

CREATIVE PROBLEM SOLVING

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8	1	6
3	5	7
4	9	2

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

MAGIC SQUARE GENERATOR

CONCEPTS: Arrays, Loops, Arithmetic

LEVEL: Easy

MAGIC SQUARE is an odd sized matrix that has numbers from 1 – NxN in such a way that

1. Sum of each row
2. Sum of each column
3. Sum of both diagonals

Results into same value. Logic to fill the square is to start with middle element of first row and then follow following logic to fill next number:

1. Top Right [If Element Location is Free]
2. Bottom [If Element Location on Top Right is Occupied]

PROBLEM STATEMENT

Given an odd integer N, generate and print a magic square. Dynamically Allocate the array based on value of N.

Input

N – an odd integer

Ouput

A magic square of size NxN.

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SAMPLE TEST CASES

	Input	Output
Test Case 1	3	8 1 6 3 5 7 4 9 2
Test Case 2	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