LAPORAN PRAKTIKUM PBO
Polymorphism

Disusun oleh :

Muhamad Rafli Nur Ikhsan

201511048

D-3 Teknik Informatika 2B

Jurusan Teknik Komputer dan Informatika

Program studi D3 Teknik Informatika

Politeknik Negeri Bandung

1. 7.1
   - SS akhir program

```
"C:\Program Files\Java\jdk-11.0.12\bin\java.
Neigh


Process finished with exit code 0
```

```
"C:\Program Files\Java\jdk-11.0.12\b
Meow


Process finished with exit code 0
```

2. 7.2
   - SS akhir program

```
"C:\Program Files\Java\jdk-11.0.12"
a: 10
a and b: 10,20
double a:5.5
O/P : 30.25


Process finished with exit code 0
```

3. 7.3
- SS akhir program

```
Name: Sam                                     Name: Diane
Address: 123 Main Line                        Address: 678 Fifth Ave.
Phone: 555-0469                               Phone: 555-0690
Social Security Number: 123-45-6789           Social Security Number: 958-47-3625
Paid: 2923.07                                 Current hours: 40
----------------------------------            Paid: 422.0
Name: Carla                                   ------------------------------------
Address: 456 off Line                         Name: Norm
Phone: 555-0101                               Address: 987 Suds Blvd.
Social Security Number: 987-65-4321           Phone: 555-8374
Paid: 1246.15                                 Thanks!
----------------------------------            ------------------------------------
Name: Woody                                   Name: Cliff
Address: 789 Off Rocker                       Address: 321 Duds Lane
Phone: 555-0000                               Phone: 555-7282
Social Security Number: 010-20-3040           Thanks!
Paid: 1169.23                                 ------------------------------------
----------------------------------
```

```
Name: Dudedu
Address: 567 Newyork Street
Phone: 123-321
Social Security Number: 123-45-6788
Current hours: 35 , total sales is 400.0
Paid: 220.0
----------------------------------
Name: John
Address: 123 Swiss Street
Phone: 111-1234
Social Security Number: 987-54-4321
Current hours: 40 , total sales is 950.0
Paid: 391.4625
----------------------------------
```

- Constraint Commission Class
  - It extends the Hourly class.

  ```
  public class Commission extends Hourly
  ```

  - It has two instance variables (in addition to those inherited): one is the total sales the employee has made (type double) and the second is the commission rate for the employee (the commission rate will be type double and will represent the percent (in decimal form) commission the employee earns on sales (so .2 would mean the employee earns 20% commission on sales)).

  ```
  double total_sales;
  double commission_rate;
  ```

  - The constructor takes 6 parameters: the first 5 are the same as for Hourly (name, address, phone number, social security number, hourly pay rate) and the 6th is the commission rate for the employee. The constructor should call the

constructor of the parent class with the first 5 parameters then use the 6th to set the commission rate.

```java
public Commission(String eName, String eAddress, String ePhone,
                  String socSecNumber, double rate, double commission_rate){
    super(eName, eAddress, ePhone, socSecNumber, rate);
    this.commission_rate = commission_rate;
}
```

- One additional method is needed: public void addSales (double totalSales) that adds the parameter to the instance variable representing total sales.

```java
public void addSales(double total_sales){
    this.total_sales = total_sales;
}
```

- The pay method must call the pay method of the parent class to compute the pay for hours worked then add to that the pay from commission on sales. (See the pay method in the Executive class.) The total sales should be set back to 0 (note: you don't need to set the hoursWorked back to 0—why not?).

```java
public double pay(){
    return super.pay() + commission_rate;
}
```

- The toString method needs to call the toString method of the parent class then add the total sales to that.

```java
public String toString(){
    return super.toString() + " , total sales is " + total_sales ;
}
```

- Uodate Staff class
    - Increase the size of the array to 8.
    ```java
    staffList = new StaffMember[8];
    ```
    - Add two commissioned employees to the staffList—make up your own names, addresses, phone numbers and social security numbers. Have one of the employees earn $6.25 per hour and 20% commission and the other one earn $9.75 per hour and 15% commission.

```java
staffList[6] = new Commission( eName: "Dudedu", eAddress: "567 Newyork Street", ePhone: "123-321",
        socSecNumber: "123-45-6788", rate: 6.25, commission_rate: 6.25*0.2);
staffList[7] = new Commission( eName: "John", eAddress: "123 Swiss Street", ePhone: "111-1234",
        socSecNumber: "987-54-4321", rate: 9.75, commission_rate: 9.75*0.15);
```

- For the first additional employee you added, put the hours worked at 35 and the total sales $400; for the second, put the hours at 40 and the sales at $950.

```
((Commission)staffList[6]).addHours ( moreHours: 35);
((Commission)staffList[6]).addSales( total_sales: 400);
((Commission)staffList[7]).addHours ( moreHours: 40);
((Commission)staffList[7]).addSales( total_sales: 950);
```