

Lab Goal : The lab was designed to help you review classes, objects, files, arrays, and matrices.

Lab Description : Write a program to make a magic square of numbers. A *magic square* is matrix of numbers. Every column, every row, and every diagonal add up to the same value.

Sample Input :

5
1
7
3

Sample Output :

```
17      24      1      8      15
23      5       7     14     16
 4       6     13     20     22
10      12     19     21      3
11      18     25      2      9
```

1

```
30      39      48      1      10      19      28
38      47      7       9      18      27      29
46       6       8      17     26      35      37
 5      14      16     25     34      36      45
13      15      24     33     42     44       4
21      23      32     41     43      3      12
22      31      40     49      2     11      20
```

```
8       1       6
3       5       7
4       9       2
```

Files Needed ::

MagicSquare.java
Lab01c.java

15	15	15	15
8	1	6	15
3	5	7	15
4	9	2	15

algorithm help

Place **1** in the middle of the top row.
 Start a loop for the rest of numbers to insert
 decrease row by one
 increase col by one
 increase num by one

 make sure row and col are in bounds

 if current spot is not zero (spot is filled)
 increase row by one
 decrease col by one
 make sure row and col are in bounds
 increase row by one

 set spot to num