Read, understand and write *.cpp code for optional extra credit project exCr7_8, Chapter 7 Programming Challenge 7_8 Lo Shu Magic Square, p. 456.

The output may look like:

10 2 3

4 15 6

7 8 -8

This is not a Lo Shu magic square.

4 9 2

3 5 7

8 1 6

This is a Lo Shu magic square.

Some hints.

In main() use two arrays

```
   // Create a magic two-dimensional array.
   int magicArray[ROWS][COLS] = { {4, 9, 2},
                                  {3, 5, 7},
                                  {8, 1, 6} };

   // Create a normal two-dimensional array.
   int normalArray[ROWS][COLS] = { {10, 2, 3},
                                   {4, 15, 6},
                                   {7, 8, -8} };
```

Use

```
// Global constants
const int ROWS = 3;  // The number of rows in the array
```

```
const int COLS = 3;  // The number of columns in the array
const int MIN  = 1;  // The value of the smallest number
const int MAX  = 9;  // The value of the largest number

// Function prototypes
void showResult(int[][COLS]);
void showArray(int[][COLS]);
bool isMagicSquare(int[][COLS]);
bool checkRange(int[][COLS]);
bool checkUnique(int[][COLS]);
bool checkRowSum(int[][COLS]);
bool checkColSum(int[][COLS]);
bool checkDiagSum(int[][COLS]);
```

Good Luck!