Postesst 5

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Kelas:C1 23

```java
import java.util.ArrayList;
import java.util.Iterator;
import java.util.Scanner;

abstract class Laporan {
    private final String id;
    private String namaItem;
    private double harga;

    public Laporan(String id, String namaItem, double harga) {
        this.id = id;
        this.namaItem = namaItem;
        this.harga = harga;
    }

    public String getId() {
        return id;
    }

    public String getNamaItem() {
        return namaItem;
    }

    public void setNamaItem(String namaItem) {
        this.namaItem = namaItem;
    }

    public double getHarga() {
        return harga;
```

```java
28      public double getHarga() {
29          return harga;
30      }
31
32      public void setHarga(double harga) {
33          this.harga = harga;
34      }
35
36      public abstract String getJenis();
37
38      public final void info() {
39          System.out.println(x:"Data laporan finansial berhasil diproses.");
40      }
41
42      @Override
43      public String toString() {
44          return "ID: " + id +
45                 " | Jenis: " + getJenis() +
46                 " | Nama Item: " + namaItem +
47                 " | Harga: Rp " + harga;
48      }
49  }
50
51  class LaporanPenjualan extends Laporan {
52      public LaporanPenjualan(String id, String namaItem, double harga) {
53          super(id, namaItem, harga);
54      }
55
```

```java
class LaporanPenjualan extends Laporan {

    @Override
    public String getJenis() {
        return "Penjualan";
    }
}

final class LaporanPengeluaran extends Laporan {
    public LaporanPengeluaran(String id, String namaItem, double harga) {
        super(id, namaItem, harga);
    }

    @Override
    public String getJenis() {
        return "Pengeluaran";
    }
}
public class LaporanList {
    private static ArrayList<Laporan> laporanList = new ArrayList<>();
    private static Scanner scanner = new Scanner(System.in);

    public static void main(String[] args) {
        while (true) {
            tampilkanMenu();
            int pilihan = scanner.nextInt();
            scanner.nextLine();
            switch (pilihan) {
                case 1:
```

```java
                case 1:
                    tambahData();
                    break;
                case 2:
                    tampilkanData();
                    break;
                case 3:
                    ubahData();
                    break;
                case 4:
                    hapusData();
                    break;
                case 5:
                    System.out.println(x:"Keluar dari program...");
                    System.exit(status:0);
                    break;
                default:
                    System.out.println(x:"Pilihan tidak valid! Coba lagi.");
            }
        }
    }

    private static void tampilkanMenu() {
        System.out.println(x:"\n=== Menu Sistem Laporan Finansial Cafe Syafar ===");
        System.out.println(x:"1. Tambah Data");
        System.out.println(x:"2. Tampilkan Data");
        System.out.println(x:"3. Ubah Data");
```

```java
104        private static void tampilkanMenu() {
108            System.out.println(x:"3. Ubah Data");
109            System.out.println(x:"4. Hapus Data");
110            System.out.println(x:"5. Keluar");
111            System.out.print(s:"Pilih menu (1-5): ");
112        }
113
114        private static void tambahData() {
115            System.out.println(x:"\n=== Tambah Data ===");
116            System.out.print(s:"Pilih jenis data (1. Penjualan, 2. Pengeluaran): ");
117            int jenis = scanner.nextInt();
118            scanner.nextLine();
119
120            System.out.print(s:"Masukkan ID: ");
121            String id = scanner.nextLine();
122            System.out.print(s:"Masukkan Nama Item: ");
123            String namaItem = scanner.nextLine();
124            System.out.print(s:"Masukkan Harga: Rp ");
125            double harga = scanner.nextDouble();
126            scanner.nextLine();
127
128            Laporan laporanBaru;
129            if (jenis == 1) {
130                laporanBaru = new LaporanPenjualan(id, namaItem, harga);
131            } else {
132                laporanBaru = new LaporanPengeluaran(id, namaItem, harga);
```

```java
114        private static void tambahData() {
135            laporanList.add(laporanBaru);
136            laporanBaru.info();
137            System.out.println(x:"Data berhasil ditambahkan.");
138        }
139
140        private static void tampilkanData() {
141            System.out.println(x:"\n=== Tampilkan Data ===");
142            if (laporanList.isEmpty()) {
143                System.out.println(x:"Tidak ada data untuk ditampilkan.");
144            } else {
145                for (Laporan laporan : laporanList) {
146                    System.out.println(laporan);
147                }
148            }
149        }
150
151        private static void ubahData() {
152            System.out.println(x:"\n=== Ubah Data ===");
153            System.out.print(s:"Masukkan ID Laporan yang ingin diubah: ");
154            String id = scanner.nextLine();
155
156            boolean ditemukan = false;
157            for (Laporan laporan : laporanList) {
158                if (laporan.getId().equals(id)) {
159                    ditemukan = true;
160                    System.out.print(s:"Masukkan Nama Item Baru: ");
161                    String namaItemBaru = scanner.nextLine();
```

```java
                System.out.print(s:"Masukkan Nama Item Baru: ");
                String namaItemBaru = scanner.nextLine();
                System.out.print(s:"Masukkan Harga Baru: Rp ");
                double hargaBaru = scanner.nextDouble();
                scanner.nextLine();

                laporan.setNamaItem(namaItemBaru);
                laporan.setHarga(hargaBaru);
                System.out.println(x:"Data berhasil diubah.");
                break;
            }
        }

        if (!ditemukan) {
            System.out.println("Data dengan ID " + id + " tidak ditemukan.");
        }
    }

    private static void hapusData() {
        System.out.println(x:"\n=== Hapus Data ===");
        System.out.print(s:"Masukkan ID Laporan yang ingin dihapus: ");
        String id = scanner.nextLine();

        Iterator<Laporan> iterator = laporanList.iterator();
        boolean ditemukan = false;

        while (iterator.hasNext()) {
            Laporan laporan = iterator.next();
            if (laporan.getId().equals(id)) {
                iterator.remove();
                ditemukan = true;
                System.out.println(x:"Data berhasil dihapus.");
                break;
            }
        }

        if (!ditemukan) {
            System.out.println("Data dengan ID " + id + " tidak ditemukan.");
        }
    }
}
```