Sudoku verifier

Sudoku is a game with few simple rules, where the goal is to place nine sets of positive digits (1...9) into the cells of a fixed grid structure (i.e. board).

The Sudoku board (or global grid) consists of a 3x3 arrangement of sub-grids, and each sub-grid is a 3x3 arrangement of cells. This yields a 9x9 arrangement of cells on the Sudoku board.

A valid Sudoku solution should conform to the following rules:

- R1: A cell in a Sudoku game can only store positive digits, i.e. 1...9.
- R2: All digits appear only once in a sub-grid, i.e. they cannot repeat.
- R3: A digit can appear only once in the rows of the global grid.
- R4: A digit can appear only once in the columns of the global grid.

Your task is to check the validity of a given solution for a Sudoku game

- You should read the candidate solution from a string variable, which should be exactly 81 characters long, i.e. first 9 are the first row, second 9 are the second row etc.
- You shall check whether the provided string follows the correct format (i.e. 9 rows with 9 entries in each row).
- You shall check the validity of the candidate solution against the rules listed above.
- You program shall provide the functionality to return an integer code on the validity of the solution:
    - Return 0: means it is a valid Sudoku solution
    - Return -1: means it is violating Rule #1
    - Return -2: means it is violating Rule #2
    - Return -3: means it is violating Rule #3
    - Return -4: means it is violating Rule #4

- You should implement the functionality with a single API method with the following signature:

`public int verify(String candidateSolution)`

A correct Sudoku string:
417369825632158947958724316825437169791586423469127582896435715732916841 64875293

An incorrect Sudoku string:
123456789912345678891234567789123456678912345567891234456789123345678912234567891