

Week 6.

## 1. Transpose of a matrix

```
import java.util.*;  
class Transpose  
{  
    public static void main(String args[])  
{
```

```
        int row = 2, column = 3;
```

```
        int [][] matrix = {{2, 3, 4}, {5, 6, 7}}
```

~~display function~~

~~System.out.println(matrix);~~

```
        int [][] transpose = new int [column][row];
```

```
        for (int i=0; i<row; i++)  
        {
```

```
            for (int j=0; j<column; j++)  
            {
```

```
                transpose[i][j] = matrix[i][j];
```

```
}
```

```
}
```

~~System.out.println(transpose);~~

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

```
        for (int i=0; i<2; i++)  
        {
```

```
            for (int j=0; j<3; j++)  
            {
```

```
}
```

~~System.out.print(transpose[i][j] + " ");~~

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

```
}
```

Page

```
System.out.println("Transposing matrix: " + n4);
for (int i = 0; i < 3; i++) {
    for (int j = 0; j < 3; j++) {
        S.O.P(transpose[i][j] + " ");
    }
    S.O.Pln();
}
}
```

2. import java.util.\*;

class CircleDemo {

}

float radius, area, pi = 3.14;

float pi = 3.14;

CircleDemo

{

radius = 0;

}

void ~~accept~~ accept()

{

System.out.println("Enter the ~~radius~~ radius : ");

Scanner xx = new Scanner(System.in);

radius = ~~xx~~ xx.nextFloat();

void Area()

{

area = pi \* radius \* radius }

}

void perimeter()

{

    perimeter = 2 \* pi \* radius;

void display()

{

    System.out.println("The radius of the circle is "+radius);

    System.out.println("Area of the circle is "+area);

    System.out.println("Perimeter of the circle is "+perimeter);

{

g.

class CircleDemo

{

    public static void main (String ss[])

{

        CircleDemo cd = new CircleDemo();

        cd.accept();

        cd.Area();

        cd.perimeter();

        cd.Display();

{

g.

8. import java.util.\*;

class Actor

{

    int cd;

    String name;

    int no\_of\_movies, no\_of\_years\_exp;

~~void~~ Actor()

{

id = 000; avg  
name = " ";  
no. of -movies = 0;  
no. of -years-exp = 0;  
}

void accept()  
{

8.0.println("Enter the details of the Actor");  
Scanner xx = new Scanner(System.in);  
8.0.println("Enter the id: ");  
id = xx.nextInt();  
8.0.println("Enter the name: ");  
name = xx.next();  
8.0.println("Enter no. of movies & years of experience");  
no. of -movies = xx.nextInt();  
no. of -years-exp = xx.nextInt();

}

int ~~accept~~ calculate()

{

average = no. of movies / no. of -years-exp;  
returns (average);

}

void display() {

8.0.println(average);

}

class Actor main

{

public static void main (String ss[])

{

Actor a1 = new Actor();

5.

```
Actor a2 = new Actor();
8.0.println ("Details of Actor 1");
a1.accept();
8.0.println ("Details of Actor 2");
a2.accept();
if ((a1.calculate()) > (a2.calculate())));
{
    8.0.println ("Actor 1 has highest average")
    a1.Display();
}
else
{
    8.0.println ("Actor 2");
    a2.Display();
}
}
```

5.

```
import java.util.*;
class Count {
    public static void main (String ss[])
    {
        Scanner xx = new Scanner (System.in);
        String str = xx.next();
        int rcount=0, ccount=0, sccount=0;
        str = str.toLowerCase();
        for (int i=0; i<str.length(); i++)
        {
            char ch = str.charAt(i);
            if (ch == 'a' || ch == 'e' || ch == 'i' || ch == 'o'
                || ch == 'u'),
```

```

            rcount++;
        }
        ccount++;
        sccount++;
    }
}
```

else

if ((ch) == 'a' && ch <='z')  
    {

        cconent++  
    }

    else if (ch == " ")  
    {

        scount++  
    }

    8.0·Pln("No. of vowels:" + vcount);  
    8.0·Pln("No. of consonants:" + cconent);  
    8.0·Pln("No. of spaces:" + scount);

3.