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**Batch: S2 RMCA B**

**Date: 06/04/2022**

**OBJECT ORIENTED PROGRAMMING LAB**

**Experiment No.: 4**

**Aim**

**Read a matrix from the console and check whether it is symmetric or not.**

**Procedure**

import java.util.Scanner;

public class MatrixSymmetric{

public static void main(String args[]){

int row,col,i,j;

int flag=0;

Scanner sym=new Scanner(System.in);

System.out.println("Entre the number of rows in the matrix");

row=sym.nextInt();

System.out.println("Enter the number of columns in the matrix");

col=sym.nextInt();

int a[][]=new int[row][col];

int b[][]=new int[row][col];

System.out.println("Enter the elements in the matrix");

for(i=0;i<row;i++){

for(j=0;j<col;j++){

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

}

}

System.out.println("the transpose of matrix A is:");

for(i=0;i<row;i++){

for(j=0;j<col;j++){

b[i][j]=a[j][i];

}

}

System.out.println("transpose of A is:");

for(i=0;i<row;i++){

for(j=0;j<col;j++){

System.out.println(b[i][j]);

}

}

for(i=0;i<row;i++){

for(j=0;j<col;j++){

if(a[i][j]!=b[i][j]){

flag=1;

break;

}

}

}

if(flag==0){

System.out.println("Symmetric");

}

else{

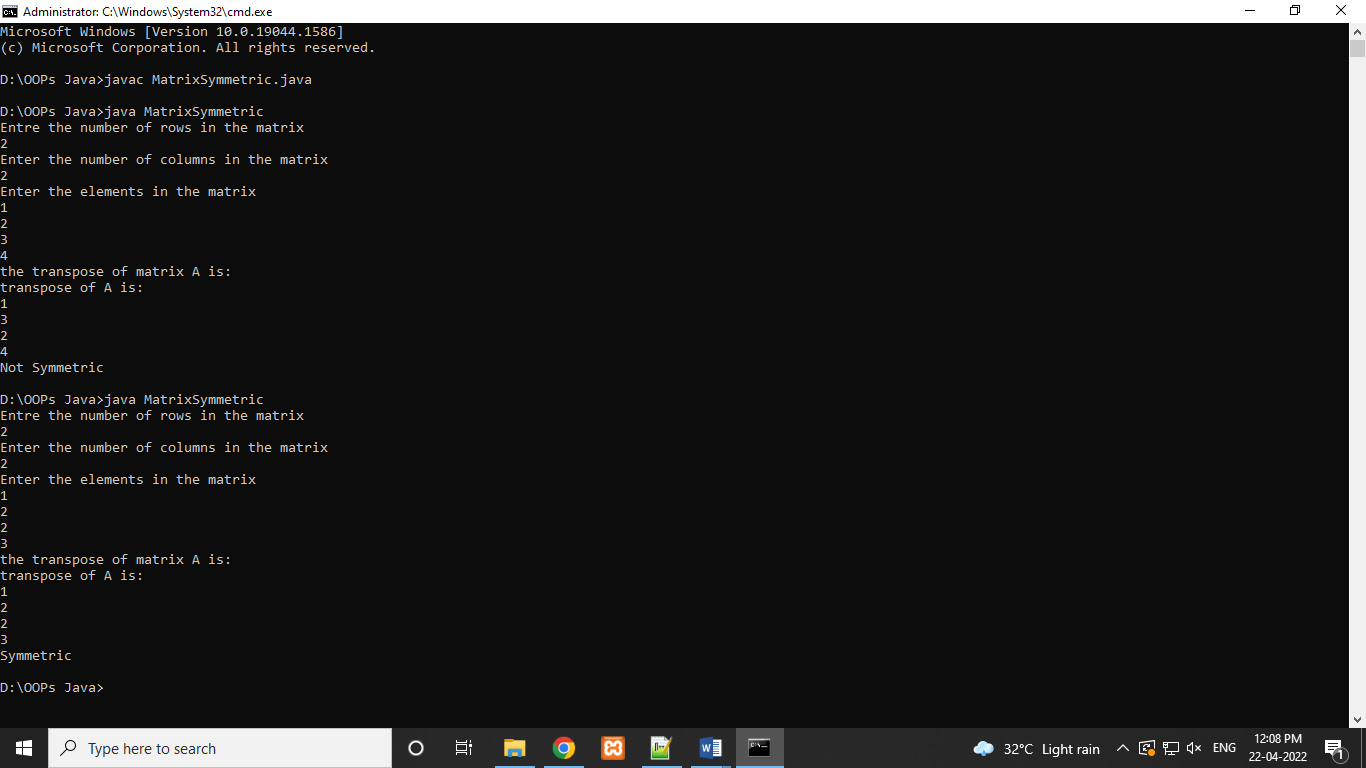
System.out.println("Not Symmetric");

}

}

}

**Output Screenshot**

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