

```

1 //to find the transpose of a matrix
2 import java.util.Scanner;
3
4 class matrix{
5     public static void main(String[] args){
6         int m,n,i,j;
7         Scanner sc = new Scanner(System.in);
8         System.out.print("How many rows? ");
9         m = sc.nextInt();
10        System.out.print("How many columns? ");
11        n = sc.nextInt();
12        int matrix[][] = new int[m][n];
13        int transpose[][] = new int[m][n];
14        for(i=0;i<m;i++){
15            for(j=0;j<n;j++){
16                System.out.print("Enter number " +(i+1)+" "+(j+1)+": ");
17                matrix[i][j] = sc.nextInt();
18            }
19        }
20        for(i=0;i<m;i++){
21            for(j=0;j<n;j++){
22                transpose[i][j] = matrix[j][i];
23            }
24        }
25        for(i=0;i<m;i++){
26            for(j=0;j<n;j++){
27                System.out.print(transpose[i][j] + "\t");
28            }
29            System.out.println();
30        }
31    }
}

```

Output:

```

Process started (PID=14040) >>>
How many rows? 3
How many columns? 3
Enter number 1,1: 1
Enter number 1,2: 2
Enter number 1,3: 3
Enter number 2,1: 4
Enter number 2,2: 5
Enter number 2,3: 6
Enter number 3,1: 7
Enter number 3,2: 8
Enter number 3,3: 9
1      4      7
2      5      8
3      6      9
<<< Process finished (PID=14040). (Exit code 0)
===== READY =====

```