**I. Matrici**

int[] a = new int[n];

**package** matrice;  
  
**import** java.util.Scanner;  
  
**public class** Matrice **{  
 public static void main(**String**[]*args*){** System.*out*.println**(*"Enter matrix size : "*)**;  
 Scanner ***scanner*** = **new** Scanner**(**System.*in***)**;  
 **int *n*** = ***scanner***.nextInt**()**;  
 System.*out*.println**(*"Reading matrix "*** + ***n*** +***" x "*** +***n*)**;  
 **int[][] *a*** = **new int[*n*][*n*]**;  
 **for (int *i*** = **0**; ***i***< ***n*** ;***i***++**) {  
 for(int *j*** = **0**; ***j*** < ***n***; ***j***++**) {  
 *a*[*i*][*j*]** = ***scanner***.nextInt**()**;  
 **}  
 }  
 }  
}**

Ex: Afisare matrice

**package** matrice;  
  
**import** java.util.Scanner;  
  
**public class** Matrice **{  
 public static void printMatrix(int [][] *myMatrix*) {  
 for(int *i*** = **0**; ***i*** < ***myMatrix***.length; ***i***++**) {  
 for(int *j*** = **0**; ***j*** < ***myMatrix*[*i*]**.length;***j***++**){** System.*out*.print**(*myMatrix*[*i*][*j*]**+***" "*)**;  
 **}** System.*out*.println**()**;  
 **}  
 }  
 public static void main(**String**[]*args*){** System.*out*.println**(*"Enter matrix size : "*)**;  
 Scanner ***scanner*** = **new** Scanner**(**System.*in***)**;  
 **int *n*** = ***scanner***.nextInt**()**;  
 System.*out*.println**(*"Reading matrix "*** + ***n*** +***" x "*** +***n*)**;  
 **int[][] *a*** = **new int[*n*][*n*]**;  
 **for (int *i*** = **0**; ***i***< ***n*** ;***i***++**) {  
 for(int *j*** = **0**; ***j*** < ***n***; ***j***++**) {  
 *a*[*i*][*j*]** = ***scanner***.nextInt**()**;  
 **}  
 }  
 *printMatrix*(*a*)**;  
 **}  
}**

**package** matrice;  
  
**import** java.util.Scanner;  
  
**public class** Matrice **{  
 public static void sumColumns(int *size***, **int[][] *myMatrix*) {  
  
 for(int *j*** = **0**; ***j*** < ***size***; ***j***++**) {***// iterem prin coloane* **int *sumC***= **0**;  
 **double *avgL*** = **0**;  
 **for(int *i*** = **0**; ***i*** < ***size***;***i***++**) {  
 *sumC*** = ***sumC*** + ***myMatrix*[*i*][*j*]**;  
 ***avgL*** = ***sumC***/***size***;  
 **}** System.*out*.println**(*"Suma elementelor de pe coloana "*** +**(*j***+**1)**+***" este "*** +***sumC*)**;  
 System.*out*.println**(*"Media elementelor de pe coloana "*** +**(*j***+**1)**+***" este "*** +***avgL*)**;  
 **}  
  
 }  
  
  
  
 public static void sumLines(int *size***, **int[][] *myMatrix*) {  
  
 for(int *i*** = **0**; ***i*** < ***size***; ***i***++**) {  
 int *sumL*** = **0**;  
 **int *avgL*** = **0**;  
 **for(int *j*** = **0**; ***j*** < ***size***;***j***++**) {  
 *sumL*** = ***sumL*** + ***myMatrix*[*i*][*j*]**;  
 **}** System.*out*.println**(*"Suma elementelor de pe linia "*** +**(*i***+**1)**+***" este "*** +***sumL*)**;  
 **}  
  
 }  
 public static void printMatrix(int [][] *myMatrix*) {  
 for(int *i*** = **0**; ***i*** < ***myMatrix***.length; ***i***++**) {  
 for(int *j*** = **0**; ***j*** < ***myMatrix*[*i*]**.length;***j***++**) {** System.*out*.print**(*myMatrix*[*i*][*j*]**+***" "*)**;  
 **}** System.*out*.println**()**;  
 **}  
 }  
 public static void main(**String**[]*args*){** System.*out*.println**(*"Enter matrix size : "*)**;  
 Scanner ***scanner*** = **new** Scanner**(**System.*in***)**;  
 **int *n*** = ***scanner***.nextInt**()**;  
 System.*out*.println**(*"Reading matrix "*** + ***n*** +***" x "*** +***n*)**;  
 **int[][] *a*** = **new int[*n*][*n*]**;  
 **for (int *i*** = **0**; ***i***< ***n*** ;***i***++**) {  
 for(int *j*** = **0**; ***j*** < ***n***; ***j***++**) {  
 *a*[*i*][*j*]** = ***scanner***.nextInt**()**;  
 **}  
  
 }  
  
 *printMatrix*(*a*)**;  
 ***sumLines*(*n***, ***a*)**;  
 ***sumColumns*(*n***, ***a*)**;  
  
 **}  
}**

**TEMA: De facut o matrice de la calculator. Redati oglinda matricei conf. cu ce am scris pe foaie. De facut suma si media pentru fiecare linie si coloana.**