Main Goals were to

* Correctly input a solved set of values into the constructor
* Print the correct board to verify it entered correctly
* Create the isSolution function that identifies the board as correct, as opposed to a board that is incorrect, either because it has empty spaces, no empty spaces but incorrect values

Testing

It is not all that easy to test because making specific incorrect sudoku boards is not all that simple. However, I have create for txt files,

Correct.txt - a correct board - tests True

Incorrectrowcol.txt - the same as correct but location 5,5 has been changed - tests False

clusterCheck - rows and columns are ok but clusters are not - tests False

Zerocheck - a board with an incoming zero -tests False

All test cases are correct, but further testing will be necessary

IMPORTANT NOTES

First I added an important if then to the constructor. Because the incoming board will have some correct values, I think it is necessary to update the corrLoStor array with the xys of the incoming values. I changed row col back to x y to eliminate confusion in the other functions.

When the test.cpp is run, you will first see a print out of the coordinates in the corrLoStor array.

For the correct txt, this includes all the coordinates in order because it is coming in completely correct.

For the zeroecheck, notice the 0,0 for square 1 is missing, as it hasn’t been added (note that for the incorectrowcol, it does print 4,4 but this would not happen in a real case because the board will not come in incorrectly)

Also important, I was not sure the isSolution should be checking sodokuBoard,contents, or the correctvalues[] array. It is checking the sodukoBoard.contents, but this can easily be changed and it should still work ok.

For now when test.cpp is run

1. Prints coordinates stored in corrLoStor array
2. Prints the board
3. After ENTER, prints a cout that false arrayemptysquares is greater than 0, a cout that says not a solution, or a cout that says is a solution