

20/10/2020

LAB-4

Q1

* transpose of a matrix */

```
import java.util.Scanner;

public static void main (String ss[]) {
    int i, j;

    System.out.println ("Enter no. of rows &
                           columns");

    Scanner sc = new Scanner (System.in);
    int row = sc.nextInt();
    int column = sc.nextInt();
    int array [][ ] = new int [row][column];

    System.out.println ("ENTER MATRIX");
    for (i=0; i < row; i++) {
        for (j=0; j < column; j++) {
            array[i][j] = sc.nextInt();
            System.out.println ("");
        }
    }

    System.out.println ("MATRIX ENTERED IS :");
    for (i=0; i < row; i++) {
        for (j=0; j < column; j++) {
            System.out.println (array[i][j] + " - " )
        }
        System.out.println (" - ");
    }

    System.out.println ("MATRIX after transpose")
    for (i=0; i < column; i++) {
```

```

        for (j=0; j<row; j++) {
            System.out.println(" array [i][j] = " + " ");
        }
        System.out.println (" ");
    }
}

```

②

/* CircleDemo */

```

import java.util.Scanner;

public class CircleDemo {
    Scanner sc = new Scanner(System.in);
    double r;
    static double area, perimeter;

    void accept() {
        System.out.println("Enter radius of circle");
        r = sc.nextDouble();
    }

    double ac() {
        area = 3.14 * r * r;
        return area;
    }

    double p() {
        perimeter = (2 * 3.14 * r);
        return perimeter;
    }

    public static void main (String[] ss) {

```

//_

```

Scanner sc = new Scanner(System.in);
circledemo c1 = new circledemo();
    c1.accept();
    c1.a();
    c1.p();

System.out.println("CALCULATED DETAILS");
System.out.println("AREA" + circledemo.area);
System.out.println("PERIMETER" + circledemo.perimeter);
}
}

```

③

/* Actor */

```

import java.util.Scanner;

class actor {
    int no.of movies;
    int years of exp;
    String name;
    int id;
    double avg;
    static String highest java;
    Scanner sc = new Scanner(System.in);

    void average() {
        avg = (no.of movies / no.of years);
    }

    void accept() {
        System.out.println("Name");
        name = sc.next();
        System.out.print("20:");
        id = sc.nextInt();
    }
}

```



```

System.out.println ("No. of movies");
no.of movies = sc.nextInt();
System.out.println ("Years of exp");
years of exp = sc.nextInt();
}

```

```

void display () {
    System.out.println ("name + " ... " + id"
                        "+ avg"      "+ no of movies" " +
                        years of exp");
}
}

```

```

class actormain {
    public static void main (String s[]) {
        int n;
        Scanner sc = new Scanner (System.in);
        System.out. print ("No. of actors");
        n = sc.nextInt();
        actor a1[] = new actor [n];

        for (int i=0; i<n; i++) {
            System.out. println ("Enter Actor : +(i+1)");
            a1[i] = new actor ();
            a1[i].accept();
            a1[i].average();
        }
    }
}

```

```

System.out. println (" s.no | name | id | avg
                    | no. of movies | years");

```

```

for (int i=0; i<n; i++) {
    System.out.println (" ... " + (i+1) + " } ... " );
    a1[i].display();
}

```

```

double l = 0;
int index = 0;
for (int i=0; i<a1.length; i++) {
    if (a1[i].avg > l) {
        l = a1[i].avg;
        actor.highestavg = a1[i].name;
        index = i+1;
    }
}

```

```

System.out.println ("! Actor name : " + actor.
                    highestavg);
}
}

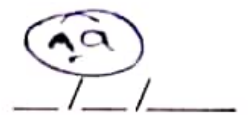
```

④. /* double array sorting */ through emdline.

```

class emddouble {
    public static void main (String ss[]) {
        double[] ssa = new double [ss.length];
        for (int i=0; i<ss.length; i++) {
            ssa[i] = Double.parseDouble(ss[i]);
        }
        for (int i=0; i<ss.length; i++) {
            for (int j=1; j<ssa.length; j++) {
                if (ssa[i] > ssa[j]) {
                    double temp = ssa[i];

```



```
        ssa[i] = ssa[j];  
        ssa[j] = temp;  
    }  
}  
  
for (int i = 0; i < ss.length; i++) {  
    System.out.println(ssa[i] + " - ");  
}  
  
}
```