

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 {
    private static BufferedReader br = new BufferedReader(new
    InputStreamReader(System.in));
    private static ArrayList<Perhiasan> perhiasan = new ArrayList<>();

    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());
```

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```
        switch (pilihan) {
            case 1:
                createhias();
                break;
            case 2:
                readhias();
                break;
            case 3:
                edithias();
                break;
            case 4:
                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.print("Masukan Tipe Perhiasan (1.Gold | 2.Diamond) :");
    int tipePerhiasan = Integer.parseInt(br.readLine());

    System.out.print("Masukkan Nomor Perhiasan: ");
    int nomorPerhiasan = Integer.parseInt(br.readLine());

    for (Perhiasan perhiasan : perhiasan ) {
        if (perhiasan.getNomorPerhiasan() == nomorPerhiasan) {
            System.out.println("Nomor Perhiasan Sudah Ada. Membatalkan
Proses!");
            return;
        }
    }

    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());
}
```

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

//        Perhiasan hiasanBaru = new Perhiasan(addnama, addjenis,
addKarat, addBerat);

//        perhiasan.add(hiasanBaru);
//        hiasanBaru.registrasi();

        if (tipePerhiasan == 1) {
            System.out.print("Masukkan Gold : ");
            int emas = Integer.parseInt(br.readLine());

            Gold newPerhiasan = new Gold(nomorPerhiasan,namaPerhiasan,
jenis, Karat, Berat, emas);
            perhiasan.add(newPerhiasan);
            System.out.println("Data Berhasil Ditambah!");

        } else if (tipePerhiasan == 2) {
            System.out.print("Masukkan Diamond : ");
            int berlian = Integer.parseInt(br.readLine());

            Diamond newPerhiasan = new Diamond(nomorPerhiasan,
namaPerhiasan, jenis, Karat, Berat, berlian);
            perhiasan.add(newPerhiasan);
            System.out.println("Data Berhasil Ditambah!");

        } else {
            System.out.println("Tipe Perhiasan Invalid.");
        }
    }

//TAMPILKAN
    public static void readhias() throws NumberFormatException,
IOException{
        System.out.print("Masukkan Nomor Perhiasan: ");
        int nomorPerhiasan = Integer.parseInt(br.readLine());
        System.out.println("===== DATA PERHIASAN =====");
        for (Perhiasan perhiasan : perhiasan) {
            if (perhiasan.getNomorPerhiasan() == nomorPerhiasan) {
                System.out.println("Nomor Perhiasan      : " +
perhiasan.getNomorPerhiasan());
                System.out.println("Nama Perhiasan      : " +
perhiasan.getNamaperhiasan());
                System.out.println("Jenis              : " +
perhiasan.getJenis());
            }
        }
    }
}
```

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```
        System.out.println("Karat                : " +
perhiasan.getKarat());
        System.out.println("Berat                : " +
perhiasan.getBerat());
        System.out.println("\n");
        if (perhiasan instanceof Gold) {
            Gold gold = (Gold) perhiasan;
            System.out.println("Emas                : " + gold.getEmas());
            return;
        } else if (perhiasan instanceof Diamond) {
            Diamond diamond = (Diamond) perhiasan;
            System.out.println("Diamond            : " +
diamond.getBerlian());
            return;
        }
    }
}
System.out.println("Perhiasan Tidak Ditemukan");
}

    public static void editthias() throws NumberFormatException,
IOException {
        System.out.print("Masukkan Nomor Perhiasan: ");
        int nomorPerhiasan = Integer.parseInt(br.readLine());
        for (Perhiasan perhiasan : perhiasan) {
            if (perhiasan.getNomorPerhiasan() == nomorPerhiasan) {
                System.out.print("Masukkan Nama Perhiasan Baru (Tekan Enter
Untuk Skip): ");
                String namaperhiasanNew = br.readLine();
                if (!namaperhiasanNew.isEmpty()) {
                    perhiasan.setNamaperhiasan(namaperhiasanNew);
                }

                System.out.print("Masukkan Jenis Baru (Tekan Enter Untuk
Skip): ");
                String jenisNew = br.readLine();
                if (!jenisNew.isEmpty()) {
                    perhiasan.setJenis(jenisNew);
                }

                System.out.print("Masukkan Karat Baru (Tekan Enter Untuk
Skip): ");
                int karatNew = Integer.parseInt(br.readLine());
                if (karatNew != 0) {
                    perhiasan.setKarat(karatNew);
                }
            }
        }
    }
}
```

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```
        System.out.print("Masukkan Berat Baru (Tekan Enter Untuk
Skip): ");
        Double BeratNew = Double.parseDouble(br.readLine());
        if ( BeratNew != 0) {
            perhiasan.setBerat(BeratNew);
        }

        if (perhiasan instanceof Gold) {
            Gold gold = (Gold) perhiasan;
            System.out.print("Masukkan Emas (Input 0 Untuk Skip):
");
            int emasNew = Integer.parseInt(br.readLine());
            if (emasNew != 0) {
                gold.setEmas(emasNew);
                System.out.println("Jadwal Berhasil Di Update!");
                return;
            }
        } else if (perhiasan instanceof Diamond) {
            Diamond diamond = (Diamond) perhiasan;
            System.out.print("Masukkan Diamond Baru (Tekan Enter
Untuk Skip): ");
            int berlianNew =Integer.parseInt(br.readLine());

            if (berlianNew != 0 ) {
                diamond.setBerlian(berlianNew);
            }
            System.out.println("Data Berhasil Di Update!");
            return;
        }
    }
    System.out.println("Perhiasan Tidak Ditemukan!.");
}

    public static void hapushias() throws
    NumberFormatException,IOException {
        System.out.print("Masukkan Nomor Perhiasan: ");
        int nomorPerhiasan = Integer.parseInt(br.readLine());
        for (int i = 0; i < perhiasan.size(); i++) {
            int nomorperhiasan = 0;
            if (perhiasan.get(i).getNomorPerhiasan() == nomorPerhiasan) {
                perhiasan.remove(i);
                System.out.println("Data Berhasil Dihapus.");
                return;
            }
        }
    }
}
```

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```
        System.out.println("Data Tidak Ditemukan.");  
  
    }  
}
```

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  
 */  
class Perhiasan {  
    // property  
    private int nomorPerhiasan ;  
    private String namaperhiasan;  
    private String jenis;  
    private int Karat;  
    private double Berat;  
  
    // constructor || ini juga digunakan untuk bisa menghubungkan objek dan  
    arraylist biar enak dipanggil  
    public Perhiasan(int nomorPerhiasan, String namaperhiasan, String  
jenis, int Karat, double Berat){  
        this.nomorPerhiasan = nomorPerhiasan ;  
        this.namaperhiasan = namaperhiasan;  
        this.jenis = jenis;  
        this.Karat = Karat;  
        this.Berat = Berat;  
    }  
  
    /**  
     * @return the namaperhiasan  
     */  
}
```


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```
public int getNomorPerhiasan() {
    return nomorPerhiasan;
}

public void setNomorPerhiasan(int nomorPerhiasan) {
    this.nomorPerhiasan = nomorPerhiasan;
}

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
 */
public int getKarat() {
    return Karat;
}

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

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

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

Gold.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
 */
class Gold extends Perhiasan {
    // Atribut
    private int emas;

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

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

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

Diamond.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  
 */  
class Diamond extends Perhiasan {  
    // Atribut  
    private int berlian;  
  
    // Constructor  
    public Diamond(int nomorPerhiasan, String namaperhiasan, String jenis,  
int Karat, double Berat, int berlian) {  
        super(nomorPerhiasan, namaperhiasan, jenis, Karat, Berat);  
        this.berlian = berlian;  
    }  
  
    // Getter dan Setter  
    public int getBerlian() {  
        return berlian;  
    }  
  
    public void setBerlian(int berlian) {  
        this.berlian = berlian;  
    }  
}
```

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