

Maharani Salsabila Alysa Putri

1301210110

IF4507

Koordinat.java

```
1  /**
2
3
4
5  package tp07;
6
7  /**
8   *
9   * @author ASUS
10  */
11
12  public class Koordinat {
13      private int x, y;
14      public Koordinat(int x, int y) {
15          this.x = x;
16          this.y = y;
17      }
18
19      public int getX() {
20          return x;
21      }
22
23      public int getY() {
24          return y;
25      }
26
27      public void setX(int x) {
28          this.x = x;
29      }
30
31      public void setY(int y) {
32          this.y = y;
33      }
34  }
```

Koordinat3D.java

```

5   package tp07;
6
7   /**
8    *
9    * @author ASUS
10  */
11  public class Koordinat3D extends Koordinat{
12      private int z;
13      public Koordinat3D(int x, int y, int z){
14          super(x, y);
15          this.z = z;
16      }
17      public int getZ(){
18          return z;
19      }
20
21      public void setZ(int z){
22          this.z = z;
23      }
24  }

```

Serangga.java

```

5   package tp07;
6
7   /**
8    *
9    * @author ASUS
10  */
11  public abstract class Serangga {
12      private final int jmlKaki;
13      public String getWarna(){
14          return warna;
15      }
16
17      public void setWarna(String warna){
18          this.warna = warna;
19      }
20      private String warna;
21      public Serangga(String color){
22          warna = color;
23          jmlKaki=6;
24      }
25
26      public abstract void gerak(int[] axis);
27      public int getJmlKaki(){
28          return jmlKaki;
29      }
30      public abstract void info();
31  }

```

Semut.java

```

5 package tp07;
6
7 /**
8  *
9  * @author ASUS
10 */
11 public class Semut extends Serangga {
12     private Koordinat posisi;
13     public Semut(String warna, int x, int y){
14         super(color: warna);
15         posisi = new Koordinat(x,y);
16     }
17     public void gerak(int[] axis){
18         posisi = new Koordinat(axis[0], axis[1]);
19     }
20     public void info(){
21         System.out.println("Posisi Semut :\tX =" + posisi.getX());
22         System.out.println("\t\tY= " + posisi.getY());
23     }
24 }

```

## Lebah.java

```

5 package tp07;
6
7 /**
8  *
9  * @author ASUS
10 */
11 public class Lebah extends Serangga implements BisaTerbang{
12     Koordinat3D posisi;
13     public Lebah(String color, int x, int y, int z){
14         super(color);
15         posisi = new Koordinat3D(x,y,z);
16     }
17     public void gerak(int [] axis){
18         posisi= new Koordinat3D(axis[0], axis[1], axis[2]);
19     }
20     public void info(){
21         System.out.println("Posisi Lebah :\tX =" + posisi.getX());
22         System.out.println("\t\tY =" + posisi.getY());
23         System.out.println(x: "\t\tY =" + posisi.getZ());
24     }
25     public void terbang(int x, int y, int z){
26         posisi = new Koordinat3D(x+posisi.getX(), y+posisi.getY(), z+posisi.getZ());
27     }
28 }

```

## BisaTerbang.java

```
5 package tp07;
6
7 /**
8  *
9  * @author ASUS
10 */
11 public abstract interface BisaTerbang {
12     public abstract void terbang(int x, int y, int z);
13 }
14
```

## Main.java

```
5 package tp07;
6
7 /**
8  *
9  * @author ASUS
10 */
11 public class TP07 {
12
13     public static void main(String[] args) {
14         Semut S = new Semut(warna: "hitam", x: 60, y: 80);
15         System.out.println("Warna Semut: " + S.getWarna());
16         S.info();
17         S.gerak(new int[]{70, 90});
18         S.info();
19         Lebah L = new Lebah(color: "Kuning", x: 20, y: 30, z: 40);
20         System.out.println("Warna Lebah: " + S.getWarna());
21         L.info();
22         L.terbang(x: 55, y: 65, z: 75);
23         L.info();
24         L.gerak(new int[]{25, 35, 45});
25         L.info();
26     }
27 }
```



```
run:
Warna Semut: hitam
Posisi Semut : X =60
                Y= 80
Posisi Semut : X =70
                Y= 90

Warna Lebah: hitam
Posisi Lebah : X =20
                Y =30
                Y =+posisi.getZ()
Posisi Lebah : X =75
                Y =95
                Y =+posisi.getZ()
Posisi Lebah : X =25
                Y =35
                Y =+posisi.getZ()
BUILD SUCCESSFUL (total time: 0 seconds)
```