

الأسم : أحمد محمد أحمد إبراهيم

ID : 23010104

```
import javax.swing.*;

public class EcommerceSystem {
    public static void main(String[] args) {
        ElectronicProduct smartPhone = new ElectronicProduct(1,"Smart
Phone",599.9f,"Samsung",1);
        ClothingProduct T_shirt = new
ClothingProduct(2,"T_shirt",19.99f,"Medium","Cotton");
        BookProduct oop = new BookProduct(3,"OOP",39.99f,"O'Reilly","X
Pubication");
        Customer c1 = new Customer();
        Cart cart1 =new Cart();
        Order o1 =new Order();

        JOptionPane.showMessageDialog(null,"Welcome to th`e E_Commerce System
!");

        int id = Integer.parseInt(JOptionPane.showInputDialog("Please Enter
Your ID : "));
        c1.setCustomerId(id);
        cart1.setCustomerId(id);

        String name =JOptionPane.showInputDialog("Please Enter Your Name :
");
        c1.setName(name);

        String address =JOptionPane.showInputDialog("Please Enter Your
address : ");
        c1.setAddress(address);

        int n = Integer.parseInt(JOptionPane.showInputDialog("How many
products you want to add to your cart ? "));
        cart1.setN(n);

        Product[] products = new Product[cart1.getN()];
        cart1.setProducts(products);

        for (int i=1 ; i<=cart1.getN(); i++) {
            int x = Integer.parseInt(JOptionPane.showInputDialog("Which
product you want to add ? \n 1- Smart Phone    2- T_shirt    3- OPP"+" \n Chose
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a Product by enter this number"));
        switch (x) {
            case 1: cart1.addProduct(smartPhone);
                break;
            case 2: cart1.addProduct(T_shirt);
                break;
            case 3: cart1.addProduct(oop);
                break;
        }
    }
    JOptionPane.showMessageDialog(null, "Your Total Price is
    "+cart1.calculatePrice(cart1.getProducts()));

    int m = Integer.parseInt(JOptionPane.showInputDialog("Would you want
    to place the order? \n 1- Yes   2- No"+"\n Enter your choise"));
    switch (m) {
        case 1: o1.printOrderInfo(cart1);
    }
}
}

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public class Product {
    protected int productId ;
    protected String name ;
    protected float price ;

    public Product(int productId, String name, float price) {
        this.productId = productId;
        this.name = name;
        this.price = price;
    }

    public int getProductId() {
        return productId;
    }

    public void setProductId(int productId) {
        if(productId>=0) {
            this.productId = productId;
        }
        else {
            this.productId=Math.abs(productId);
        }
    }

    public String getName() {
        return name;
    }

    public void setName(String name) {
        this.name = name;
    }
}

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    public float getPrice() {
        return price;
    }

    public void setPrice(float price) {
        if (price >= 0) {
            this.price = price;
        }
        else {
            this.price = Math.abs(price);
        }
    }
}

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public class ElectronicProduct extends Product{
    private String brand ;
    private int warrantyPeriod ;

    public ElectronicProduct(int productId, String name, float price, String
brand, int warrantyPeriod) {
        super(productId, name, price);
        this.brand = brand;
        this.warrantyPeriod = warrantyPeriod;
    }

    public String getBrand() {
        return brand;
    }

    public void setBrand(String brand) {
        this.brand = brand;
    }

    public int getWarrantyPeriod() {
        return warrantyPeriod;
    }

    public void setWarrantyPeriod(int warrantyPeriod) {
        if (warrantyPeriod >= 0) {
            this.warrantyPeriod = warrantyPeriod;
        }
        else {
            this.warrantyPeriod = Math.abs(warrantyPeriod);
        }
    }
}

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```
public class ClothingProduct extends Product{
    private String size ;
    private String fabric ;

    public ClothingProduct(int productId, String name, float price, String
size, String fabric) {
        super(productId, name, price);
        this.size = size;
        this.fabric = fabric;
    }

    public String getSize() {
        return size;
    }

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

    public String getFabric() {
        return fabric;
    }

    public void setFabric(String fabric) {
        this.fabric = fabric;
    }
}
```

```
public class BookProduct extends Product{
    private String author ;
    private String publisher;

    public BookProduct(int productId, String name, float price, String
author, String publisher) {
        super(productId, name, price);
        this.author = author;
        this.publisher = publisher;
    }

    public String getAuthor() {
        return author;
    }

    public void setAuthor(String author) {
        this.author = author;
    }

    public String getPublisher() {
        return publisher;
    }

    public void setPublisher(String publisher) {
        this.publisher = publisher;
    }
}
```

```

public class Customer {
    private int customerId ;
    private String name ;
    private String address ;

    public int getCustomerId() {
        return customerId;
    }

    public void setCustomerId(int customerId) {
        if (customerId>=0) {
            this.customerId = customerId;
        }
        else {
            this.customerId = Math.abs(customerId);
        }
    }

    public String getName() {
        return name;
    }

    public void setName(String name) {
        this.name = name;
    }

    public String getAddress() {
        return address;
    }

    public void setAddress(String address) {
        this.address = address;
    }
}

```

```

import javax.swing.*;
public class Cart {
    protected int customerId ;
    protected int nProducts=0 ;
    protected int n ;

    protected Product[] products =new Product[n];

    public int getCustomerId() {
        return customerId;
    }
}

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public void setCustomerId(int customerId) {
    if (customerId>=0) {
        this.customerId = customerId;
    }
    else {
        this.customerId = Math.abs(customerId);
    }
}

public int getnProducts() {
    return nProducts;
}

public void setnProducts(int nProducts) {
    if (nProducts>=0) {
        this.nProducts = nProducts;
    }
    else {
        this.nProducts = Math.abs(nProducts);
    }
}

public int getN() {
    return n;
}

public void setN(int n) {
    this.n = n;
}

public Product[] getProducts() {
    return products;
}

public void setProducts(Product[] products) {
    this.products = products;
}

public int addProduct(Product product){
    if(nProducts< products.length){
        products[nProducts]= product ;
        JOptionPane.showMessageDialog(null,"Product is add to the cart");
        return nProducts++;
    }
    else {
        JOptionPane.showMessageDialog(null,"Can't add the product ,
because the cart is full ");
        return nProducts ;
    }
}

public void removeProduct(Product product){
    for (int i=0 ;i<products.length ; i++){
        if(products[i]==product){
            products[i] = null;
            this.nProducts--;
            break;
        }
    }
}

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    }
}
public float calculatePrice(Product[] products){
    float sum =0 ;
    for (int i=0 ; i<nProducts ; i++){
        if ( products != null) {
            sum += products[i].getPrice();
        }
    }
    return sum ;
}
public void placeOrder(){
    if (nProducts ==0){
        JOptionPane.showMessageDialog(null,"Can't place order ,because
th cart is empty");
    }
    for (int i=0 ; i<n ; i++) {
        JOptionPane.showMessageDialog(null,"Product ID :
"+products[i].getProductId()+"\n"
        +"Product Name : "+products[i].getName()+"\n"
        +"Product Price : "+products[i].getPrice()+"\n"
        +"Total Price : "+calculatePrice(products)+"\n\n");
    }
}
}
}

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import javax.swing.*;

public class Order extends Cart{
    private int orderId =1 ;
    private float totalPrice = calculatePrice(getProducts()) ;

    public int Order(){
        return orderId++;
    }

    public int getOrderId() {
        return orderId;
    }

    public void setOrderId(int orderId) {
        if (orderId>=0) {
            this.orderId = orderId;
        }
        else {
            this.orderId =Math.abs(orderId);
        }
    }

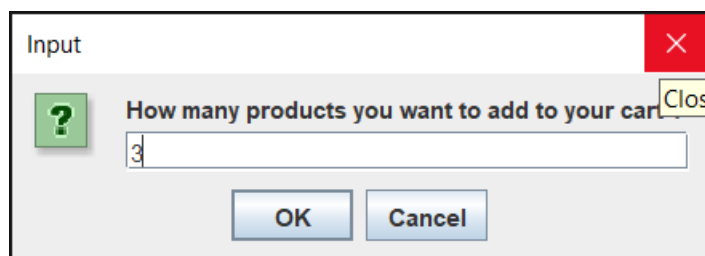
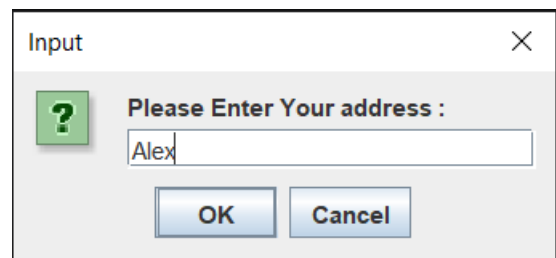
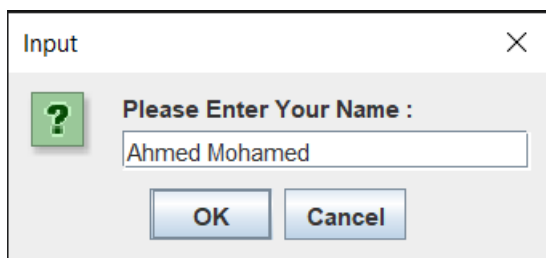
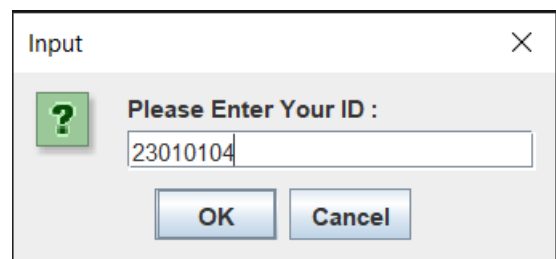
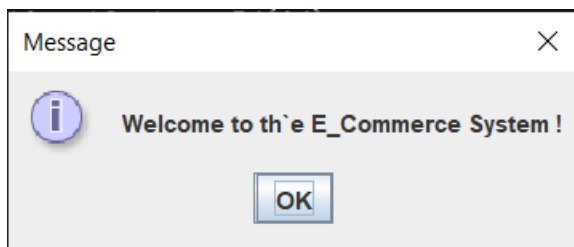
    public float getTotalPrice() {
        return totalPrice;
    }
}

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public void setTotalPrice(float totalPrice) {
    if (totalPrice >= 0) {
        this.totalPrice = totalPrice;
    }
    else {
        this.totalPrice = Math.abs(totalPrice);
    }
}
public void printOrderInfo(Cart cart) {
    JOptionPane.showMessageDialog(null, "Order ID : " + getOrderID());
    cart.placeOrder();
}
}

```




Input

 Which product you want to add ?
1- Smart Phone 2- T_shirt 3- OPP
Chose a Product by enter this number


OK Cancel

Message

 Product is add to the cart


OK

Input

 Which product you want to add ?
1- Smart Phone 2- T_shirt 3- OPP
Chose a Product by enter this number


OK Cancel

Message

 Product is add to the cart


OK

Input

 Which product you want to add ?
1- Smart Phone 2- T_shirt 3- OPP
Chose a Product by enter this number


OK Cancel

Message

 Product is add to the cart


OK

Message

 Your Total Price is 659.88


OK

Input

 Would you want to place the order?
1- Yes 2- No
Enter your choise

OK Cancel

Message

 Order ID : 1

OK

