

```

5 package com.mycompany.ecommerce_system;
6 import javax.swing.JOptionPane;
7 public class Ecommerce_System {
8
9     public static void main(String[] args) {
10         JOptionPane.showMessageDialog(parentComponent: null,message: "welcom to the E_commerse system");
11
12         ElectronicProduct e1=new ElectronicProduct(productId:1,name: "smartphone",price: 599.9f,brand: "Samsung",warrantyPeriod: 1);
13
14
15         ClothingProduct c1=new ClothingProduct(size: "Medium",fabric:"Cotton",productId:2,name: "T-shirt",price: 19.99f);
16
17         BookProduct p1=new BookProduct(author:"O'Reilly",publisher:"X Publications",productId:3,name: "OOP",price: 39.99f);
18
19
20         int customerId= Integer.parseInt( JOptionPane.showInputDialog(message: "please enter your id:"));
21         String name=JOptionPane.showInputDialog(message: "please enter your name:");
22         String address=JOptionPane.showInputDialog(message: "please enter your address:");
23         Customer c=new Customer(customerId,name,address);
24         int nProducts=Integer.parseInt( JOptionPane.showInputDialog(message: "How many products you want to add to your cart ?"));
25         System.out.println("n: nProducts);
26         Cart c2=new Cart(customerId,nProducts);
27         Order o1=new Order(customerId,orderId: 1, nproduct: nProducts);
28
29         for(int i=0;i<nProducts;i++){
30             int producttype= Integer.parseInt( JOptionPane.showInputDialog("which product would you like to add ?"
31                 +"1-"+e1.getName() +" 2-"+c1.getName()+" 3-"+p1.getName()));
32
33             switch (producttype) {
34                 case 1:
35
36                     c2.addProduct(p: e1, index: i);
37                     break;
38
39                 case 2:
40

```

```

34     switch (producttype) {
35         case 1:
36             c2.addProduct(p: e1, index: i);
37             break;
38
39             case 2:
40
41                 c2.addProduct(p: c1, index: i);
42                 break;
43
44                 case 3:
45                     c2.addProduct(p: p1, index: i);
46                     break;
47                 default:
48                     JOptionPane.showMessageDialog(parentComponent: null, message: "Invalid product type. Skipping...");
49             }
50
51     }
52     int num= Integer.parseInt( JOptionPane.showInputDialog("would you like to place the order?"+"1- yes 2- no"));
53
54     switch (num) {
55         case 1:
56
57             c2.placeOrder();
58             ol.setProducts(products: c2.getProducts());
59             ol.printOrderInfo();
60             break;
61
62         case 2:
63             JOptionPane.showMessageDialog(parentComponent: null, message: "Order not placed.");
64
65             break;
66
67     }
68 }
69

```

```

package com.company.ecommerce_system;

/**
 *
 * @author nour
 */
public class ElectronicProduct extends Product {
    private String brand;
    private int warrantyPeriod;

    public ElectronicProduct(int productId, String name, Float price, String brand) {
        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) {
        this.warrantyPeriod = Math.abs(warrantyPeriod);
    }
}

```

```

package com.mycompany.ecommerce_system;

/**
 *
 * @author nour
 */
public class BookProduct extends Product {
    private String author;
    private String publisher;

    public String getAuthor() {
        return author;
    }

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

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

    public String getPublisher() {
        return publisher;
    }

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

```

```
package com.mycompany.ecommerce_system;
```

```
/**
```

```
 *
```

```
 * @author nour
```

```
 */
```

```
public class ClothingProduct extends Product {
```

```
    private String size;
```

```
    private String fabric;
```

```
    public String getSize() {
```

```
        return size;
```

```
    }
```

```
    public ClothingProduct(String size, String fabric, int productId, String name, Float price) {
```

```
        super(productId, name, price);
```

```
        this.size = size;
```

```
        this.fabric = fabric;
```

```
    }
```

```
    public void setSize(String size) {
```

```
        this.size = size;
```

```
    }
```

```
    public String getFabric() {
```

```
        return fabric;
```

```
    }
```

```
    public void setFabric(String fabric) {
```

```
        this.fabric = fabric;
```

```
    }
```

```
}
```

...a1 Cart.java X Ecommerce\_System.java X Order.java X Customer.java X Product.java X ClothingProduct.java X ElectronicPro

Source History

```
4  */
5  package com.mycompany.ecommerce_system;
6  public class Cart {
7      private int customerId;
8      protected int nProducts;
9      Product[] products;
10
11
12      public Cart(int customerId, int nProducts) {
13          this.customerId = Math.abs(a: customerId);
14          this.nProducts = Math.abs(a: nProducts);
15          this.products = new Product[nProducts];
16      }
17
18      public int getCustomerId() {
19          return customerId;
20      }
21
22      public void setCustomerId(int customerId) {
23          this.customerId = customerId;
24      }
25
26      public int getnProducts() {
27          return nProducts;
28      }
29
30      public void setnProducts(int nProducts) {
31          this.nProducts =nProducts;
32      }
33
34      public Product[] getProducts() {
35          return products;
36      }
37
38      public void setProducts(Product[] products) {
39          this.products = products;
40      }
```

Run (Ecommerce System) X (2 more)



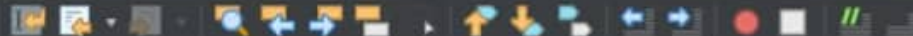
```

36 }
37
38 public void setProducts(Product[] products) {
39     this.products = products;
40 }
41
42 public void addProduct(Product p, int index) {
43     if (index >= 0 && index < products.length) {
44         this.products[index] = p;
45     } else {
46         System.out.println(x: "out of bounds");
47     }
48 }
49
50 public void removeProduct(int index) {
51     if (index >= 0 && index < nProducts) {
52         products[index] = null;
53     } else {
54         System.out.println(x: "Invalid index for removing product from cart.");
55     }
56 }
57
58 public float calculatePrice() {
59     float totalPrice = 0;
60     for (int i=0; i<products.length; i++) {
61         totalPrice += products[i].getPrice();
62     }
63     return totalPrice;
64 }
65
66 public void placeOrder() {
67     System.out.println(x: "Here's your order's summary:");
68 }
69

```

Source

History



```
10  */
11  import javax.swing.JOptionPane;
12  public class Order {
13      private int customerId;
14      private int orderId;
15      Product[] products;
16      private float totalPrice;
17
18      public Order(int customerId, int orderId, int nproduct) {
19          this.customerId = Math.abs(a: customerId);
20          this.orderId = Math.abs(a: orderId);
21          this.products = new Product[nproduct];
22      }
23      public int getCustomerId() {
24          return customerId;
25      }
26
27      public void setCustomerId(int customerId) {
28          this.customerId =customerId;
29      }
30
31      public int getOrderId() {
32          return orderId;
33      }
34
35      public void setOrderId(int orderId) {
36          this.orderId = orderId;
37      }
38
39      public Product[] getProducts() {
40          return products;
41      }
42
43      public void setProducts(Product[] products) {
44          this.products = products;
45      }
46  }
```



```
...a1 | Cart.java X | Ecommerce_System.java X | Order.java X | Customer.java X | Product.java X | ClothingProduct.java X | ElectronicProduct.java X | BookProduct.jav...
Source | History | [Icons]
44 public void setProducts(Product[] products) {
45     this.products = products;
46 }
47
48 public float getTotalPrice() {
49     return totalPrice;
50 }
51
52 public void setTotalPrice(float totalPrice) {
53     this.totalPrice = totalPrice;
54 }
55
56 private double calculateTotalPrice() {
57     this.totalPrice = 0;
58     for (int i=0;i<products.length;i++) {
59         if ( products!= null) {
60             totalPrice += products[i].getPrice();
61         }
62     }
63     return totalPrice;
64 }
65
66 public void printOrderInfo() {
67     JOptionPane.showMessageDialog(parentComponent: null,"Order ID: " + orderId);
68     JOptionPane.showMessageDialog(parentComponent: null,"Customer ID: " +getCustomerId());
69     JOptionPane.showMessageDialog(parentComponent: null,message: "Products:");
70
71     for (int i=0;i<products.length;i++) {
72         if (products != null) {
73             JOptionPane.showMessageDialog(parentComponent: null,"- " + products[i].getName() + ", $" + products[i].getPrice());
74         }
75     }
76
77     JOptionPane.showMessageDialog(parentComponent: null,"Total price:"+this.calculateTotalPrice());
78
79 }
80 }
```

```

9      * @author neur
10     */
11
12     public class Product {
13
14         protected int productId;
15         protected String name;
16         protected Float price;
17
18         public Product(int productId, String name, Float price) {
19             this.productId = Math.abs(productId);
20             this.name = name;
21             this.price = Math.abs(price);
22         }
23
24         public int getProductId() {
25             return productId;
26         }
27
28         public void setProductId(int productId) {
29             this.productId = productId;
30         }
31
32         public String getName() {
33             return name;
34         }
35
36         public void setName(String name) {
37             this.name = name;
38         }
39
40         public Float getPrice() {
41             return price;
42         }
43
44         public void setPrice(Float price) {
45             this.price = price;
46         }
47     }
48
49
50
51
52
53
54
55
56
57
58
59
60
61
62
63
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```

Message



welcom to the E\_commerse system



Input



**please enter your id:**

23011588

**OK**

**Cancel**

Input



**please enter your name:**

nermeen

OK

Cancel

Input



**please enter your address:**

alex

**OK**

**Cancel**



Input



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

2

**OK**

**Cancel**

Input



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

1

OK

Cancel

Input



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

3

OK

Cancel

Input



would you like to place the order?1- yes 2- no

1

OK

Cancel

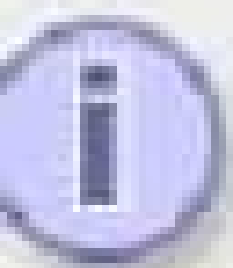
# Message



**Customer ID: 23011588**



Message



- smartphone, \$599.9







- OOP, \$39.99





**Total price: 639.8900146484375**



```
...a1 | Cart.java × | Ecommerce_System.java × | Order.java × | Customer.java × | Product.java × | ClothingProduct.java × | Elec

Source | History | [Icons]

10
11 public class Customer{
12     private int customerId;
13     private String name;
14     private String address;
15     [-] public Customer(int customerId, String name, String address) {
16         |     this.customerId = customerId;
17         |     this.name = name;
18         |     this.address = address;
19         | }
20
21
22
23
24 [-] public int getCustomerId() {
25     |     return customerId;
26     | }
27
28 [-] public void setCustomerId(int customerId) {
29     |     this.customerId = Math.abs(a: customerId);
30     | }
31
32 [-] public String getName() {
33     |     return name;
34     | }
35
36 [-] public void setName(String name) {
37     |     this.name = name;
38     | }
39
40 [-] public String getAddress() {
41     |     return address;
42     | }
43
44 [-] public void setAddress(String address) {
45     |     this.address = address;
46     | }
47 }
```