

Laporan Tugas Praktikum PBO

Pertemuan 8 Polymorphism



Disusun Oleh :

Nova Kensa Aura Dewi Oematan (201511054)

Kelas 2 – B

Jurusan Teknik Komputer dan Informatika

Program Studi D3 Teknik Informatika

Politeknik Negeri Bandung

2021

Tugas 1

Dynamic Polymorphism

1. Hasil program

```
timal.java Horse.java
package soall;

public class Horse extends Animal{
    public void sound() {
        System.out.println("Neigh");
    }

    public static void main(String args[]) {
        Animal obj = new Horse();
        obj.sound();
    }
}
```

```
timal.java Horse.java Cat.java
package soall;

public class Cat extends Animal{
    public void sound() {
        System.out.println("Meow");
    }

    public static void main(String[] args) {
        // TODO Auto-generated method stub
        Animal obj = new Cat();
        obj.sound();
    }
}
```

Output

```
<terminated> Horse [Java Application] C:\Program Files\Java\jdk-11.0.12\bin\javaw.exe
Neigh
```

```
Cat [Java Application] C:\Program Files\Java\jdk-11.0.12\bin\javaw.exe (11 Nov 2021 21:56:50)
Meow
```

2. Permasalahan : -
3. Solusi : -
4. Teman yang membantu : -

Tugas 2

Static Polymorphism

1. Hasil program

```
nimal.java Horse.java Cat.java Overload.java MethodOverloading.java
package soal2;

public class MethodOverloading {

    public static void main(String[] args) {
        // TODO Auto-generated method stub
        Overload obj = new Overload();
        double result;
        obj.demo(10);
        obj.demo(10,20);
        result = obj.demo(5.5);
        System.out.println("O/P : " + result);
    }
}
```

Output

```
<terminated> MethodOverloading [Java Application] C:\Program Files\Java\jdk-11.0.12\bin\
a :10
a and b : 10,20
double a: 5.5
O/P :30.25
```

2. Permasalahan : -
3. Solusi : -
4. Teman yang membantu : -

Tugas 3

Another Type of Employee

1. Hasil program Program yang ditambahkan

```
package soal3;

public class Commission extends Hourly
{
    double totalSale;
    double commissionRate;

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

    public void addSales(double totalSales)
    {
        totalSale = commissionRate * totalSales;
    }

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

    public String toString()
    {
        String result = super.toString();

        result += "\ntotal sales: " + totalSale;

        return result;
    }
}

package soal3;

public class Staff {
    StaffMember[] staffList;

    public Staff() {
        staffList = new StaffMember[8];

        staffList[0] = new Executive ("Sam", "123 Main Line", "555-0469", "123-45-6789", 2423.07);
        staffList[1] = new Employee ("Carla", "456 off Line", "555-0101", "987-65-4321", 1246.15);
        staffList[2] = new Employee ("Woody", "789 off Rocker", "555-0000", "010-20-3040", 1169.23);
        staffList[3] = new Hourly ("Diane", "678 Fifth Ave", "555-0690", "958-47-3625", 10.55);
        staffList[4] = new Volunteer ("Norm", "987 Sude Blvd", "555-8374");
        staffList[5] = new Volunteer ("Cliff", "321 Duds Lane", "555-7282");
        staffList[6] = new Commission ("Leon", "452 Streat lemons", "555-4231", "456-20-7654", 6.25, 0.2);
        staffList[7] = new Commission ("rere", "324 Local Street", "555-9087", "786-51-0122", 9.75, 0.15);

        ((Commission)staffList[6]).addHours(35);
        ((Commission)staffList[6]).addSales(400);

        ((Commission)staffList[7]).addHours(40);
        ((Commission)staffList[7]).addSales(950);

        ((Executive)staffList[0]).awardBonus (500.00);

        ((Hourly)staffList[3]).addHours (40);
    }
}
```

Output

```
Name: Sam
Address : 123 Main Line
Phone : 555-0469
Social Security Number: 123-45-6789
paid:2923.07
-----
Name: Carla
Address : 456 off Line
Phone : 555-0101
Social Security Number: 987-65-4321
paid:1246.15
-----
Name: Woody
Address : 789 off Rocker
Phone : 555-0000
Social Security Number: 010-20-3040
paid:1169.23
-----
Name: Diane
Address : 678 Fifth Ave
Phone : 555-0690
Social Security Number: 958-47-3625
Current hours: 40
paid:422.0
-----
Name: Norm
Address : 987 Sude Blvd
Phone : 555-8374
Thanks!
-----
Name: Cliff
Address : 321 Duds Lane
Phone : 555-7282
Thanks!
-----
Name: Leon
Address : 452 Streat lemons
Phone : 555-4231
Social Security Number: 456-20-7654
Current hours: 35
total sales: 80.0
paid:298.75
-----
Name: rere
Address : 324 Local Street
Phone : 555-9087
Social Security Number: 786-51-0122
Current hours: 40
total sales: 142.5
paid:532.5
-----
```

2. Permasalahan : -
3. Solusi : -
4. Teman yang membantu : -