

PRATIUM PEMROGRAMAN BERORIENTASIKAN OBJEK

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Kelas : Informatika A 2021

POSTTEST 2

Program : Sistem pendataan perhiasan emas

SS Out Put :

```
--- exec-maven-plugin:3.0.0:exec (default-cli) @ Posttest2 ---
+++ SIA VERSI LITE +++
1. Create
2. Read
3. Update
4. Delete
5. Exit
Masukan Pilihan :
```

gambar 1 Tampilan Awal

```
Masukan Pilihan :1
Masukan Tipe Perhiasan (1.Gold | 2.Diamond) :1
Masukkan Nomor Perhiasan: 001
Masukan nama :emas
Masukan Jenis :cincin
Masukan Karat :20
Masukan Berat :3.5
Masukkan Gold : 2
Data Berhasil Ditambah!
+++ SIA VERSI LITE +++
1. Create
2. Read
3. Update
4. Delete
5. Exit
```

gambar 3 Tampilan tambah data

```
+++ SIA VERSI LITE +++
1. Create
2. Read
3. Update
4. Delete
5. Exit
Masukan Pilihan :2
Masukkan Nomor Perhiasan: 001
===== DATA PERHIASAN =====
Nomor Perhiasan      : 1
Nama Perhiasan       : emas
Jenis                 : cincin
Karat                 : 20
Berat                 : 3.5

Emas                  : 0
```

gambar 2 Tampilan Liat data

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```
+++ SIA VERSI LITE +++
1. Create
2. Read
3. Update
4. Delete
5. Exit
Masukan Pilihan :4
Masukkan Nomor Perhiasan: 1
Data Berhasil Dihapus.
+++ SIA VERSI LITE +++
1. Create
2. Read
3. Update
4. Delete
5. Exit
Masukan Pilihan :2
Masukkan Nomor Perhiasan: 1
===== DATA PERHIASAN =====
Perhiasan Tidak Ditemukan
```

gambar 5 Tampilan hapus data

```
===== DATA PERHIASAN =====
Perhiasan Tidak Ditemukan
+++ SIA VERSI LITE +++
1. Create
2. Read
3. Update
4. Delete
5. Exit
Masukan Pilihan :5
-----
BUILD SUCCESS
-----
Total time: 01:31 min
Finished at: 2023-03-22T21:32:01+08:00
-----
```

gambar 4 Tampilan Keluar

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SOURCE CODE :

Main.java

```
/*
 * Click nbfs://nbhost/SystemFileSystem/Templates/Licenses/license-default.txt to change this license
 */

package com.mycompany.posttest2;

import java.io.BufferedReader;
import java.io.IOException;
import java.io.InputStreamReader;
import java.util.*;

/**
 *
 * @author asus
 */
public class Main {

    static BufferedReader br = new BufferedReader(new InputStreamReader(System.in));
    static ArrayList<Gold> gold = new ArrayList<Gold>();
    static ArrayList<Diamond> diamond = new ArrayList<Diamond>();
    static ArrayList<Perhiasan> perhiasan = new ArrayList<Perhiasan>();

    public static void main(String[] args) throws IOException {
        while (true) {
            System.out.println("+++ PENDATAAN PERHIASAN EMAS / DIAMOND +++");
            System.out.println("1. Create");
            System.out.println("2. Read");
            System.out.println("3. Update");
            System.out.println("4. Delete");
            System.out.println("5. Exit");
            System.out.print("Masukan Pilihan :");
            int pilihan = Integer.parseInt(br.readLine());
            switch (pilihan) {
                case 1:
                    createhias();
                    break;
                case 2:
                    readhias();
                    break;
                case 3:
                    edithias();
                    break;
                case 4:
                    deletehias();
                    break;
                case 5:
                    System.exit(0);
                    break;
            }
        }
    }

    private static void createhias() {
        // TODO: Implementasi metode createhias
    }

    private static void readhias() {
        // TODO: Implementasi metode readhias
    }

    private static void edithias() {
        // TODO: Implementasi metode edithias
    }

    private static void deletehias() {
        // TODO: Implementasi metode deletehias
    }
}
```

PRATIKUM PEMROGRAMAN BERORIENTASIKAN OBJEK

Nama : Fitra Noviarji

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Kelas : Informatika A 2021

```
        hapushias();
        break;
    case 5:
        System.exit(0);
        break;
    default:
        System.out.println("Pilihan tidak ada");
        break;
    }
}
```

//BUAT BARU

```
public static void createhias() throws NumberFormatException, IOException{
    System.out.println("Masukan Tipe Perhiasan (1.Gold | 2.Diamond)");
    System.out.print("Masukan Pilihan : ");
    int pilihan = Integer.parseInt(br.readLine());
    switch (pilihan) {
        case 1:
            System.out.print("Masukan nama :");
            String namaPerhiasan = br.readLine();

            System.out.print("Masukan Jenis :");
            String jenis = br.readLine();

            System.out.print("Masukan Karat :");
            int Karat = Integer.parseInt(br.readLine());

            System.out.print("Masukan Berat :");
            double Berat = Double.parseDouble(br.readLine());

            System.out.print("Masukkan kemurnian Gold : ");
            int emas = Integer.parseInt(br.readLine());

            Gold newemas = new Gold (namaPerhiasan, jenis, Karat, Berat, emas, "Gold");
            gold.add(newemas) ;
            newemas.isAdded();
            break ;
        case 2 :
            System.out.print("Masukan nama :");
            String namaPerhiasan1 = br.readLine();

            System.out.print("Masukan Jenis :");
            String jenis1 = br.readLine();

            System.out.print("Masukan carat :");
            int Carat = Integer.parseInt(br.readLine());
    }
}
```

PRATIUM PEMROGRAMAN BERORIENTASIKAN OBJEK

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```
        System.out.print("Masukan Berat :");
        double Berat1 = Double.parseDouble(br.readLine());

        System.out.print("Masukkan kemurnian Diamond : ");
        int berlian = Integer.parseInt(br.readLine());

        Diamond newberlian = new Diamond(namaPerhiasan1, jenis1, Carat, Berat1, berlian,
"Diamond");
        diamond.add(newberlian);
        newberlian.isAdded();
        break ;

    default:
        System.out.println("Pilihan tidak ada");
        break;
    }
}

//TAMPILKAN
public static void readhias() throws NumberFormatException, IOException{
    System.out.println("Tampilkan1 data");
    System.out.println("1. Gold");
    System.out.println("2. Diamond");
    System.out.print("Masukan Pilihan : ");
    int pilihan = Integer.parseInt(br.readLine());
    switch (pilihan) {
        case 1:
            System.out.println(" DATA Gold");
            for (int i = 0; i < gold.size(); i++){
                System.out.println("Gold ke-" + (i+1));
                gold.get(i).display();
                System.out.println("\n");
            }
            break;

        case 2:
            System.out.println(" DATA Diamond");
            for (int i = 0; i < diamond.size(); i++) {
                System.out.println("Dosen ke-" + (i+1));
                diamond.get(i).display();
                System.out.println("\n");
            }
            break;
        default:
            System.out.println("Pilihan tidak ada");
    }
}
```

PRATIUM PEMROGRAMAN BERORIENTASIKAN OBJEK

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```
        break;
    }
}

public static void editthias() throws NumberFormatException, IOException {
    System.out.println("Pilih data");
    System.out.println("1. Gold | 2. Diamond");
    System.out.print("Masukan Pilihan : ");
    int pilihan = Integer.parseInt(br.readLine());
    switch (pilihan) {
        case 1:
            System.out.print("Masukkan indeks gold : ");
            int idx = Integer.parseInt(br.readLine());

            if(idx <= gold.size() || idx > 0) {
                System.out.print("Masukan nama Emas :");
                String addnamaPerhiasan = br.readLine();
                System.out.print("Masukan Jenis :");
                String addjenis = br.readLine();
                System.out.print("Masukan Karat :");
                int addkarat = Integer.parseInt(br.readLine());
                System.out.print("Masukan Berat :");
                double addberat = Double.parseDouble(br.readLine());
                System.out.print("Masukan Kemurnian emas :");
                int addemas = Integer.parseInt(br.readLine());
                System.out.print("Masukan ipk :");
                gold.get(idx-1).setNamaperhiasan(addnamaPerhiasan);
                gold.get(idx-1).setJenis (addjenis);
                gold.get(idx-1).setKarat(addkarat);
                gold.get(idx-1).setBerat(addberat);
                gold.get(idx-1).setEmas(addemas);

                System.out.println("Data berhasil diedit!");
            }else{
                System.out.println("Data Tidak ada");
            }
            break;
        case 2 :
            System.out.print("Masukkan indeks diamond : ");
            int idx1 = Integer.parseInt(br.readLine());

            if(idx1 <= gold.size() || idx1 > 0) {
                System.out.print("Masukan nama diamond :");
                String addnamaPerhiasan = br.readLine();
                System.out.print("Masukan Jenis :");
                String addjenis = br.readLine();
```

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Nama : Fitra Noviarji

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```
        System.out.print("Masukan Carat :");
        int addcarat = Integer.parseInt(br.readLine());
        System.out.print("Masukan Berat :");
        double addberat = Double.parseDouble(br.readLine());
        System.out.print("Masukan Kemurnian berlian :");
        int addemas = Integer.parseInt(br.readLine());
        System.out.print("Masukan ipk :");
        diamond.get(idx1-1).setNamaperhiasan(addnamaPerhiasan);
        diamond.get(idx1-1).setJenis (addjenis);
        diamond.get(idx1-1).setKarat(addcarat);
        diamond.get(idx1-1).setBerat(addberat);
        diamond.get(idx1-1).setEmas(addemas);

        System.out.println("Data berhasil diedit!");
    }else{
        System.out.println("Data Tidak ada");
    }
    break;
default:
    break;
}

}

public static void hapushias() throws NumberFormatException,IOException {
    System.out.println("Pilih data ");
    System.out.println("1. Gold | 2. Diamond");
    System.out.print("Masukan Pilihan : ");
    int pilihan = Integer.parseInt(br.readLine());
    switch (pilihan) {
        case 1:
            System.out.print("Masukkan indeks gold : ");
            int idx = Integer.parseInt(br.readLine());

            if(idx <= gold.size() || idx > 0) {
                gold.remove(idx - 1);

                System.out.println("Data berhasil dihapus!");
            }else{
                System.out.println("Data Tidak ada");
            }
            break;
        case 2:
            System.out.print("Masukkan indeks diamond : ");
            int idx1 = Integer.parseInt(br.readLine());
```

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Kelas : Informatika A 2021

```
        if(idx1 <= diamond.size() || idx1 > 0) {
            diamond.remove(idx1 - 1);

            System.out.println("Data berhasil dihapus!");
        }else{
            System.out.println("Data Tidak ada");
        }
        break;
    default:
        break;
    }
}

}
```

Perhiasan.java

```
/*
 * Click nbfs://nbhost/SystemFileSystem/Templates/Licenses/license-
default.txt to change this license
 * Click nbfs://nbhost/SystemFileSystem/Templates/Classes/Class.java to
edit this template
 */
package com.mycompany.posttest2;

/**
 *
 * @author asus
 */
public abstract class Perhiasan {
    // property

    protected String namaperhiasan;
    protected String jenis;
    protected int Karat;
    protected int Carat;
    protected double Berat;
    protected int emas;
    protected int berlian;
}
```


PRATIUM PEMROGRAMAN BERORIENTASIKAN OBJEK

Nama : Fitra Noviarji

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```
// constructor || ini juga digunakan untuk bisa menghubungkan objek dan
arraylist biar enak dipanggil
public Perhiasan( String namaperhiasan, String jenis, int Karat, double
Berat){
    this.namaperhiasan = namaperhiasan;
    this.jenis = jenis;
    this.Karat = Karat;
    this.Berat = Berat;
    this.Carat = Carat;
    this.emas = emas;
    this.berlian = berlian;

}

/**
 * @return the namaperhiasan
 */

public String getNamaperhiasan() {
    return namaperhiasan;
}

/**
 * @param namaperhiasan the namaperhiasan to set
 */
public void setNamaperhiasan(String namaperhiasan) {
    this.namaperhiasan = namaperhiasan;
}

/**
 * @return the jenis
 */
public String getJenis() {
    return jenis;
}

/**
 * @param jenis the jenis to set
 */
public void setJenis(String jenis) {
    this.jenis = jenis;
}

/**
 * @return the Karat
 */
```

PRATIUM PEMROGRAMAN BERORIENTASIKAN OBJEK

Nama : Fitra Noviarji

Nim : 2109106017

Kelas : Informatika A 2021

```
public int getKarat() {
    return Karat;
}

/**
 * @param Karat the Karat to set
 */
public void setKarat(int Karat) {
    this.Karat = Karat;
}

/**
 * @return the Berat
 */
public double getBerat() {
    return Berat;
}

/**
 * @param Berat the Berat to set
 */
public void setBerat(double Berat) {
    this.Berat = Berat;
}

/**
 * @return the Carat
 */
public int getCarat() {
    return Carat;
}

/**
 * @param Carat the Carat to set
 */
public void setCarat(int Carat) {
    this.Carat = Carat;
}

/**
 * @return the emas
 */
public int getEmas() {
    return emas;
}

/**
```

PRATIUM PEMROGRAMAN BERORIENTASIKAN OBJEK

Nama : Fitra Noviarji

Nim : 2109106017

Kelas : Informatika A 2021

```
        * @param emas the emas to set
        */
    public void setEmas(int emas) {
        this.emas = emas;
    }

    /**
     * @return the berlian
     */
    public int getBerlian() {
        return berlian;
    }

    /**
     * @param berlian the berlian to set
     */
    public void setBerlian(int berlian) {
        this.berlian = berlian;
    }

    public abstract void isAdded();
    public abstract void display();
}
```

Gold.java

```
/*
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 * default.txt to change this license
 * Click nbfs://nbhost/SystemFileSystem/Templates/Classes/Class.java to
 * edit this template
 */
package com.mycompany.posttest2;

/**
 *
 * @author asus
 */
class Gold extends Perhiasan {
    // Atribut
    private int emas;
```

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Nama : Fitra Noviarji

Nim : 2109106017

Kelas : Informatika A 2021

```
final String status = "Gold" ;

// Constructor
public Gold(String namaperhiasan, String jenis, int Karat, double
Berat, int emas, String status) {
    super( namaperhiasan, jenis, Karat, Berat);
    this.emas = emas;
}

// Getter dan Setter
public int getEmas() {
    return emas;
}

public void setEmas(int emas) {
    this.emas = emas;
}

public String getStatus(){
    return status ;
}

@Override
public void isAdded() {
    System.out.println("Gold baru dengan nama " + this.namaperhiasan);
    System.out.println("Dengan Jenis " + this.jenis);
    System.out.println("Dengan Karat " + this.Karat);
    System.out.println("Dengan Berat " + this.Berat);
    System.out.println("Dengan Dengan kemurnian emas " + this.emas);
    System.out.println("Berhasil ditambahkan");
}

@Override
public void display(){
    System.out.println("Nama: " + this.namaperhiasan);
    System.out.println("Jenis: " + this.jenis);
    System.out.println("Karat: " + this.Karat);
    System.out.println("Berat: " + this.Berat);
    System.out.println("Kemurnian Emas: " + this.emas);
    System.out.println("Status: " + this.status);
}
}
```

PRATIUM PEMROGRAMAN BERORIENTASIKAN OBJEK

Nama : Fitra Noviarji

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Diamond.java

```
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default.txt to change this license
 * Click nbfs://nbhost/SystemFileSystem/Templates/Classes/Class.java to
edit this template
 */
package com.mycompany.posttest2;

/**
 *
 * @author asus
 */
class Diamond extends Perhiasan {
    // Atribut
    private int berlian;
    final String status = "Diamond" ;

    // Constructor
    public Diamond(String namaperhiasan, String jenis, int Carat, double
Berat, int berlian, String status) {
        super (namaperhiasan, jenis, Carat, Berat);
        this.berlian = berlian;
    }

    // Getter dan Setter
    public int getBerlian() {
        return berlian;
    }

    public void setBerlian(int berlian) {
        this.berlian = berlian;
    }

    public String getStatus(){
        return status ;
    }

    @Override
    public void isAdded() {
        System.out.println("Gold baru dengan nama " + this.namaperhiasan);
        System.out.println("Dengan Jenis " + this.jenis);
        System.out.println("Dengan Carat " + this.Carat);
        System.out.println("Dengan Berat " + this.Berat);
    }
}
```

PRATIUM PEMROGRAMAN BERORIENTASIKAN OBJEK

Nama : Fitra Noviarji

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Kelas : Informatika A 2021

```
        System.out.println("Dengan Dengan kemurnian Berlian " +
this.berlian);
        System.out.println("Berhasil ditambahkan");
    }

    @Override
    public void display(){
        System.out.println("Nama: " + this.namaperhiasan);
        System.out.println("Jenis: " + this.jenis);
        System.out.println("Carat: " + this.Carat);
        System.out.println("Berat: " + this.Berat);
        System.out.println("Kemurnian Berlian: " + this.berlian);
        System.out.println("Status: " + this.status);
    }
}
```