This is a detailed description of how the program functions step by step:

1.) We have three classes Board_GUI, SolveSudoku,SudokuStart
2.) First the SudokuStart class calls the constructor of Board_GUI class
3.) Then the constructor of the board_GUI builds the GUI of the sudoku solver
4.) The user then enters the input in the textfields provided in the gui.
5.) When the user presses the solve sudoku button, an object of solve sudoku is created. The data from the textfields is collected,keeping in check the exception handling parts, and stores it in a 9x9 2d array. Then the array along with sudoku size is passed onto the solve sudoku objects constructor. Inside the sudoku solver constructor a separate array of same size is created which stores info about which textfields are the input and which are the output
6.) The exception is handled using pop up frames as shown in the images.
7.) The case of no possible solution is also handled with a pop up window.
8.) The solve sudoku object internally solves the sudoku
9.) The board gui constructor then accesses the solved 2d array from the solvesudoku object
10.)The board gui then uses the info about input and output stored in the solve sudoku object to print the solution on the board. It makes the input font black and the output font red
11.)When we press the clear button, the board is cleared as seen in the code
12.)When we press nextsolution button it again creates a solve sudoku object which internally calculates the next solution using the solvesudoku2() function. The output and exception handling is done in a way similar to that in solve sudoku button
13.)The gui closes on pressing the cross button and the program terminates

Test cases:-

5	3	4	6	7	8	9	1	2
6	7	2	1	9	5	3	4	8
1	9	8	3	4	2	5	6	7
8	5	9	7	6	1	4	2	3
4	2	6	8	5	3	7	9	1
7	1	3	9	2	4	8	5	6
9	6	1	5	3	7	2	8	4
2	8	7	4	1	9	6	3	5
3	4	5	2	8	6	1	7	9

Solve Sudoku   **Clear**

Next Solution

3	4	6	8	9	1	5	7	2
2	9	1	7	3	5	6	8	4
5	7	8	2	6	4	3	9	1
8	5	9	4	7	3	1	2	6
4	6	3	9	1	2	8	5	7
7	1	2	6	5	8	4	3	9
1	3	7	5	4	9	2	6	8
9	2	4	3	8	6	7	1	5
6	8	5	1	2	7	9	4	3

Solve Sudoku   **Clear**

Next Solution