WEEK-6 — Extra Programs

1.)
```
import java.util.*;
class Matrix {
  public static void main (String args[]) {
    int m,n,i,j;
    Scanner sc = new Scanner (System.in);
    System.out.println ("Enter the value of rows and
                                        columns: ");
    m= sc.nextInt();
    n= sc.nextInt();
    int matrix[][]= new int[m][n];
    for(i=0; i<m; i++) {
        for(j=0; j<n; j++) {
            System.out.println ("Enter the element: "+i+j);
            matrix[i][j]= sc.nextInt();
        }
    }
    System.out.println ("Inputted matrix: \n");
    for (i=0; i<m; i++) {
        for (j=0; j<n; j++) {
            System.out.print (matrix[i][j]+" \t");
        }
        System.out.println();
    }
    int transpose[][]= new int[n][m];
    for (i=0; i<m; i++) {
        for (j=0; j<n; j++) {
            transpose[j][i]= matrix[i][j];
        }
    }
```

```
System.out.println("Transpose matrix: \n");
for (i=0; i<m; i++) {
    for (j=0; j<n; j++) {
        System.out.println(transpose[i][j]+"\t");
    }
    System.out.println();
}
}
}
```

2)
```
import java.util.Scanner;
class Circledemo {
    double radius;
    double area;
    double perimeter
    double pi = 3.14;
    void getradius () {
        Scanner sc=new Scanner (System.in);
        System.out.println ("Enter the radius of the
                                circle: ");
        radius = sc.nextDouble ();
    }
    void Calarea () {
        area = pi * radius * radius ;
    }
    void Calperimeter () {
        perimeter = 2*pi* radius ;
    }
    void Display () {
        System.out.println("Radius of circle: "+radius);
        System.out.println ("Area of circle: "+ area);
        System.out.println ("Perimeter of circle: "
                                +perimeter);
    }
}
class CircledemoMain {
    public static void main (String args[]) {
        Circledemo D1= new Circledemo ();
        D1.get radius
```

```
        D1.getradius();
        D1.Calradius();
        D1.Calperimeter();
        D1.Display();
    }
}
```

3)
```
import java.util.Scanner;
class Actor {
    int Id;
    String name;
    int no_of_movies;
    int no_of_years_exp;
    float avg;
    void getdata(),{
      Scanner sc = new Scanner(System.in);
      System.out.println("Enter the Id: \nName:
                  \n No. of \nNumber of movies:
          \n Number of years (experience): ");
      Id = sc.nextInt();
      name = sc.next();
      no_of_movies = sc.nextInt();
      no_of_years_exp = sc.nextInt();
    }
    float calavg() {
      avg = (no_of_movies / no_of_years_exp);
      return avg;
    }
    void Display() {
      System.out.println("Id: "+Id+"\n Name: "
            +name+"\n Number of movies: "
          +no_of_movies+"\n Experience in
           years: "+no_of_years_exp);
    }
}
class ActorMain {
    public static void main(String args[]) {
      Actor a1 = new Actor();
```

```
        Actor a2=new Actor();
        a1.getdata();
        a2.getdata();
        a1.calavg();
        a2.calavg();
        if(a1.calavg()>a2.calavg()){
            a1.Display();
        }
        else {
            a2.Display();
        }
    }
}
```

4.)
```
import java.util.Arrays;
public class CmdArray {
  public static void main (String[] args) {
    Double arr[];
    int n=0;
    for(int i=0; i<args.length; i++) {
        n++;
    }
    arr = new Double[n];
    for(int i=0; i<args.length; i++) {
        arr[i] = Double.parseDouble(args[i]);
    }
    Arrays.sort(arr);
    System.out.println
    System.out.format("Double array after sort:");
    for(int i=0; i<arr.length; i++) {
        System.out.format("%.2f ", arr[i]);
    }
  }
}
```