# **SUDOKU**

#### **Description:**

The project involves the implementation of a Sudoku solver and player using C++ programming language. Sudoku is a popular number puzzle game that requires filling a 9x9 grid with digits from 1 to 9, following specific rules. The program provides functionalities for generating a random Sudoku puzzle and allowing users to play and solve it interactively.

### **Key Idea:**

- 1. The program includes a solver that uses backtracking to find a solution for a given Sudoku puzzle.
- 2. Users can play Sudoku by entering their moves, and the program validates each move based on Sudoku rules.
- 3. The system generates a random Sudoku puzzle with a specified number of given numbers, ensuring a unique solution.
- 4. The Sudoku grid is visually represented, making it user-friendly for playing and solving.

## **Requirements:**

A software to run a cpp code is enough for the user to play this game on console. The Sudoku solver and player project cater to a diverse audience, offering a stimulating and educational experience for Sudoku enthusiasts, students, and casual gamers alike.

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