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IF-47-08

TP Modul 8

Main

```java
package com.mycompany.tp.modul8;

/**
 *
 * @author gavinbenjiro
 */
public class TPModul8 {

    public static void main (String[] args) {
        Koordinat3D kL = new Koordinat3D(30, 40, 50);
        Lebah l = new Lebah("oranye", kL);

        Koordinat kS = new Koordinat(70, 90);
        Semut s = new Semut("merah", kS);

        System.out.println("Warna semut  : " + s.getWarna());
        s.info();
        s.gerak(kS);
        s.info();

        System.out.println();

        System.out.println("Warna lebah  : " + l.getWarna());
        l.info();
        System.out.println("            Z = " + kL.getZ());
        l.gerak(kL);
        l.info();
        System.out.println("            Z = " + (kL.getZ() + 15));
    }
}
```

Koordinat

```java
package com.mycompany.tp.modul8;

/**
 *
 * @author gavinbenjiro
 */
public class Koordinat {
    private int x;
    private int y;

    public Koordinat(int x, int y) {
        this.x = x;
        this.y = y;
    }

    public int getX() {
        return x;
    }

    public int getY() {
        return y;
    }

    public void setX(int x) {
        this.x = x;
    }

    public void setY(int y) {
        this.y = y;
    }
}
```

Koordinat3D

```java
package com.mycompany.tp.modul8;

/**
 *
 * @author gavinbenjiro
 */
public class Koordinat3D extends Koordinat {
    private int z;

    public Koordinat3D(int x, int y, int z) {
        super(x, y);
        this.z = z;
    }

    public int getZ() {
        return z;
    }

    public void setZ(int z) {
        this.z = z;
    }
}
```

Serangga

```java
package com.mycompany.tp.modul8;

/**
 *
 * @author gavinbenjiro
 */
public class Serangga {
    private String warna;
    private Koordinat posisi;

    public Serangga(String warna, Koordinat k) {
        this.warna = warna;
        this.posisi = k;
    }

    public Koordinat getPosisi() {
        return posisi;
    }

    public String getWarna() {
        return warna;
    }

    public void setWarna(String warna) {
        this.warna = warna;
    }

    public void gerak(Koordinat k) {

    }

    public void info() {

    }
}
```

Lebah

```java
package com.mycompany.tp.modul8;

/**
 *
 * @author gavinbenjiro
 */
public class Lebah extends Serangga {
    public Lebah(String warna, Koordinat3D k) {
        super(warna, k);
    }

    public void gerak(Koordinat k) {
        k.setX(k.getX() + 15);
        k.setY(k.getY() + 15);
    }

    @Override
    public void info() {
        System.out.println("Posisi lebah : X = " + getPosisi().getX());
        System.out.println("              Y = " + getPosisi().getY());
    }
}
```

Semut

```java
package com.mycompany.tp.modul8;

/**
 *
 * @author gavinbenjiro
 */
public class Semut extends Serangga {
    public Semut(String warna, Koordinat k) {
        super(warna, k);
    }

    @Override
    public void gerak(Koordinat k) {
        k.setX(k.getX() + 10);
        k.setY(k.getY() + 10);
    }

    @Override
    public void info() {
        System.out.println("Posisi semut : X = " + getPosisi().getX());
        System.out.println("              Y = " + getPosisi().getY());
    }
}
```

Hasil

```
    exec:3.1.0:exec (default-cli) @ TP-Modu
Warna semut  : merah
Posisi semut : X = 70
               Y = 90
Posisi semut : X = 80
               Y = 100

Warna lebah  : oranye
Posisi lebah : X = 30
               Y = 40
               Z = 50
Posisi lebah : X = 45
               Y = 55
               Z = 65
------------------------------------------------
BUILD SUCCESS
------------------------------------------------
Total time:  1.305 s
Finished at: 2025-04-13T03:10:43+07:00
------------------------------------------------
|
```