Week-6 Extre programs import java util scanner; clair matrix public static void main (Storing ang 8 5) Scanner &c=new &canner(&ystem.in); inti, ma; System-out pointly ("Enter the number of shows and columns in the matrix"); m= LC-next Inter: n= sc. next Inti); int mat[][] = new int[m][n]; int trustife] = new int CnJEm]; (107 (i=0; i(m, i+1) 107 (j=0; j(n; j+1) System out println (" Enter the number in + (it 1) + " srow & " + (j+1)+" when "); Mat [i][]: he not Inte) tmat Gibil = met a Jiji Syxtem out paintly ("The transpose of the given matrix is: "); por lizo; icn; i+) 2 (120; Km; jt+) System-out-print (trat sis cj) + " "); 3 3 yetem-out-println();

```
import java.util.Scanner;
class matrix
 public static void main(String args[])
 {
  Scanner sc=new Scanner(System.in);
  int i,j,m,n;
  System.out.println("Enter the number of rows and coulmns in the matrix");
  m=sc.nextInt();
  n=sc.nextInt();
  int mat[][]=new int[m][n];
  int tmat[][]=new int[n][m];
  for(i=0;i<m;i++)
  {
   for(j=0;j<n;j++)
     System.out.println("Enter the number in "+(i+1)+" row and "+(j+1)+" column");
     mat[i][j]=sc.nextInt();
     tmat[j][i]=mat[i][j];
   }
  }
  System.out.println("The transpose of the given matrix is:");
  for(i=0;i<n;i++)
  {
   for(j=0;j< m;j++)
   {
     System.out.print(tmat[i][j]+" ");
   System.out.println();
```

```
C:\Users\Adithi\Desktop\java_prgs>java matrix
Enter the number of rows and coulmns in the matrix
Enter the number in 1 row and 1 column
Enter the number in 1 row and 2 column
Enter the number in 1 row and 3 column
Enter the number in 1 row and 4 column
Enter the number in 2 row and 1 column
Enter the number in 2 row and 2 column
Enter the number in 2 row and 3 column
Enter the number in 2 row and 4 column
Enter the number in 3 row and 1 column
Enter the number in 3 row and 2 column
Enter the number in 3 row and 3 column
Enter the number in 3 row and 4 column
The transpose of the given matrix is:
2 2 5
4 4 4
3 7 9
5 6 0
C:\Users\Adithi\Desktop\java_prgs>
```

}

}

}