public class SudokuChecker {

static int[][] sMatrix=new int[9][9];

int a,b;

for(a=0;a<9;a++)

{

for(b=0;b<9;b++)

{

System.out.println(sMatrix[a][b]);

}

}

static int rSum=0;

static int cSum=0;

static int[] rSumArray=new int[9];

static int[] cSumArray=new int[9];

static int[] boxSumArray=new int[9];

static boolean checkArrayStatus(int[] rSumArray,int[] cSumArray,int[] boxSumArray)

{

int i=0;

boolean sudokuStatus=true;

System.out.println("/n Congratulations!You won the game");

while(i<9){

if(rSumArray[i]!=45)

{

sudukoStatus=false;

System.out.println("Row %d has a problem");

break;

}

else if(cSumArray[i]!=45)

{

sudukoStatus=false;

System.out.println("Column %d has a problem");

break;

}

i++;

else(rSumArray[i]!=45)

{

sudukoStatus=false;

System.out.println("Square %d has a problem");

break;

}

}

return sudukoStatus;

}

public static void main(String[] args) {

for(int i=0 ; i<sMatrix.length ; i++){

for(int j=0 ; j<sMatrix.length ; j++){

rSum+=sMatrix[i][j];

cSum+=sMatrix[j][i];

}

rSumArray[i]=rSum;

cSumArray[i]=cSum;

rSum=0;

cSum=0;

}

for(int i=0 ; i< sMatrix.length ; i++){

for(int j=0 ; j<sMatrix.length ; j++){

if(i<=2&&j<=2)

{

boxSumArray[0]+=sMatrix[i][j];

}

if(i<=2&&(j>=3&&j<=5))

{

boxSumArray[1]+=sMatrix[i][j];

}

if(i<=2&&(j>=6&&j<=8))

{

boxSumArray[2]+=sMatrix[i][j];

}

if((i>=3&&i<=5)&&(j<=2))

{

boxSumArray[3]+=sMatrix[i][j];

}

if((i>=3&&i<=5)&&(j>=3&&j<=5))

{

boxSumArray[4]+=sMatrix[i][j];

}

if((i>=3&&i<=5)&&(j>=6&&j<=8))

{

boxSumArray[5]+=sMatrix[i][j];

}

if((i>=6)&&(j<=2))

{

boxSumArray[6]+=sMatrix[i][j];

}

if((i>=6)&&(j>=3&&j<=5))

{

boxSumArray[7]+=sMatrix[i][j];

}

if((i>=6)&&(j>=6))

{

boxSumArray[8]+=sMatrix[i][j];

}

}

}

if(checkArrayStatus(rSumArray,cSumArray,boxSumArray))

{

System.out.println("The matrix is sudoku compliant");

}

else

{

System.out.println("The matrix is not sudoku compliant");

}

}

}