using System;

using System.Collections.Generic;

using System.Linq;

using System.Text;

using System.Threading.Tasks;

namespace magicSquare

{

class Program

{

static void Main(string[] args)

{

int[,] arr = new int[3, 3];

for (int i = 0; i < 3; i++)

{

for (int j = 0; j < 3; j++)

{

Console.Write("element - [{0},{1}] : ", i, j);

arr[i, j] = Convert.ToInt32(Console.ReadLine());

}

}

int rowLength = arr.GetLength(0);

int colLength = arr.GetLength(1);

for (int i = 0; i < rowLength; i++)

{

for (int j = 0; j < colLength; j++)

{

Console.Write("{0} ", arr[i, j]);

}

Console.WriteLine("\n");

}

int row1 = arr[0, 0] + arr[0, 1] + arr[0, 2];

int row2 = arr[1, 0] + arr[1, 1] + arr[1, 2];

int row3 = arr[2, 0] + arr[2, 1] + arr[2, 2];

int leftdiagonal = arr[0, 0] + arr[1, 1] + arr[2, 2];

int rightdiagonal = arr[0, 2] + arr[1, 1] + arr[2, 0];

int col1= arr[0,0] + arr[1,0] + arr[2,0];

int col2 = arr[0, 1] + arr[1, 1] +arr[2,1];

int col3 = arr[0, 2] + arr[1, 2] + arr[2, 2];

Console.WriteLine("sum of row1 is {0}" ,row1);

Console.WriteLine("sum of row2 is {0}", row2);

Console.WriteLine("sum of row2 is {0}", row3);

Console.WriteLine("sum of left diagonal is {0}", leftdiagonal);

Console.WriteLine("sum of right diagonal is {0}", rightdiagonal);

Console.WriteLine("sum of col1 is {0}", col1);

Console.WriteLine("sum of col2 is {0}", col2);

Console.WriteLine("sum of col3 is {0}", col3);

if (row1 == row2 && row1 == row3 && row1 == leftdiagonal && row1 == rightdiagonal && row1 == col1 && row1 == col2 && row1 == col3)

{

Console.WriteLine("It is a Magic Square");

}

else {

Console.WriteLine("It is not a Magic Square");

}

Console.ReadLine();

}

}

}