

ElectronicProducts.java

```
public class ElectronicProducts {
    protected String productId;
    protected String productname;
    protected String batchId;
    protected String dispatchDate;
    protected int warrantyYears;

    public ElectronicProducts(String productId, String productName, String batchId,
String dispatchDate, int warrantyYears) {
        this.productId = productId;
        this.productname = productName;
        this.batchId = batchId;
        this.dispatchDate = dispatchDate;
        this.warrantyYears = warrantyYears;
    }

    public String getProductId() {
        return productId;
    }

    public void setProductId(String productId) {
        this.productId = productId;
    }

    public String getProductName() {
        return productname;
    }

    public void setProductName(String productName) {
        this.productname = productName;
    }

    public String getBatchId() {
        return batchId;
    }

    public void setBatchId(String batchId) {
        this.batchId = batchId;
    }

    public String getDispatchDate() {
        return dispatchDate;
    }

    public void setDispatchDate(String dispatchDate) {
        this.dispatchDate = dispatchDate;
    }

    public int getWarrantyYears() {
```

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        return warrantyYears;
    }

    public void setWarrantyYears(int warrantyYears) {
        this.warrantyYears = warrantyYears;
    }
}

```

AirConditioner.java

```

public class AirConditioner extends ElectronicProducts {
    private String airConditionerType;
    private double capacity;

    public AirConditioner(String productId, String productName, String batchId, String
dispatchDate, int warrantyYears, String airConditionerType, double capacity) {
        super(productId, productName, batchId, dispatchDate, warrantyYears);
        this.airConditionerType = airConditionerType;
        this.capacity = capacity;
    }

    public String getAirConditionerType() {
        return airConditionerType;
    }

    public void setAirConditionerType(String airConditionerType) {
        this.airConditionerType = airConditionerType;
    }

    public double getCapacity() {
        return capacity;
    }

    public void setCapacity(double capacity) {
        this.capacity = capacity;
    }

    public double calculateProductPrice(){
        double price = 0;
        if(airConditionerType.equalsIgnoreCase("Residential")){
            if (capacity == 2.5){
                price = 32000;
            }
            else if(capacity == 4){
                price = 40000;
            }
            else if(capacity == 5.5){
                price = 47000;
            }
        }
    }
}

```

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    }
    else if(airConditionerType.equalsIgnoreCase("Commercial")){
        if (capacity == 2.5){
            price = 40000;
        }
        else if(capacity == 4){
            price = 55000;
        }
        else if(capacity == 5.5){
            price = 67000;
        }
    }
    else if(airConditionerType.equalsIgnoreCase("Industrial")){
        if (capacity == 2.5){
            price = 47000;
        }
        else if(capacity == 4){
            price = 60000;
        }
        else if(capacity == 5.5){
            price = 70000;
        }
    }
    return price;
}
}

```

LEDTV.java

```

public class LEDTV extends ElectronicProducts {
    private int size;
    private String quality;

    public LEDTV(String productId, String productName, String batchId, String
dispatchDate, int warrantyYears, int size, String quality) {
        super(productId, productName, batchId, dispatchDate, warrantyYears);
        this.size = size;
        this.quality = quality;
    }

    public int getSize() {
        return size;
    }

    public void setSize(int size) {
        this.size = size;
    }

    public String getQuality() {
        return quality;
    }
}

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    }

    public void setQuality(String quality) {
        this.quality = quality;
    }

    public double calculateProductPrice(){
        double price = 0;
        if(quality.equalsIgnoreCase("Low")){
            price = size * 850;
        }
        else if(quality.equalsIgnoreCase("Medium")){
            price = size * 1250;
        }
        else if(quality.equalsIgnoreCase("High")){
            price = size * 1550;
        }
        return price;
    }
}

```

MicrowaveOven.java

```

public class MicrowaveOven extends ElectronicProducts{
    private int quantity;
    private String quality;

    public MicrowaveOven(String productId, String productName, String batchId, String
dispatchDate, int warrantyYears, int quantity, String quality) {
        super(productId, productName, batchId, dispatchDate, warrantyYears);
        this.quantity = quantity;
        this.quality = quality;
    }

    public int getQuantity() {
        return quantity;
    }

    public void setQuantity(int quantity) {
        this.quantity = quantity;
    }

    public String getQuality() {
        return quality;
    }

    public void setQuality(String quality) {
        this.quality = quality;
    }
}

```

```

    public double calculateProductPrice(){
        double price = 0;
        if(quality.equalsIgnoreCase("Low")){
            price = quantity * 1250;
        }
        else if(quality.equalsIgnoreCase("Medium")){
            price = quantity * 1750;
        }
        else if(quality.equalsIgnoreCase("High")){
            price = quantity * 2000;
        }
        return price;
    }
}

```

UserInterface.java

```
import java.util.Scanner;
```

```

public class UserInterface {
    public static void main(String[] args) {
        Scanner sc = new Scanner(System.in);
        System.out.println("Enter Product Id");
        String productId = sc.next();
        System.out.println("Enter Product Name");
        String productName = sc.next();
        System.out.println("Enter Batch Id");
        String batchId = sc.next();
        System.out.println("Enter Dispatch Date");
        String dispatchDate = sc.next();
        System.out.println("Enter Warranty Years");
        int warrantyYears = sc.nextInt();
        double price;
        String quality;

        switch(productName){
            case "AirConditioner":
                System.out.println("Enter type of Air Conditioner");
                String type = sc.next();
                System.out.println("Enter quantity");
                double capacity = sc.nextDouble();
                AirConditioner ac = new AirConditioner(productId, productName, batchId,
dispatchDate, warrantyYears, type, capacity);
                price = ac.calculateProductPrice();
                System.out.printf("Price of the product is %.2f", price);
                break;

            case "LEDTV":
                System.out.println("Enter size in inches");
                int size = sc.nextInt();
                System.out.println("Enter quality");

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        quality = sc.next();
        LEDTV l = new LEDTV(productId, productName, batchId, dispatchDate,
warrantyYears, size, quality);
        price = l.calculateProductPrice();
        System.out.printf("Price of the product is %.2f", price);
        break;

    case "MicrowaveOven":
        System.out.println("Enter quantity");
        int quantity = sc.nextInt();
        System.out.println("Enter quality");
        quality = sc.next();
        MicrowaveOven m = new MicrowaveOven(productId, productName, batchId,
dispatchDate, warrantyYears, quantity, quality);
        price = m.calculateProductPrice();
        System.out.printf("Price of the product is %.2f", price);
        break;

    default:
        System.out.println("Provide a valid Product name");
        System.exit(0);
    }
}
}

```