The Sudoku game is being played on a 9x9 board. Each group of 3x3 squares (as illustrated in the following example) is also called a block. In the beginning of the game, a number of squares already contain digits in the range of 1-9.

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

The game's objective is to fill the grid so that each column, each row, and each of the blocks contain all the digits from 1 to 9. No digit should be repeated in the same row, column or block.

Write an application that implements the Sudoku game in the following way:

- The application will display to the user an initial grid in difficulty level that may be chosen (easy, medium or hard). The difference between the levels will be determined by the number of digits in the initialized grid (e.g. hard 28 digits, medium 31 digits and easy 36 digits). You should take care that the application creates a legal initial grid.
- The user will be able to place digits in the empty squares. The application won't let placing a wrong digit.
- In case that the user regrets, there should be an option to cancel a digit he/she has placed.
- The user will be able to ask, at any time, for a new grid.