API documentation

Here are the lists of all the functions used in the program, with their arguments inputs and what they return:

```
import sudoku
# Takes a 9x9 grid/board as argument, returns a boolean if the board is solved
correctly
sudoku.check_board_valid(grid)

# Takes the row, col, and the board/grid as argument,
# checks whether grid[i][j] is valid at the i's row and returns a boolean of the
result
sudoku.check_row_safe(i, j , grid)

# Takes the row, col, and the board/grid as argument,
# check whether grid[i][j] is valid at the j's column and returns a boolean of the
result
sudoku.check_col_safe(i, j, grid)

# Takes the row, col, and the board/grid as argument,
# check whether grid[i][j] is valid in the 3 by 3 box, and returns a boolean of
the result
sudoku.check_box_safe(i, j, grid)

# Takes the row, col, and the board/grid as argument,
# check whether a number at the cell location grid[i][j] is valid in the grid, and
returns a boolean
sudoku.check_cell_valid(i, j, grid)

# Helper function that takes the board as arguments and simply prints the board,
doesn't return anything
sudoku.print_board(grid)

# Helper function that takes the grid/board as input, finds the empty cells in the
grid,
# and return that number, return 0 if all filled
sudoku.find_empty_num(grid)

# Helper function that takes the grid/board as input,
# finds the location of the empty cell in the grid and updates the local variable,
# returns a boolean whether there are empty spots left in the board
sudoku.find_empty_spot(grid)

# Takes the grid/board as arguments. Backtracking recursion to solve the board
# Returns true or false.
sudoku.solve_board(grid)
```