

```
import java.util.Scanner;
```

```
class Matrix
```

```
{
```

```
int m, n, i, j, a[][];
```

```
void getData()
```

```
{
```

```
Scanner s = new Scanner(System.in)
```

```
System.out.println("enter no. of rows");
```

```
m = s.nextInt();
```

```
System.out.println("enter no. of columns");
```

```
n = s.nextInt();
```

```
a = new int[m][n];
```

```
System.out.println("enter elements of array");
```

```
for(i=0; i<m; i++)
```

```
{ for(j=0; j<n; j++)
```

```
{ a[i][j] = s.nextInt();
```

```
}
```

```
}
```

```
}
```

```
void display()
```

```
{
```

```
System.out.println("array:");
```

```
for(i=0; i<m; i++)
```

```
{
```

```
for(j=0; j<n; j++)
```

```
{
```

```
System.out.print(a[i][j]);
```

```
} System.out.print(" ");
```

```
}
```

```
}
```

```

void transpose()
{
    t = new int[n][m];
    System.out.println("Transpose:");
    for (i=0; i<n; i++)
    {
        for (j=0; j<m; j++)
        {
            t[j][i] = a[i][j];
        }
    }
    for (i=0; i<n; i++)
    {
        for (j=0; j<m; j++)
        {
            System.out.println(t[i][j]);
        }
        System.out.println();
    }
}

public static void main(String[] args)
{
    Matrix m = new Matrix();
    m.getData();
    m.display();
    m.transpose();
}

```