once the function has added the information into the array I will need to make another function that prints the array to the screen in a formatted fashion.

In the function I will have another nested loop to print out the sudoku answer and format the numbers on the screen to look like a puzzle

Once the information is displayed on the screen I will need the next function to check if the answer to the sudoku puzzle is possible or not.

The next function will consist of 4 main parts

* The first part will be nested loop to make sure that all numbers in the sudoku solution are between 1 and 9 including 1 and 9
* The second part will be nested loops that check to make sure that all numbers in the rows are unique
* The third part will be nested loops that check to make sure that all numbers in the columns are unique
* The final part will be a nest of 4 loops to scan through the 9 sections to check if each of them unique numbers

If the program finds that there are numbers in one of these steps that are not unique it will quit searching and display that it is not a solution. If it gets through checking everything and it finds that the numbers are unique it will display that it is a solution.