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1/* Aim : Write a program in java to perform sum of diagonal elements of a matrix.
5package pkg3;
6import java.util.*;
7public class DiagonalAddition {
8    public static void main(String[] args) {
9        System.out.println("~A PROJECT BY KASHISH GUPTA");
10        int set[][] = new int[3][3];
11        int i,j;
12        int d1=0, d2=0;
13        Scanner sc =new Scanner(System.in);
14        System.out.println("Start the program : ");
15        System.out.println("Enter the 3x3 matrix:");
16        for(i=0;i<3;i++)
17        {
18            for(j=0;j<3;j++)
19            {
20                set[i][j]=sc.nextInt();
21            }
22        }
23        System.out.println("The 3X3 matrix is : ");
24        for (i=0 ; i<3 ; i++)
25        {
26            for (j=0 ; j<3 ; j++)
27            {
28                System.out.print(set[i][j]+"\\t");
29            }
30            System.out.println(" ");
31        }
32        for (i=0 ; i<3 ; i++)
33        {
34            for (j=0 ; j<3 ; j++)
35            {
36                if(i==j)
37                    d1 = d1+set[i][j];
38            }
39        }
40        for (i=0 ; i<3 ; i++)
41        {
42            for (j=0 ; j<3 ; j++)
43            {
44                if(i+j==2)
45                    d2 = d2+set[i][j];
46            }
47        }
48        System.out.println("The sum of first diagonal is : "+d1);
49        System.out.println("The sum of second diagonal is : "+d2);
50    }
51}
52
```