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## 1. Hewan

```
abstract class Makan { // abstract
    private String makanan;

    public void setMakanan(String food) { // encapsulation (setter)
        this.makanan = food;
    }

    public String getMakanan() { // encapsulation (getter)
        return this.makanan;
    }

    public void eat() {
        System.out.println("Makan " + makanan);
    }
}

class Karnivora extends Makan { // inheritance
    public Karnivora() {
        setMakanan("daging");
    }

    public void eat() {
        System.out.println("Makan " + getMakanan());
    }
}

class Herbivora extends Makan { // inheritance
    public Herbivora() {
        setMakanan("tumbuhan");
    }

    public void eat() {
        System.out.println("Makan " + getMakanan());
    }
}

class Omnivora extends Makan { // inheritance
    public Omnivora() {
```

```

        setMakanan("daging dan tumbuhan");
    }

    public void eat() {
        System.out.println("Makan " + getMakanan());
    }
}

public class Hewan {
    public static void main(String[] args) {
        Makan Karnivora1 = new Karnivora(); // polymorphism
        Karnivora1.eat();

        Herbivora Herbivora1 = new Herbivora();
        Herbivora1.eat();

        Omnivora Omnivora1 = new Omnivora();
        Omnivora1.eat();
    }
}

```

## Screenshot Program

```

19         setMakanan("daging");
20     }
21
22     public void eat() {
23         System.out.println("Makan " + getMakanan());
24     }
25 }
26
27 class Herbivora extends Makan { // inheritance
28     public Herbivora() {
29         setMakanan("tumbuhan");
30     }
31
32     public void eat() {
33         System.out.println("Makan " + getMakanan());
34     }
35 }
36
37 class Omnivora extends Makan { // inheritance
38     public Omnivora() {
39         setMakanan("daging dan tumbuhan");
40     }
41
42     public void eat() {
43         System.out.println("Makan " + getMakanan());
44     }
45 }
46
47 public class Hewan {
48     public static void main(String[] args) {
49         Makan Karnivora1 = new Karnivora(); // polymorphism
50         Karnivora1.eat();
51
52         Herbivora Herbivora1 = new Herbivora();
53         Herbivora1.eat();
54
55         Omnivora Omnivora1 = new Omnivora();
56         Omnivora1.eat();
57     }
58 }

```

TERMINAL

```

PS D:\CS21\Algoritma dan Struktur Data\B\Code\Tugas1\Hewan> cd "d:\CS21\Algoritma dan Struktur Data\B\Code\Tugas1\Hewan"; & "C:\Program Files\Java\jdk-17.0.2\bin\java.exe" "-enable-preview" "-xx:ShowCodeDetails" "ExceptionMessages" "-cp" "D:\CS21\Algoritma dan Struktur Data\B\Code\Tugas1\Hewan\bin" "Hewan"
Makan daging
Makan tumbuhan
Makan daging dan tumbuhan
PS D:\CS21\Algoritma dan Struktur Data\B\Code\Tugas1\Hewan>

```

## 2. Hotel

```
class Kamar {
    public String nama;
    public int nomor;
    public boolean status = true;

    public Kamar(int nomor) {
        this.nomor = nomor;
    }

    public String pesanKamar(String nama) {
        this.status = false;
        return this.nama = nama;
    }

    public void statusKamar() {
        if(status) {
            System.out.println("Kamar " + this.nomor + " : Kosong");
        }
        else {
            System.out.println("Kamar " + this.nomor + " : Terisi " +
this.nama);
        }
    }
}

class Pesan {
    Kamar[] kamar = new Kamar[10];

    public Pesan() {
        for(int i = 0; i < kamar.length; i++) {
            kamar[i] = new Kamar(i+1);
        }
    }

    public Kamar getRoom(int i) {
        return kamar[i-1];
    }
}

public class Hotel {
    public static void main(String[] args) {
        Pesan hoho = new Pesan();
        hoho.getRoom(1).statusKamar();
        hoho.getRoom(1).pesanKamar("Joni");
        hoho.getRoom(1).statusKamar();
        hoho.getRoom(9).statusKamar();
    }
}
```

```

        hoho.getRoom(9).pesanKamar("Parker");
        hoho.getRoom(9).statusKamar();
    }
}

```

## Screenshot Program

```

10     public String pesanKamar(String nama) {
11         this.status = false;
12         return this.nama = nama;
13     }
14
15     public void statusKamar() {
16         if(status) {
17             System.out.println("Kamar " + this.nomor + " : Kosong");
18         }
19         else {
20             System.out.println("Kamar " + this.nomor + " : Terisi " + this.nama);
21         }
22     }
23 }
24
25 class Pesan {
26     Kamar[] kamar = new Kamar[10];
27
28     public Pesan() {
29         for(int i = 0; i < kamar.length; i++) {
30             kamar[i] = new Kamar(i+1);
31         }
32     }
33     public Kamar getRoom(int i) {
34         return kamar[i-1];
35     }
36 }
37
38
39 public class Hotel {
40     public static void main(String[] args) {
41         Pesan hoho = new Pesan();
42         hoho.getRoom(1).statusKamar();
43         hoho.getRoom(1).pesanKamar("Joni");
44         hoho.getRoom(1).statusKamar();
45         hoho.getRoom(9).statusKamar();
46         hoho.getRoom(9).pesanKamar("Parker");
47         hoho.getRoom(9).statusKamar();
48     }
49 }

```

```

PS D:\CS21\Algoritma dan Struktur Data B\Code\Tugas1\Hewan> cd "d:\CS21\Algoritma dan Struktur Data B\Code\Tugas1\Hewan"; & "C:\Program Files\Java\jdk-17.0.2\bin\java.exe" --enable-preview -XX:+ShowCodeDetails -Xs -cp "D:\CS21\Algoritma dan Struktur Data B\Code\Tugas1\Hewan\bin" "Hotel"
Kamar 1 : Kosong
Kamar 1 : Terisi Joni
Kamar 9 : Kosong
Kamar 9 : Terisi Parker
PS D:\CS21\Algoritma dan Struktur Data B\Code\Tugas1\Hewan>

```