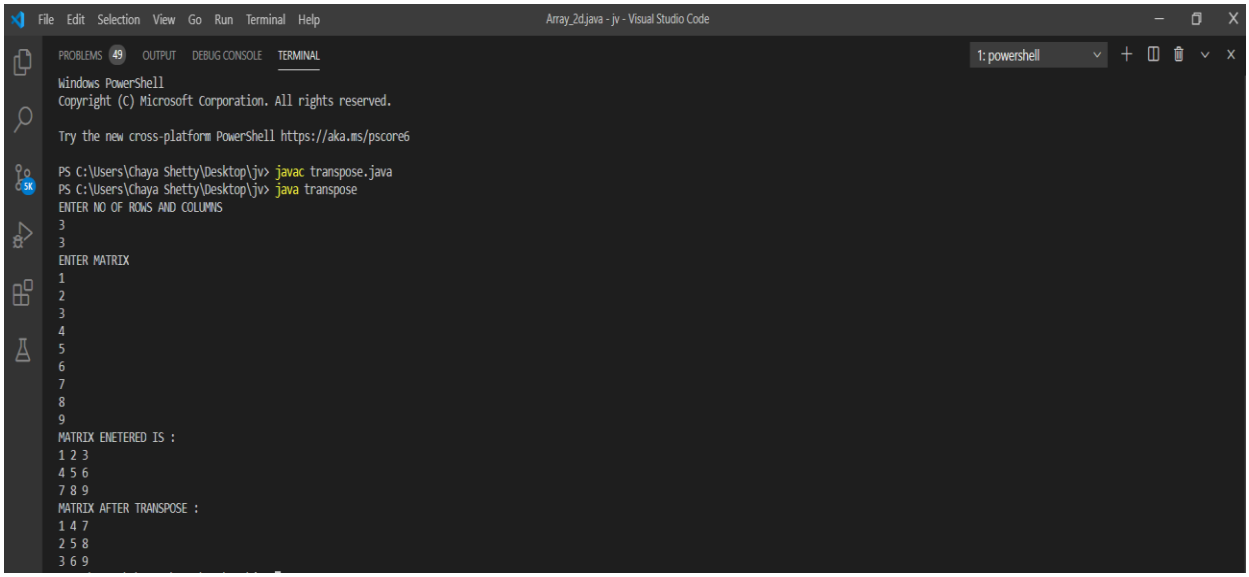
Week-6 Practice Programs

1. Transpose:

```java
import java.util.Scanner;
public class transpose{
    public static void main(String ss[]){
        int i,j;
        System.out.println("ENTER NO OF ROWS AND 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.print("");

            }
        }


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



    }
```

```
}
```

Output :



2. Circle :

```java
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 a(){
          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);

    }
}
```

Output :

```
PS C:\Users\Chaya Shetty\Desktop\jv> javac circledemo.java
PS C:\Users\Chaya Shetty\Desktop\jv> java circledemo
ENTER RADIUS OF CIRCLE
5
CALCULATED DETAILS
AREA :78.5
PERIMETER :31.400000000000002
PS C:\Users\Chaya Shetty\Desktop\jv>
```

3. Actor :

```
import java.util.Scanner;
class actor{
    int noofmovies;
    int yearsofexp;
    String name;
    int id;
    double avg;
    static String highestavg;
    Scanner sc = new Scanner(System.in);

    void average(){
        avg = (noofmovies/yearsofexp);
    }

    void accept(){
        System.out.print("NAME :");
        name = sc.next();
        System.out.print("ID :");
        id = sc.nextInt();
        System.out.print("NO OF MOVIES :");
        noofmovies = sc.nextInt();
        System.out.print("YEARS OF EXPERIENCE :");
```

```
        yearsofexp = sc.nextInt();
    }


        void display(){
            System.out.println(name+"        *"+id+"       "+avg+"          "+noofmovies+
"           "+yearsofexp);
        }

}


class actormain{
    public static void main(String ss[]){
        int n;
        Scanner sc = new Scanner(System.in);
        System.out.println("ENTER NO OF ACTORS DETAILS YOU WANT TO ENTER");
        n = sc.nextInt();
        actor a1[] = new actor[n];

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




        System.out.println("\n**********************");
        System.out.println(" S.NO  |   NAME   |   ID    |   AVERAGE  |   NO.MOVIES  |  YE
ARS ");
        System.out.println("_____________________");
        for(int i=0;i<n;i++){
            System.out.print("     "+(i+1)+")   ");
            a1[i].display();
            System.out.println("_____________________");
        }


        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("\n*************\n");
        System.out.println("HIGHEST AVERAGE AMOUNG ALL ACTOR IS:");
        System.out.println("|"+index+"TH MEMBER IN TABLE "+"\n|AND AVERAGE IS :"+l);
        System.out.println("|ACTOR NAME :"+actor.highestavg);
        System.out.println("\n*************");



    }
}
```

Output:

```
PROBLEMS 49  OUTPUT  DEBUG CONSOLE  TERMINAL                                  1: powershell

Windows PowerShell
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Try the new cross-platform PowerShell https://aka.ms/pscore6

PS C:\Users\Chaya Shetty\Desktop\jv> javac actormain.java
PS C:\Users\Chaya Shetty\Desktop\jv> java actormain
ENTER NO OF ACTORS DETAILS YOU WANT TO ENTER
2
---------------------------------
ENTER ACTOR :1
NAME :Roshan
ID :12
NO OF MOVIES :34
YEARS OF EXPERIENCE :5
---------------------------------
ENTER ACTOR :2
NAME :Savant
ID :15
NO OF MOVIES :32
YEARS OF EXPERIENCE :8

**********
 S.NO  |  NAME  |  ID  |  AVERAGE  |  NO.MOVIES  |  YEARS
_____________
    1)  Roshan     *12     6.0        34         5
_____________
    2)  Savant     *15     4.0        32         8
_____________

*************

HIGHEST AVERAGE AMOUNG ALL ACTOR IS:
|1TH MEMBER IN TABLE
|AND AVERAGE IS :6.0
|ACTOR NAME :Roshan

*************
```

4.Command Line :

```
public class Cmd_2 {
```

```
 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=i;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] + " ");

        }


    }
}
```

Output :

```
E:\jdk8\bin\ooj lab>javac CmdD.java

E:\jdk8\bin\ooj lab>java CmdD 12 34.5 1.3 5.7
1.3
5.7
12.0
34.5

E:\jdk8\bin\ooj lab>java CmdD 12 34.5 1.3 5.7 5.6 1.31 1.27 34.4
1.27
1.3
1.31
5.6
5.7
12.0
34.4
34.5
```