LAPORAN PRAKTIKUM

PBO

TUGAS 6

Disusun oleh :

Bintang Pancahaya Prasetyo

244107020115

TI – 2G

Jurusan Teknologi Informasi

Prodi D-IV Teknik Informatika

Politeknik Negeri Malang

INHERITANCE 1

Kode Program

- Pegawai

```
package Inheritance_1;

public class Pegawai {
    private String nip;
    private String nama;
    private String alamat;

    public Pegawai(String nip, String nama, String alamat) {
        this.nip = nip;
        this.nama = nama;
        this.alamat = alamat;
    }

    public String getNama() {
        return this.nama;
    }

    public int getGaji() {
        return 1500000;
    }
}
```

- Dosen

```
package Inheritance_1;

public class Dosen extends Pegawai {
    private int jumlahSKS;
    private int tarifSKS = 120000;

    public Dosen(String nip, String nama, String alamat) {
        super(nip, nama, alamat);
    }

    public void setSKS(int sks) {
        this.jumlahSKS = sks;
    }

    public int getGaji() {
        return this.jumlahSKS * tarifSKS;
    }
}
```

- Daftar Gaji

```
package Inheritance_1;

import java.util.ArrayList;

public class DaftarGaji {
    private ArrayList<Pegawai> listPegawai;

    public DaftarGaji() {
        listPegawai = new ArrayList<>();
    }

    public void addPegawai(Pegawai p) {
        listPegawai.add(p);
    }

    public void printSemuaGaji() {
        System.out.println("=== DAFTAR GAJI PEGAWAI ===");
        for (Pegawai p : listPegawai) {
            System.out.println("Nama   : " + p.getNama());
            System.out.println("Gaji   : Rp " + p.getGaji());
            System.out.println("----------------------------");
        }
    }
}
```

- Main

```
package Inheritance_1;

public class Main {
    public static void main(String[] args) {
        DaftarGaji daftar = new DaftarGaji();

        Pegawai staf1 = new Pegawai("P001", "Andi", "Jl. Merdeka No. 10");

        Dosen dosen1 = new Dosen("D001", "Budi Santoso", "Jl. Pendidikan No.
5");
        dosen1.setSKS(18);

        Dosen dosen2 = new Dosen("D002", "Citra Dewi", "Jl. Cendekia No. 12");
        dosen2.setSKS(20);

        daftar.addPegawai(staf1);
        daftar.addPegawai(dosen1);
        daftar.addPegawai(dosen2);

        daftar.printSemuaGaji();
    }
}
```

Hasil Kode Program

```
=== DAFTAR GAJI PEGAWAI ===
Nama   : Andi
Gaji   : Rp 1500000
--------------------------
Nama   : Budi Santoso
Gaji   : Rp 2160000
--------------------------
Nama   : Citra Dewi
Gaji   : Rp 2400000
--------------------------
PS C:\Users\Bintang\Kuliah\Semester 3\PBO\Pertemuan 6>
```

INHERITANCE 2

Kode Program

- Komputer

```java
package Inheritance_2;

public class Komputer {
    public String merk;
    public int kecProsesor;
    public int sizeMemory;
    public String jnsProsesor;

    public Komputer() {
    }

    public Komputer(String merk, int kecProsesor, int sizeMemory, String
jnsProsesor) {
        this.merk = merk;
        this.kecProsesor = kecProsesor;
        this.sizeMemory = sizeMemory;
        this.jnsProsesor = jnsProsesor;
    }

    public void tampilData() {
        System.out.println("Merk                : " + merk);
        System.out.println("Kecepatan Prosesor  : " + kecProsesor + " GHz");
        System.out.println("Ukuran Memori       : " + sizeMemory + " GB");
        System.out.println("Jenis Prosesor      : " + jnsProsesor);
    }
}
```

- Laptop

```java
package Inheritance_2;

public class Laptop extends Komputer {
    public String jnsBatrei;
```

```
    public Laptop() {
    }

    public Laptop(String merk, int kecProsesor, int sizeMemory, String
jnsProsesor, String jnsBatrei) {
        super(merk, kecProsesor, sizeMemory, jnsProsesor);
    }

    public void tampilLaptop() {
        super.tampilData();
        System.out.println("Jenis Baterai       : " + jnsBatrei);
    }
}
```

- Pc

```
package Inheritance_2;

public class Pc extends Komputer {
    public int ukuranMonitor;

    public Pc() {
    }

    public Pc(String merk, int kecProsesor, int sizeMemory, String
jnsProsesor, int ukuranMonitor) {
        super(merk, kecProsesor, sizeMemory, jnsProsesor);
        this.ukuranMonitor = ukuranMonitor;
    }

    public void tampilPc() {
        super.tampilData();
        System.out.println("Ukuran Monitor      : " + ukuranMonitor + "
inci");
    }
}
```

- Windows

```
package Inheritance_2;

public class Windows extends Laptop {
    public String fitur;

    public Windows() {
    }

    public Windows(String merk, int kecProsesor, int sizeMemory, String
jnsProsesor, String jnsBatrei, String fitur) {
        super(merk, kecProsesor, sizeMemory, jnsProsesor, jnsBatrei);
    }

    public void tampilWindows() {
        System.out.println("======== SPESIFIKASI WINDOWS ========");
```

```
        super.tampilLaptop();
        System.out.println("Fitur               : " + fitur);
    }
}
```

- Mac

```
package Inheritance_2;

public class Mac extends Laptop {
    public String security;

    public Mac() {
    }

    public Mac(String merk, int kecProsesor, int sizeMemory, String
jnsProsesor, String jnsBatrei, String security) {
        super(merk, kecProsesor, sizeMemory, jnsProsesor, jnsBatrei);
        this.security = security;
    }

    public void tampilMac() {
        System.out.println("========== SPESIFIKASI MAC ==========");
        super.tampilLaptop();
        System.out.println("Security            : " + security);
    }
}
```

- Main

```
package Inheritance_2;

public class Main {
    public static void main(String[] args) {
        Mac mac = new Mac("MacBook Pro", 3, 16, "Apple M2 Pro", "Lithium-
Polymer", "Secure Enclave");
        mac.tampilMac();

        System.out.println();

        Windows windows = new Windows("Dell XPS 15", 3, 32, "Intel Core i7",
"Lithium-Ion", "Windows Hello");
        windows.tampilWindows();

        System.out.println();

        Pc pc = new Pc("ASUS ROG", 4, 16, "AMD Ryzen 9", 27);
        System.out.println("========== SPESIFIKASI PC ==========");
        pc.tampilPc();
    }
}
```

Hasil Kode Program

```
========== SPESIFIKASI MAC ==========
Merk                : MacBook Pro
Kecepatan Prosesor  : 3 GHz
Ukuran Memori       : 16 GB
Jenis Prosesor      : Apple M2 Pro
Jenis Baterai       : null
Security            : Secure Enclave

======== SPESIFIKASI WINDOWS ========
Merk                : Dell XPS 15
Kecepatan Prosesor  : 3 GHz
Ukuran Memori       : 32 GB
Jenis Prosesor      : Intel Core i7
Jenis Baterai       : null
Fitur               : null

========== SPESIFIKASI PC ==========
Merk                : ASUS ROG
Kecepatan Prosesor  : 4 GHz
Ukuran Memori       : 16 GB
Jenis Prosesor      : AMD Ryzen 9
Ukuran Monitor      : 27 inci
PS C:\Users\Bintang\Kuliah\Semester 3\PBO\Pertemuan 6>
```