Main.java ×   product.java ×   ElectronicProduct.java ×   ClothingProduct.java ×   BookProduct.java ×   Customer.java ×   Cart.java ×

```java
package com.company;

import java.util.Scanner;

public class Main {

    public static void main(String[] args) {
        Scanner scan = new Scanner(System.in);
        product electronic = new ElectronicProduct( name: "smartphone", productId: 1, price: 599.9f, brand: "Samsung", warrantyPeriod: 1);
        product clothing = new ClothingProduct( name: "T-shirt", productId: 2, price: 19.99f, size: "Medium", fabric: "Cotton");
        product book = new BookProduct( name: "OOP", productId: 3, price: 39.99f, author: "O Reilly", publisher: "X Publications");
        System.out.println("Welcome to the E-commerce System!");
        System.out.println(" Enter your ID ");
        int ID=scan.nextInt();
        scan.nextLine();
        System.out.println(" Enter your name");
        String name =scan.nextLine();
        System.out.println(" Enter your address ");
        String address = scan.nextLine();
        Customer customer=new Customer(ID,name,address);

        System.out.println("How many products do you want to add to your cart?");
        int nProducts = scan.nextInt();
        Cart cart = new Cart(customer.getCustomerId(),nProducts);


        for (int i = 0;i<nProducts;i++) {
            System.out.println("Which product would you like to add? 1- smartphone 2- T-shirt 3- OOP" );
            int productChoice = scan.nextInt();
            product product:
```

Main > main()

Main.java ×   product.java ×   ElectronicProduct.java ×   ClothingProduct.java ×   BookProduct.java ×   Customer.java ×   Cart.java ×

```java
27          product product;
28          switch (productChoice){
29              case 1:
30                  product=new ElectronicProduct( name: "smartphone", productId: 1, price: 599.9f, brand: "Samsung", warrantyPeriod: 1)
31                  break;
32              case 2:
33                  product= new ClothingProduct( name: "T-shirt", productId: 2, price: 19.99f, size: "Medium", fabric: "Cotton");
34                  break;
35              case 3:
36                  product = new BookProduct( name: "OOP", productId: 3, price: 39.99f, author: "O Reilly", publisher: "X Publications"
37                  break;
38              default:
39                  System.out.println("Invalid choice ");
40                  i--;
41                  continue;
42          } cart.addProduct(product,i);
43
44      }
45      System.out.println("Your total is "+cart.calculatePrice()+" Do you want to place an order for the products in your cart
46      int resp = scan.nextInt();
47      if (resp==1){
48          System.out.println("Here is your order summary");
49          Order order =new Order(ID, orderId: 1,cart.getProducts(),(float)cart.calculatePrice());
50          order.printOrderInfo();
51      }
52   }
53 }
```

Main > main()

Run: Main ×

File   Edit   View   Navigate   Code   Analyze   Refactor   Build   Run   Tools   VCS   Window   Help

e-commerce) src) com) company) product   Main ▾   ▶ ※ ✿ ■   ▣ Q

Main.java ×   product.java ×   ElectronicProduct.java ×   ClothingProduct.java ×   BookProduct.java ×   Customer.java ×   Cart.java ×

```java
package com.company;


public class product {
    private String name;
    private int productld;
    private float price;
    public product(String name,int productld,float price){
        this.name=name;
        this.productld=Math.abs(productld);
        this.price=Math.abs(price);
    }
    public void setName(String name) { this.name = name; }

    public String getName() { return name; }

    public void setProductld(int productld) { this.productld = Math.abs(productld); }

    public int getProductld() { return productld; }

    public void setPrice(float price) { this.price = Math.abs(price); }

    public float getPrice() { return price; }
}
```

product

e-commerce > src > com > company > ElectronicProduct   Main ▾ ▶ 🐞 🔾 ■ 🎁 🖵 Q

Main.java × product.java × ElectronicProduct.java × ClothingProduct.java × BookProduct.java × Customer.java × Cart.java × ▾≣2

```java
package com.company;

public class ElectronicProduct extends product {
    private String brand;
    private int warrantyPeriod;
    public  ElectronicProduct(String name,int productld,float price,String brand,int warrantyPeriod){
        super(name,productld,price);
        this.brand=brand;
        this.warrantyPeriod=Math.abs(warrantyPeriod);
    }

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


    public String getBrand() {
        return brand;
    }


    public void setWarrantyPeriod(int warrantyPeriod) {
        this.warrantyPeriod = Math.abs(warrantyPeriod);
    }


    public int getWarrantyPeriod() {
        return warrantyPeriod;
    }

}
```

ElectronicProduct

Run: Main ×

☰ 0: Messages   ▶ 4: Run   ☰ 6: TODO   ⬛ Terminal   1 Event Log
Error: java.awt.print.PrinterAbortException (55 minutes ago)   3:14 CRLF UTF-8 4 spaces

```java
package com.company;


public class ClothingProduct extends product {
    private  String size;
    private String fabric;
public ClothingProduct(String name,int productld,float price,String size,String fabric){
    super(name,productld,price);
    this.size=size;
    this.fabric=fabric;
}

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


    public String getSize() {
        return size;
    }


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


    public String getFabric() {
        return fabric;
    }

}
```

ClothingProduct

```java
package com.company;


public class BookProduct extends product {
    private String author;
    private String publisher;
    public BookProduct(String name,int productld,float price,String author ,String publisher){
        super(name,productld,price);
        this.author=author;
        this.publisher= publisher;
    }
    public void setAuthor(String author) {
        this.author = author;
    }


    public String getAuthor() {
        return author;
    }


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


    public String getPublisher() {
        return publisher;
    }

}

```

BookProduct

Run: Main ×   ⚙ —

≡ 0: Messages   ▶ 4: Run   ≣ 6: TODO   ⬛ Terminal   1 Event Log
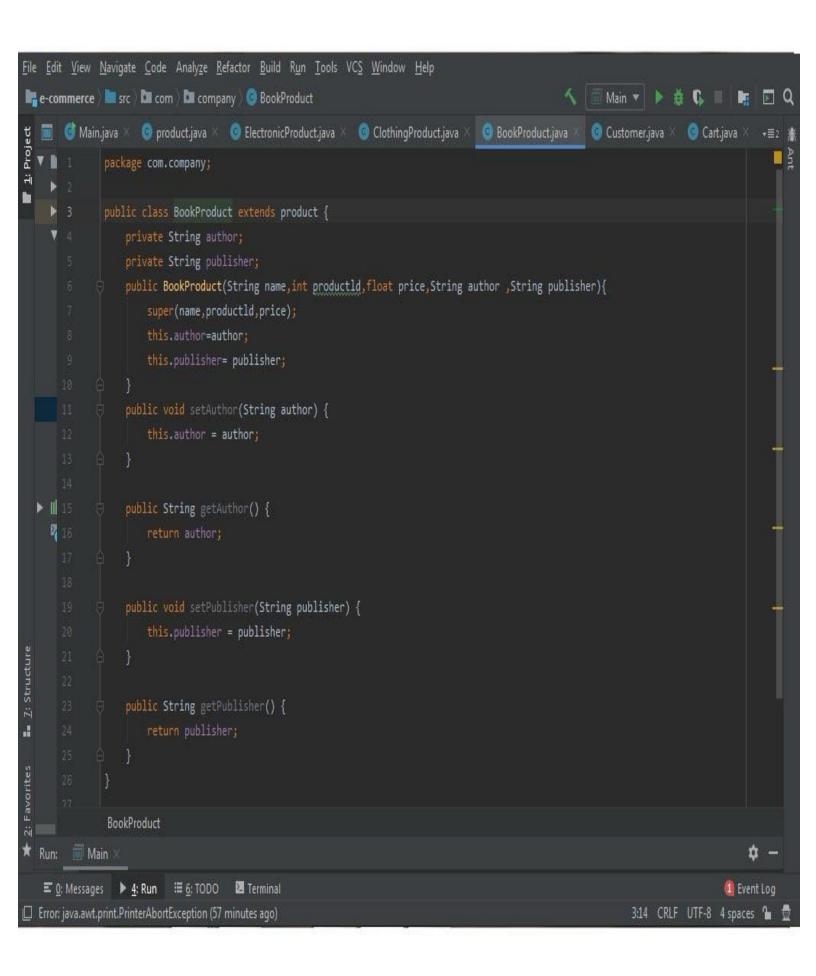Error: java.awt.print.PrinterAbortException (57 minutes ago)   3:14   CRLF   UTF-8   4 spaces

Main.java ×   product.java ×   ElectronicProduct.java ×   ClothingProduct.java ×   BookProduct.java ×   Customer.java ×   Cart.java ×

```java
public class Customer {
    private int customerId;
    private String name;
    private String address;
    public Customer(int customerId,String name,String address){
        this.customerId=Math.abs(customerId);
        this.name=name;
        this.address=address;
    }

    public void setCustomerId(int customerId) {
        this.customerId = Math.abs(customerId);
    }

    public int getCustomerId() {
        return customerId;
    }

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

    public String getName() {
        return name;
    }

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

    public String getAddress() {
        return address;
    }
}
```
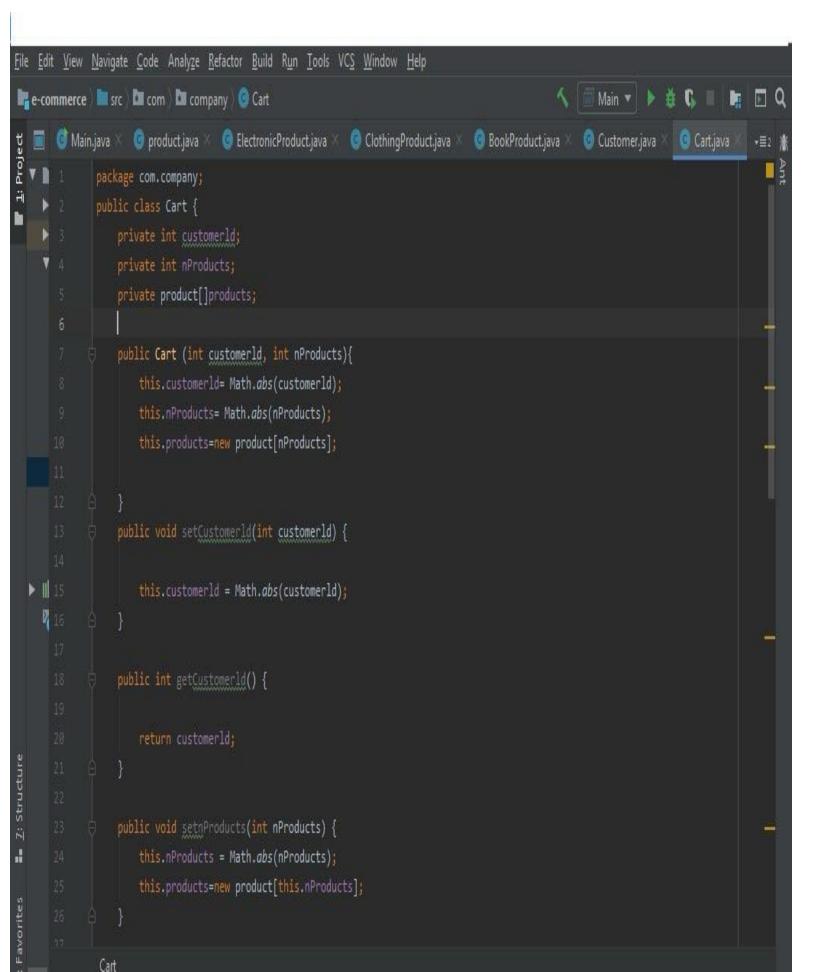
File Edit View Navigate Code Analyze Refactor Build Run Tools VCS Window Help

e-commerce) src) com) company) Cart   Main ▼

Main.java ×   product.java ×   ElectronicProduct.java ×   ClothingProduct.java ×   BookProduct.java ×   Customer.java ×   Cart.java ×

```java
package com.company;
public class Cart {
    private int customerId;
    private int nProducts;
    private product[]products;

    public Cart (int customerId, int nProducts){
        this.customerId= Math.abs(customerId);
        this.nProducts= Math.abs(nProducts);
        this.products=new product[nProducts];

    }
    public void setCustomerId(int customerId) {

        this.customerId = Math.abs(customerId);
    }


    public int getCustomerId() {

        return customerId;
    }


    public void setnProducts(int nProducts) {
        this.nProducts = Math.abs(nProducts);
        this.products=new product[this.nProducts];
    }
```

Cart

Main.java ×   product.java ×   ElectronicProduct.java ×   ClothingProduct.java ×   BookProduct.java ×   Customer.java ×   Cart.java ×

```java
28          public product[] getProducts() {
29              return products; }
30      public void addProduct(product product,int index){
31          if(index>=0&& index < nProducts){
32              products[index]=product;
33          }else {
34              System.out.println("invalid index");
35          }
36      }
37        public  void removeProduct(int index){
38        if(index >=0&& index< nProducts){
39            products[index]=null;
40        }else {
41            System.out.println(" invalid index");
42        }
43        }
44      public double calculatePrice(){
45          float totalPrice= 0;
46          for (product product: products){
47              if (product!=null){ totalPrice+=product.getPrice(); }
48          }
49          return totalPrice;
50      }
51      public void placeOrder(){
52          System.out.println("Order Placed Successfully");
53      }
54      }
```

Cart › getProducts()

Run: Main ×

≡ 0: Messages   ▶ 4: Run   ≡ 6: TODO   Terminal   1 Event Log

Error: java.awt.print.PrinterAbortException (today 02:08 ص)   29:26 CRLF UTF-8 4 spaces

ⓒ ElectronicProduct.java × ⓒ ClothingProduct.java × ⓒ BookProduct.java × ⓒ Customer.java × ⓒ Cart.java × ⓒ Order.java × e-commerce.iml ×

```java
package com.company;
public class Order {
    private int customerId;
    private int orderId;
    private product[]products;
    private float totalPrice;


    public Order(int customerId, int orderId ,product[]products ,float totalPrice){
        this.customerId=Math.abs(customerId);
        this.orderId=Math.abs(orderId);
        this.totalPrice=Math.abs(totalPrice);
        this.products=products;

    }


    public void setCustomerId(int customerId) { this.customerId = Math.abs(customerId); }


    public int getCustomerId() { return customerId; }


    public void setOrderId(int orderId) { this.orderId =Math.abs( orderId); }


    public int getOrderId() { return orderId; }


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


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


    public void setTotalPrice(float totalPrice) { this.totalPrice =Math.abs( totalPrice); }
```

File Edit View Navigate Code Analyze Refactor Build Run Tools VCS Window Help

e-commerce) src) com) company) Order

Main ▼

ElectronicProduct.java × ClothingProduct.java × BookProduct.java × Customer.java × Cart.java × Order.java × e-commerce.iml × ▼≡2

```java
        public product[] getProducts() {
            return products;
        }


        public void setTotalPrice(float totalPrice) {
            this.totalPrice =Math.abs( totalPrice);
        }

        public float getTotalPrice() {
            return totalPrice;
        }
        public void printOrderInfo(){
            System.out.println("Order ID "+orderId);
            System.out.println("Customer ID "+ customerId);
            System.out.println("Products :");
            for (product product : products){
                System.out.println(" - "+ product.getName() +" , Price :"+ product.getPrice());
            }
            System.out.println("total price "+ totalPrice);
        }

    }
```

Order > getTotalPrice()

Run: Main ×

≡ 0: Messages   ▶ 4: Run   ≡ 6: TODO   Terminal   1 Event Log

Error: java.awt.print.PrinterAbortException (today 02:08 ص)   43:33 CRLF UTF-8 4 spaces

e-commerce) src) com) company) Main ⟨ Main ▼ ▶ 🐞 🔾 ■ 📥 □ Q

Main.java × product.java × ElectronicProduct.java × ClothingProduct.java × BookProduct.java × Customer.java × Cart.java × (× ▾≡₂ 🛠

Run: Main × ⚙ —

```
Welcome to the E-commerce System!

 Enter your ID

23012084

 Enter your name

Mohamed ehab mohamed

 Enter your address

alex

How many products do you want to add to your cart?

4

Which product would you like to add? 1- smartphone 2- T-shirt 3- OOP

2

Which product would you like to add? 1- smartphone 2- T-shirt 3- OOP

3

Which product would you like to add? 1- smartphone 2- T-shirt 3- OOP

2

Which product would you like to add? 1- smartphone 2- T-shirt 3- OOP

1

Your total is 679.8699951171875 Do you want to place an order for the products in your cart? (1-yes or2- no)

1

Here is your order summary

Order ID 1

Customer ID 23012084

Products :

 - T-shirt , Price :19.99

 - OOP , Price :39.99

 - T-shirt , Price :19.99

 - smartphone , Price :599.9

total price 679.87
```

Name: Mohamed ehab mohamed
ID: 23012084