Assignment

**Magic squares**

A magic square is a N x N square grid filled with distinct positive integers from 1 to N x N such that each cell contains a different integer and the sum of the integers in each row, column and diagonal is the same.

references

<https://www.transum.org/software/SW/magic_square/magic_square.asp?Level=1>

<https://www.dcode.fr/magic-square>

Assign numbers from 1 to N x N.

Put the first number 1 at the middle of the first row.

Assign next number in this direction

If the position is already occupied, assign next number at the next row and same column.

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| 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 |

Enter the order of the magic square (only 3, 5, 7, and 9 are accepted).

Generate a magic square of the given order.

Show the sum of the cells in a row.

Add the statement **pause=input("Press ENTER to quit.")** at the end of your program.

Test your program. Check against the following sample output.

File name e.g. 4C03ChanTaiMan\_MagicSquare.py

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Enter the order of the magic square: 5

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

Sum of cells in a row= 65

Press ENTER to quit.

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