Exercise: Make a Magic Square

A magic square is an NxN square grid in which every row, column, and diagonal add up to the same number. N represents an odd number that is equal or greater than 3.

For example, a 3x3 magic square has 9 empty boxes. In each box, put an integer in it. You should put the numbers 1 through N2 in the magic square. This means that you will have to put numbers 1 through 9 in a 3x3 magic square. As stated above, each row, column, and diagonal has to add up to the same number. You will see that the every row, column, and diagonal in the below magic square adds up to the number 15.

|  |  |  |
| --- | --- | --- |
| 4 | 9 | 2 |
| 3 | 5 | 7 |
| 8 | 1 | 6 |

Now, write a program in which it prompts the user to enter the dimension of the magic square (aka ‘N’) that they wish to see and the program will display the magic square for it. Make sure you put comments in your program that will help another programmer understand the logic behind your program.

Optional: Tell the user to input another dimension if it is not an odd number that is equal or greater than 3.