import java.io.\*;

class Matriznova

{

public int mat[][];

int aux=0;

DataInputStream ler = new DataInputStream(System.in);

public Matriznova(int i)

{

mat = new int[i][i];

aux=i;

}

public int[][] leitura()

{

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

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

{

System.out.print("Digite o valor da matriz "+i+" "+j+" :");

try {

mat[i][j] = Integer.valueOf(ler.readLine()).intValue();

}

catch (Exception e) { }

}

System.out.println();

return this.mat;

}

public int[][] adicao(int mat1[][], int mat2[][],int tam)

{

int a[][] = new int[tam][tam];

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

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

{

a[i][j] = mat1[i][j] + mat2[i][j];

}

return a;

}

public int[][] subtracao( int mat1[][], int mat2[][], int tam)

{

int a[][] = new int[tam][tam];

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

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

{

a[i][j] = mat1[i][j]-mat2[i][j];

}

return a;

}

public void mostra(int aux[][],int x)

{

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

{

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

{

System.out.print(aux[i][j]+" ");

}

System.out.println();

}

}

public int[][] multiplica(int mat1[][], int mat2[][], int tam)

{

int s, aux;

int a[][] = new int[tam][tam];

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

{

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

{

aux = 0;

for(int k=0; k< tam; k++)

{

aux+= (mat1[i][k] \* mat2[k][j]);

}

a[i][j]= aux;

}

}

return a;

}

}

import java.io.\*;

class Teste {

public static void main (String args[]) {

DataInputStream ler = new DataInputStream(System.in);

int x=0;

System.out.print("Digite o tamanho da matriz quadrada\n");

try {

x = Integer.valueOf(ler.readLine()).intValue();

}

catch (Exception e) { }

Matriznova primeira = new Matriznova(x);

Matriznova segunda = new Matriznova(x);

int mat1[][]=new int[x][x];

int mat2[][]=new int[x][x];

int mat3[][]=new int[x][x];

mat1=primeira.leitura();

System.out.println();

mat2=segunda.leitura();

System.out.println();

System.out.println("MATRIZES: ");

primeira.mostra(mat1,x);

System.out.println();

primeira.mostra(mat2,x);

System.out.println();

mat3 = primeira.adicao(mat1,mat2,x);

System.out.println("SOMA: ");

primeira.mostra(mat3,x);

System.out.println();

mat3 = primeira.subtracao(mat1,mat2,x);

System.out.println("SUBTRACAO: ");

primeira.mostra(mat3,x);

System.out.println();

mat3 = primeira.multiplica(mat1,mat2,x);

System.out.println("MULTIPLICACAO: ");

primeira.mostra(mat3,x);

}

}