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**Batch:MCA-B**

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**OBJECT ORIENTED PROGRAMMING LAB**

**Experiment No.: 2**

**Aim**

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

**Procedure**

import java.util.Scanner;

public class CO14 {

public static void main(String aR[]) {

Scanner sc = new Scanner(System.in);

System.out.print("Enter the size of Row \t: ");

int row = sc.nextInt();

System.out.print("Enter the size of Cols \t: ");

int col = sc.nextInt();

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

boolean yes = true;

int i, j;

System.out.print("Enter elements of the matrix\t: ");

if (row == col) {

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

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

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

}

}

System.out.println("\nMatrix A :");

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

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

System.out.print(a[i][j] + "\t");

}

System.out.println("\n");

}

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

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

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

yes = false;

}

}

}

if (yes) {

System.out.println("The Matrix is Symmetric\n");

} else

System.out.println("The Matrix is NOT Symmetric\n");

} else

System.out.println("The Rows and Columns are NOT equal.");

}

}

**Output Screenshot**

