LAPORAN TUGAS PRAKTIKUM 7

Resume i*ni Disusun Untuk Memenuhi Tugas Mata Kuliah PBO-P*

Disusun oleh:

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PROGRAM STUDI D3 TEKNIK INFORMATIKA JURUSAN TEKNIK KOMPUTER DAN INFORMATIKA POLITEKNIK NEGERI BANDUNG 2021

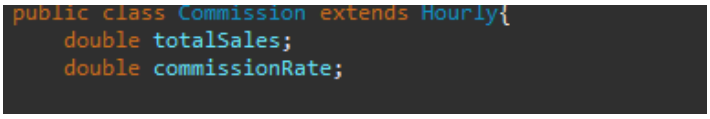
Link Github : https://github.com/Rhezapanjii/PBO-PRAK-7.git

Kasus 1

Commision.java

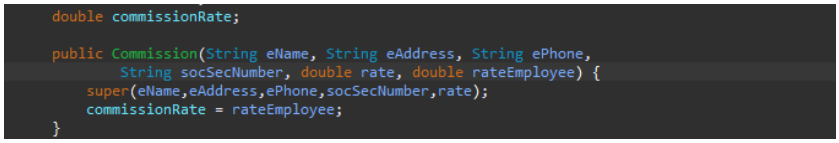
```java
public class Commission extends Hourly{
    double totalSales;
    double commissionRate;

    public Commission(String eName, String eAddress, String ePhone,
            String socSecNumber, double rate, double rateEmployee) {
        super(eName,eAddress,ePhone,socSecNumber,rate);
        commissionRate = rateEmployee;
    }

    public void addSales(double TotalSales) {
        totalSales += TotalSales;
    }

    public double pay() {
        double payment = commissionRate + totalSales + super.pay();
        totalSales = 0;
        return payment;
    }

    public String toString() {
        String result = super.toString();
        result += "\nCurrent Total Sales: " + totalSales;

        return result;
    }

}
```

Saya menambahkan bahwa commission harus extends dengan hourly.java lalu ditambahkan 2 insance variable



```java
public class Commission extends Hourly{
    double totalSales;
    double commissionRate;
```

Lalu menambahkan 6 construcyor



```java
    double commissionRate;

    public Commission(String eName, String eAddress, String ePhone,
            String socSecNumber, double rate, double rateEmployee) {
        super(eName,eAddress,ePhone,socSecNumber,rate);
        commissionRate = rateEmployee;
    }
```

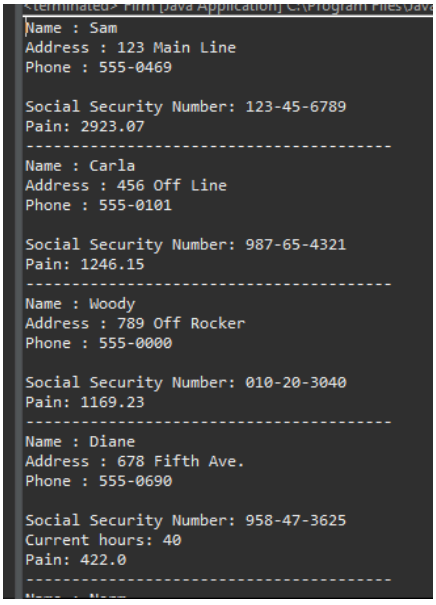
Dan menambahkan variable penghitung total dari komisi

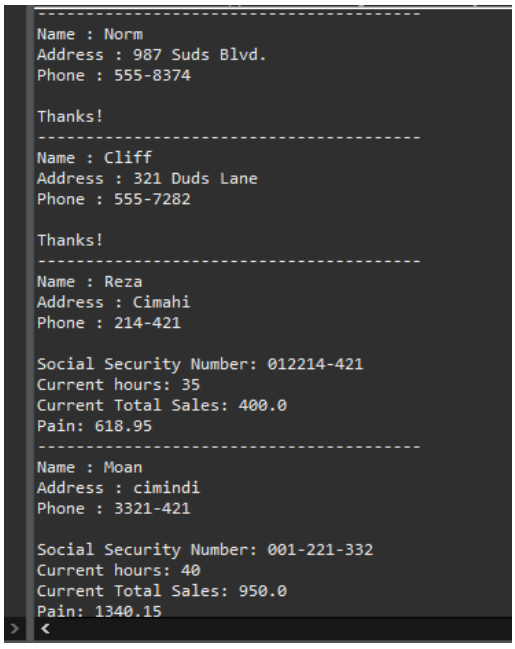
```
    public void addSales(double TotalSales) {
        totalSales += TotalSales;
    }

    public double pay() {
        double payment = commissionRate + totalSales + super.pay();
        totalSales = 0;
        return payment;
    }

    public String toString() {
        String result = super.toString();
        result += "\nCurrent Total Sales: " + totalSales;

        return result;
    }
```

Lalu dihubungkan dengan dengan class staff juga manambahkan deklarasi dari arraynya dan menambahkan 2 objek commission

```
staffList[6] = new Commission("Reza", "Cimahi",
        "214-421", "012214-421", 6.25, 0.2);

staffList[7] = new Commission("Moan", "cimindi",
        "3321-421", "001-221-332", 9.75, 0.15);
```

Hasil run Program :





Kasus 2

Pada kasus ini saya membentuk class dengan penggunaan inherit untuk membentuk kelasnya, diiantaranya seperti class Cylinder.java, Paint.java, PaintThings.java, Rectangle.java Shape dan Sphere.java

1 Membuat Abstract Class shape dengan ketentuan

```java
package kasus2;

public abstract class Shape {
    private String shapeName;

    public Shape(String shapename) {
        this.shapeName = shapename;
    }

    public abstract double area();
    public String toString() {
        String Result = "Shape Name " + this.shapeName;
        return Result;
    }

}
```

2. Membuat file sphare.java mengekstend dari induknya shape dengan beberapa ketentuan Mengoverride method area dengan perhitungan 4*PI*radius^2

• Membuat file rectangle.java mengekstend dari induknya shape dengan beberapa ketentuan Mengoverride method area dengan perhitungan Panjang*

• Membuat file Cylinder.java mengekstend dari induknya shape dengan beberapa ketentuan Mengoverride method area dengan perhitungan 4*PI*radius^2*tinggi

Cylinder.java

```java
package kasus2;

public class Cylinder extends Shape{
    private double radius;
    private double height;

    public Cylinder(double r, double h) {
        super("Cylinder");
        this.radius = r;
        this.height = h;
    }

    @Override
    public double area() {
        return Math.PI*radius*radius*height;
    }
    public String toString() {
        return super.toString() + " of radius " + radius + " and of height " + height;
    }

}
```

Shape.java

```java
package kasus2;

public abstract class Shape {
    private String shapeName;

    public Shape(String shapename) {
        this.shapeName = shapename;
    }

    public abstract double area();
    public String toString() {
        String Result = "Shape Name " + this.shapeName;
        return Result;
    }

}
```

Rectagle.java

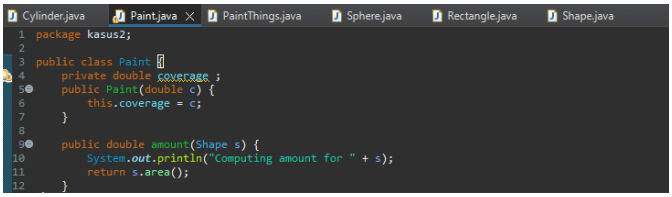
```java
package kasus2;

public class Rectangle extends Shape{
    private double length;
    private double width;

    public Rectangle(double l, double w) {
        super("Rectangle");
        this.length = l;
        this.width = w;
    }

    @Override
    public double area() {
        return this.width*this.length;
    }
    public String toString() {
        return super.toString() + " of length " + this.length + " and of width " + this.width;
    }
}
```

Sphere.java

```java
package kasus2;

public class Sphere extends Shape{
    private double radius;

    public Sphere(double r) {
        super("Sphere");
        this.radius = r;
    }

    @Override
    public double area() {
        return 4*Math.PI*radius*radius;
    }
    public String toString() {
        return super.toString() + " of radius " + radius;
    }

}
```

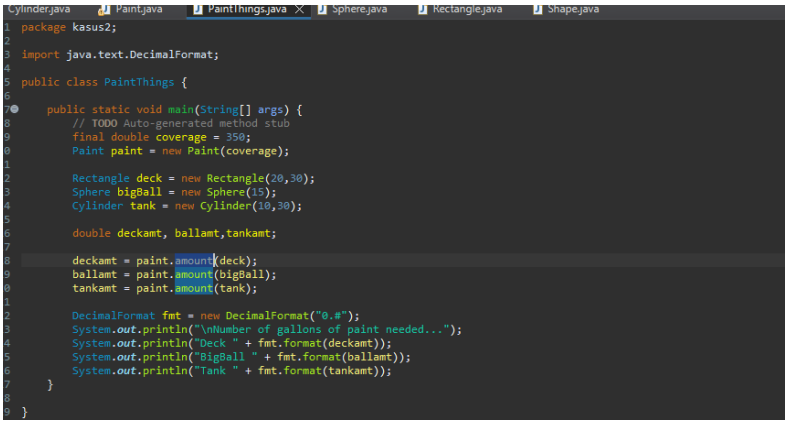
3. membbuat Paint,java

Paint.java



```java
package kasus2;

public class Paint {
    private double coverage ;
    public Paint(double c) {
        this.coverage = c;
    }

    public double amount(Shape s) {
        System.out.println("Computing amount for " + s);
        return s.area();
    }
```

4. PaintThings.java PaintThings



```java
package kasus2;

import java.text.DecimalFormat;

public class PaintThings {

    public static void main(String[] args) {
        // TODO Auto-generated method stub
        final double coverage = 350;
        Paint paint = new Paint(coverage);

        Rectangle deck = new Rectangle(20,30);
        Sphere bigBall = new Sphere(15);
        Cylinder tank = new Cylinder(10,30);

        double deckamt, ballamt,tankamt;

        deckamt = paint.amount(deck);
        ballamt = paint.amount(bigBall);
        tankamt = paint.amount(tank);

        DecimalFormat fmt = new DecimalFormat("0.#");
        System.out.println("\nNumber of gallons of paint needed...");
        System.out.println("Deck " + fmt.format(deckamt));
        System.out.println("BigBall " + fmt.format(ballamt));
        System.out.println("Tank " + fmt.format(tankamt));
    }

}
```

Output

```
<terminated> PaintThings [Java Application] C:\Program Files\Java\jdk-18.0.2.1\bin\javaw.exe (Nov 4, 2022, 7:1
Computing amount for Shape Name Rectangle of length 20.0 and of width 30.0
Computing amount for Shape Name Sphere of radius 15.0
Computing amount for Shape Name Cylinder of radius 10.0 and of height 30.0

Number of gallons of paint needed...
Deck 600
BigBall 2827.4
Tank 9424.8
```

Kasus 3

Membuat Numbers.java dimana di dalam class tersebut terdapat algoritma selection sort untuk mensort array dan menampilkannya

Number.java | Salesperson.java | Sorting.java | Strings.java | weeklySales.java

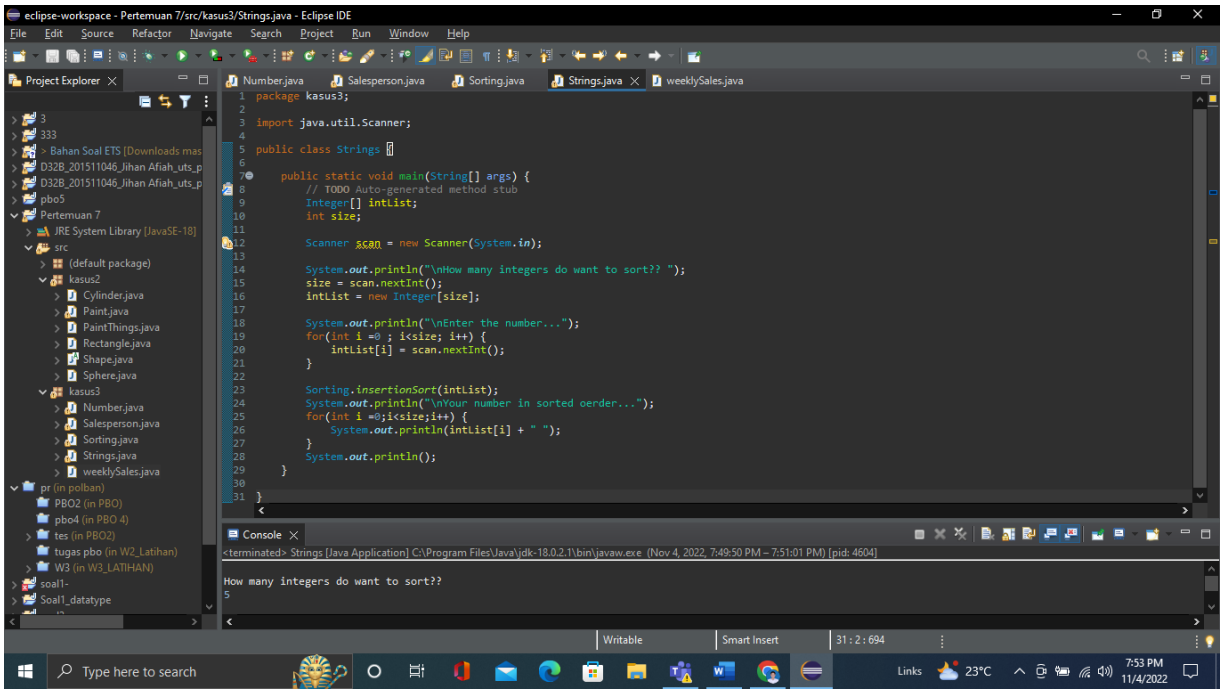
```java
package kasus3;
import java.util.Scanner;

public class Number {
    public static void main(String[] args) {
        Integer[] intList;
        int size;

        Scanner scan = new Scanner(System.in);

        System.out.println("\nHow many integers do want to sort?? ");
        size = scan.nextInt();
        intList = new Integer[size];

        System.out.println("\nEnter the number...");
        for(int i =0 ; i<size; i++) {
            intList[i] = scan.nextInt();
        }

        Sorting.selectionSort(intList);
        System.out.println("\nYour number in sorted oerder...");
        for(int i =0;i<size;i++) {
            System.out.println(intList[i] + " ");
        }
        System.out.println();
    }
}
```

Output :

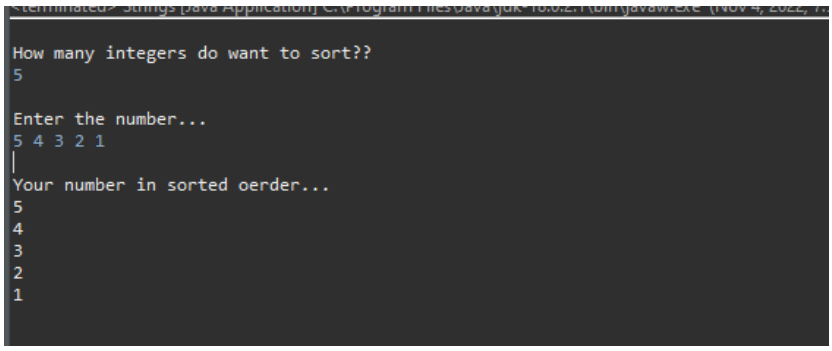
```
How many integers do want to sort??
5

Enter the number...
1 2 3 4 5

Your number in sorted oerder...
5
4
3
2
1
```

Case 2

Membuat String.Java sama seperti number.java membuat algoritma sort tetapi dengan selection sort dan menampilkannya secara ascending



Output::



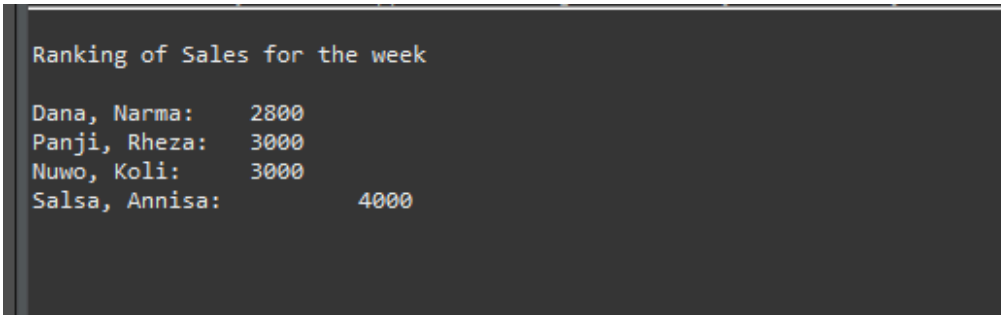
Case 3

Membuat salesperson,java

```
public class weeklySales {
    public static void main(String[] args)
    {
        Salesperson [] salesStaff = new Salesperson [4];
        salesStaff[0] = new Salesperson ("Rheza", "Panji", 3000);
        salesStaff[1] = new Salesperson ("Annisa", "Salsa", 4000);
        salesStaff[2] = new Salesperson ("Koli", "Nuwo", 3000);
        salesStaff[3] = new Salesperson ("Narma", "Dana", 2800);
        Sorting.selectionSort(salesStaff);
        System.out.println("\nRanking of Sales for the week\n");
        for(Salesperson s : salesStaff)
        System.out.println(s);
```

```
Console
<terminated> Strings [Java Application] C:\Program Files\Java\jdk-18.0.2.1\bin\javaw.exe  (Nov 4, 2022, 7:53:37 PM – 7:53:49 PM) [pid: 12220]

How many integers do want to sort??
4

Enter the number...
4 3 2 1

Your number in sorted oerder...
4
3
2
1
```

Output :



```
Ranking of Sales for the week

Dana, Narma:    2800
Panji, Rheza:   3000
Nuwo, Koli:     3000
Salsa, Annisa:          4000
```