

name: hania mohamed ibrahim soliman  
id: 23012133

```
<terminated> EcommerceSystem [Java Application] C:\Program Files\Java\jdk-21\bin\javaw.exe (Apr 22, 2024, 11:20:20AM - 11:22:01)
Welcome to the E-Commerce System!
Please enter your id
23012133
Please enter your name
hania mohamed
Please enter your address
address
How many products 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
|
2
Which product would you like to add?
1- Smartphone 2- T-Shirt 3- OOP
1
Which product would you like to add?
1- Smartphone 2- T-Shirt 3- OOP
2
Your total is $659.87. Would you like to place the order? 1- Yes 2- No
1
```

```
1- Smartphone 2- T-Shirt 3- OOP
2
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
Which product would you like to add?
1- Smartphone 2- T-Shirt 3- OOP
2
Your total is $659.87. Would you like to place the order? 1- Yes 2- No

1
Here's your order's summary:
Order ID: 1
Customer ID: 23012133
Products:
T-Shirt - $19.99
T-Shirt - $19.99
Smartphone - $599.9
T-Shirt - $19.99
Total Price: $659.87
```

```
class Product {
    private int productId;
    private String name;
    private float price;

    public Product(int productId, String name, float pr
        this.productId = Math.abs(productId);
        this.name = name;
        this.price = Math.abs(price);
    }
    public int getProductId() {
        return productId;
    }

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

    public String getName() {
        return name;
    }

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

```
        this.price = Math.abs(price);
    }
    public int getProductId() {
        return productId;
    }

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

    public String getName() {
        return name;
    }

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

    public float getPrice() {
        return price;
    }

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

```
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 = Math.abs(warrantyPeriod);
    }

    // Getters and setters
    public String getBrand() {
        return brand;
    }

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

    public int getWarrantyPeriod() {
        return warrantyPeriod;
    }

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

```
1
2 class ClothingProduct extends Product {
3     private String size;
4     private String fabric;
5
6     public ClothingProduct(int productId, String name, float price, String size, String fabric) {
7         super(productId, name, price);
8         this.size = size;
9         this.fabric = fabric;
10    }
11    public String getSize() {
12        return size;
13    }
14
15    public void setSize(String size) {
16        this.size = size;
17    }
18
19    public String getFabric() {
20        return fabric;
21    }
22
23    public void setFabric(String fabric) {
24        this.fabric = fabric;
25    }
26 }
27
28 public ClothingProduct(int productId, String name, float price, String size, String fabric) {
```

```
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;
    }
```

```
Customer.java ▾ ElectronicProduct.java ▾ ClothingProduct.java ▾ BookProduct.java ▾ Customer.java ▾ Cart.java ▾ Order.java ▾ Ecomm...  
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 int getCustomerId() {  
        return customerId;  
    }  
  
    public void setCustomerId(int customerId) {  
        this.customerId = customerId;  
    }  
  
    public String getName() {  
        return name;  
    }  
  
    public void setName(String name) {  
        this.name = name;  
    }  
}
```

Problems Javadoc Declaration Console

```
Cart.java  
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 int getCustomerId() {  
        return customerId;  
    }  
  
    public void setCustomerId(int customerId) {  
        this.customerId = customerId;  
    }  
  
    public int getnProducts() {  
        return nProducts;  
    }  
  
    public void setnProducts(int nProducts) {  
        this.nProducts = nProducts;  
    }  
}
```

```
Cart.java  
Product.java ▾ ElectronicProduct.java ▾ ClothingProduct.java ▾ BookProduct.java ▾ Customer.java ▾ Cart.java ▾ Order.java  
28*     public Product[] getProducts() {  
29         return products;  
30     }  
31  
32*     public void setProducts(Product[] products) {  
33         this.products = products;  
34     }  
35*     public void addProduct(int index, Product product) {  
36         products[index] = product;  
37     }  
38  
39*     public void removeProduct(int index) {  
40         products[index] = null;  
41     }  
42  
43*     public float calculatePrice() {  
44         float totalPrice = 0;  
45         for (Product product : products) {  
46             if (product != null) {  
47                 totalPrice += product.getPrice();  
48             }  
49         }  
50         return totalPrice;  
51     }  
52  
53*     public void placeOrder() {  
54     }
```

```
product.java  *ElectronicProd...  *ClothingProduc...  *BookProduct.java  *Customer.java  *Cart.java
class Order {
    private int customerId;
    private int orderId;
    private Product[] products;
    private float totalPrice;

    public Order(int customerId, int orderId, Product[] products) {
        this.customerId = Math.abs(customerId);
        this.orderId = Math.abs(orderId);
        this.products = products;
        this.totalPrice = calculateTotalPrice();
    }

    public int getCustomerId() {
        return customerId;
    }

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

    public int getOrderId() {
        return orderId;
    }

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

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

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

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

public float getTotalPrice() {
    return totalPrice;
}

public void setTotalPrice(float totalPrice) {
    this.totalPrice = 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() + " - $" + product.getPrice());
    }
}

public Product[] getProducts() {
}
```

```
}

public void setTotalPrice(float totalPrice) {
    this.totalPrice = 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() + " - $" + product.getPrice());
    }
    System.out.println("Total Price: $" + totalPrice);
}

private float calculateTotalPrice() {
    float total = 0;
    for (Product product : products) {
        if (product != null) {
            total += product.getPrice();
        }
    }
    return total;
}
}
```



