MATXIC MULTIPLICATION:

import java.util.\*;

public class matmul

{

public static void main(String[] args)

{

Scanner scan=new Scanner(System.in);

System.out.println("enter the number of rows of 1st matrix");

int row1;

row1=scan.nextInt();

System.out.println("enter the number of columns of 1st matrix");

int col1;

col1=scan.nextInt();

System.out.println("enter the number of rows of the 2nd matrix");

int row2;

row2=scan.nextInt();

System.out.println("enter the number of columns of the 2nd matrix");

int col2;

col2=scan.nextInt();

if(col1!=row2)

{

System.out.println("matrix multiplication is not possible");

return;

}

else

{

int a[][]=new int[row1][col1];

int b[][]=new int[row2][col2];

int c[][]=new int[row1][col2];

System.out.println("enter the elements of 1st matrix");

for(int i=0;i<row1;i++)

{

for(int j=0;j<col1;j++)

{

a[i][j]=scan.nextInt();

}

}

System.out.println("enter the elements of 2nd matrix");

for(int i=0;i<row2;i++)

{

for(int j=0;j<col2;j++)

{

b[i][j]=scan.nextInt();

}

}

System.out.println("matrix multiplication is::");

for(int i=0;i<row1;i++)

{

for(int j=0;j<col2;j++)

{

c[i][j]=0;

for( int k=0;k<col1;k++)

{

c[i][j]+=a[i][k]\*b[k][j];

}

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

}

System.out.println(" ");

}

}

}

}