

```

1 import javax.swing.JOptionPane;
2 public class EcommerceSystem2 {
3     public static void main(String[] args) {
4         String name=JOptionPane.showInputDialog("Enter your name");
5         JOptionPane.showMessageDialog(null,"Hello "+name+" to the Ecommerce system!");
6         String address =JOptionPane.showInputDialog("Please "+name+" Enter your address ");
7         int id =Integer.parseInt(JOptionPane.showInputDialog("please "+name+" Enter your id: "));
8
9         customer k = new customer (id,name,address);
10        ElectronicProduct e = new ElectronicProduct("samsung",1,1,"smart phone",599.9f);
11        ClothingProduct c = new ClothingProduct("medium","fabric",2,"t-shirt",19.99f);
12        BookProduct b = new BookProduct("O'reilly","X publisher",3,"OOP",39.99f);
13        int nproduct =Integer.parseInt(JOptionPane.showInputDialog("How many many products you want to add to your
14        cart cart = new cart());
15        cart.setCustomerid(k.getCustomerid());
16        cart.setNproduct(nproduct);
17        for (int i = 0; i < nproduct; i++) {
18            int ARRAY=Integer.parseInt(JOptionPane.showInputDialog("Which product would you like to add?1-Smart Phone
19                switch (ARRAY) {
20                    case 1:
21                        cart.addProduct(e);
22                        break;
23                    case 2:
24                        cart.addProduct(c);
25                        break;

```

```
        cart.addProduct(e);  
        break;  
    case 2:  
        cart.addProduct(c);  
        break;  
    case 3:  
        cart.addProduct(b);  
        break;  
    default:  
        System.out.println("invalid choice!");  
    }  
}
```

```
JOptionPane.showMessageDialog(null, "your total is: "+cart.calculateprice());  
int choice = Integer.parseInt(JOptionPane.showInputDialog( "Do you want to place the order?1.yes 2.no "));  
cart.placeorder(choice);  
f (choice == 1) {  
    order o = new order(cart);  
    o.printorderinfo();  
    JOptionPane.showMessageDialog(null, "Thank you "+name+" to use our Ecommerce system!");  
else if (choice == 2) {  
    JOptionPane.showMessageDialog(null, "your cart is Empty now.\nThank you"+name+"for using our Ecommerce system!")  
else {  
    JOptionPane.showMessageDialog(null, "invalid input");  
}
```

```
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) {  
        this.productid= Math.abs(productid); //to get a positive  
    }  
  
    public String getName() {  
        return name;  
    }  
  
    public void setName(String name) {  
        this.name = name;  
    }  
  
    public float getPrice() {  
        return price;  
    }  
}
```



```
    this.name = name;  
}
```

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

```
public void setPrice(float price) {  
    this.price=Math.abs(price); //to get a p  
}
```

```
}
```

```
1 public class ElectronicProduct extends product {
```

```
2     protected String brand;
```

```
3     protected int warrantyperiod;
```

```
4  
5     public ElectronicProduct(String brand, int warrantyperiod, int productid, String name, float price) {
```

```
6         super(productid, name, price); //inherited from product
```

```
7         this.brand = brand;
```

```
8         this.warrantyperiod = warrantyperiod;
```

```
9     }
```

```
10  
11     public String getBrand() {
```

```
12         return brand;
```

```
13     }
```

```
14  
15     public void setBrand(String brand) {
```

```
16         this.brand = brand;
```

```
17     }
```

```
18  
19     public int getWarrantyperiod() {
```

```
20         return warrantyperiod;
```

```
21     }
```

```
22  
23     public void setWarrantyperiod(int warrantyperiod) {
```

```
24         this.warrantyperiod = Math.abs(warrantyperiod); //to always get a positive value
```

```
25     }
```

```
1 public class BookProduct extends product{
2     protected String author;
3     protected String publisher;
4
5     public BookProduct(String author, String publisher, int productid, String name, float price) {
6         super(productid, name, price); //inherited from product
7         this.author = author;
8         this.publisher = publisher;
9     }
10
11
12     public String getAuthor() {
13         return author;
14     }
15
16     public void setAuthor(String author) {
17         this.author = author;
18     }
19
20     public String getPublisher() {
21         return publisher;
22     }
23
24     public void setPublisher(String publisher) {
25         this.publisher = publisher;
26     }
27 }
```

```
public class ClothingProduct extends product {
```

```
    protected String size;
```

```
    protected String fabric;
```

```
    public ClothingProduct(String size, String fabric, int productid, String name, float price) {
```

```
        super(productid, name, price); //inherited from product
```

```
        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 customer {  
    private int customerid; //private customer id في كلاس تاتي  
    private String name; //w name  
    private String address;  
  
    public customer(int customerid, String name, String address) {  
        this.customerid = customerid;  
        this.name = name;  
        this.address = address;  
    }  
  
    public int getCustomerid() {  
        return customerid;  
    }  
  
    public void setCustomerid(int customerid) {  
        this.customerid = Math.abs(customerid); //positive value  
    }  
  
    public String getName() {  
        return name;  
    }  
  
    public void setName(String name) {  
        this.name = name;  
    }  
}
```



```
public int getCustomerId() {  
    return customerid;  
}  
  
public void setCustomerId(int customerid) {  
    this.customerid = Math.abs(customerid); //positive value  
}  
  
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.JOptionPane;

public class cart {
    private int customerid;
    private int nproduct;
    protected product[] arr;

    public product[] getArr() { //constructor

        return arr;
    }

    public void setArr(product[] arr) { //can be removed
        this.arr = new product[nproduct];
    }

    public int getCustomerId() {
        return customerid;
    }

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

    public int getNproduct() {
        return nproduct;
    }
}
```

```

public void setNproduct(int nproduct) {
    this.nproduct=Math.abs(nproduct);
    arr = new product[this.nproduct];
}

public void addProduct(product product){
    for (int i = 0; i < nproduct; i++) { // 0 1 2 3 size/nproduct : 4
        if(arr[i]==null){ // *
            arr[i] = product;//add product mn elmain to the array and exit the fuction then enters the
            return;//exit function after every iteration
        }
    }

    JOptionPane.showMessageDialog(null,"the cart is full,can not add more products.");

}

public void removeproduct(int in){
    if(in>=0&&in<nproduct){
        arr[in]=null;
    } else{
        JOptionPane.showMessageDialog(null,"invalid index,cannot remove product.");
    }
}

public float calculateprice(){
float total=0;
for(int i=0;i<nproduct;i++){
    if(arr[i]!=null){
        total+=arr[i].getPrice();}
}
}

```

```
public float calculateprice() {  
    float total=0;  
    for(int i=0;i<nproduct;i++){  
        if(arr[i]!=null){  
            total+=arr[i].getPrice();}  
        }return total;  
    }  
    public void placeorder(int n){  
        switch(n){  
            case 1:JOptionPane.showMessageDialog(null,"your order has been successfully confirmed.");  
            break;  
            case 2:for (int i = 0; i < arr.length; i++) {  
                arr[i]=null;  
            }break;  
        }  
    }  
}
```



```
import javax.swing.JOptionPane;

public class order {
    private int customerid;
    private int orderid;
    private product[] arr;
    private float totalprice;
    static int number ;

    public order(cart c ) { //association
        number ++;
        this.customerid = c.getCustomerid();
        this.orderid = number;
        this.arr = c.getArr();
        this.totalprice = c.calculateprice();
    }

    public void printorderinfo() {
        JOptionPane.showMessageDialog(null, "Here's your order's summary: \n" + "Order id: " + orderid + "\nCustomer id: " + customerid);
        for (int i = 0; i < arr.length; i++) {
            if (arr[i] != null) {
                JOptionPane.showMessageDialog(null, "name : " + arr[i].getName() + "\nprice : " + arr[i].getPrice());
            }
        }
    }
}
```

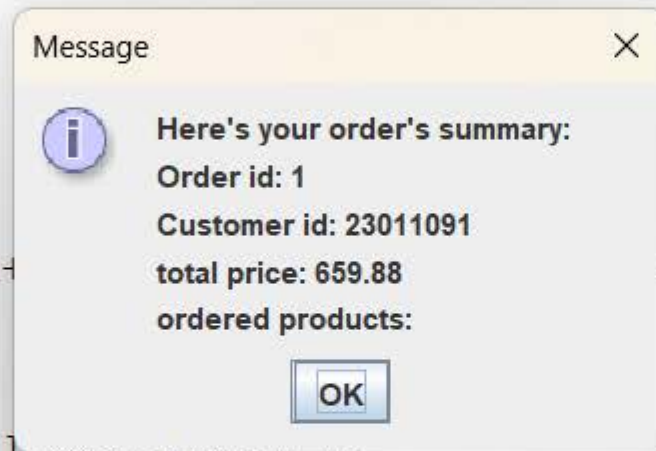
```
ary: \n"+"Order id: "+orderid+"\nCustomer id: "+customerid+"\ntotal price: "+totalprice+"\nordered products: ");
```

```
getName()+"\nprice : "+ arr[i].getPrice());
```

```
Summary: \n"+"Order id: "+orderid+
```

```
.getName()+"\nprice : "+ arr[i].getPrice(),
```

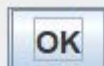
```
erid+"\ntotal price: "+totalprice+"\nordered prod
```



Message



name : smart phone
price : 599.9



orderid+

erid+"\ntotal price: "+to

+ arr[i].getPrice());



```
+orderid+
```

```
erid+"\ntotal price: "+totalprice+"\nordere
```

```
" + arr[i].getPrice());
```

Message



name : OOP

price : 39.99

OK

```
+orderid+
```

```
erid+"\ntotal
```

```
" + arr[i].getPrice());
```

```

1 import java.util.Scanner;
2 public class Ecommerce1 {
3     public static void main(String[] args) {
4         Scanner s = new Scanner(System.in);
5         System.out.println("Welcome to our Ecommerce system");
6         ElectronicProduct e = new ElectronicProduct("samsung",1,1,"smart phone",599.9f);
7         ClothingProduct c = new ClothingProduct("medium","fabric",2,"t-shirt",19.99f);
8         BookProduct b = new BookProduct("O'reilly","X publisher",3,"OOP",39.99f);
9         System.out.println("Please Enter your name: ");
10        String name = s.nextLine();
11        System.out.println("Enter your id: ");
12        int id = s.nextInt();
13        s.nextLine();
14        System.out.println("Enter your address: ");
15        String ad = s.nextLine();
16        Customer k = new Customer(id,name,ad);
17        System.out.println("How many many products you want to add to your cart? ");
18        int nproduct = s.nextInt();
19        Cart cart = new Cart();
20        cart.setCustomerid(k.getCustomerid());
21        cart.setNproduct(nproduct);
22        for (int i = 0; i < nproduct; i++) {
23            System.out.println("Which product would you like to add?");
24            System.out.println("1.smartphone\n2.T-shirt\n3.OOP");
25            int choice = s.nextInt();

```

```

int choice = s.nextInt();
switch (choice) {
    case 1:
        cart.addProduct(e);
        break;
    case 2:
        cart.addProduct(c);
        break;
    case 3:
        cart.addProduct(b);
        break;
    default:
        System.out.println("invalid choice!");
}
}

System.out.println("Do You want to remove any product?1-Yes 2-No");
int r=s.nextInt();
if(r==1){
    System.out.println("what transiction do you want to remove?");
    int i=s.nextInt();
    cart.removeproduct((i-1)); //as index of array starts from zer0.if he wants to remove product 3 then it
}

System.out.println("your total is: " + cart.calculateprice() + "Do you want to place the order?1.yes 2.no");
int n = s.nextInt();

```



```
        System.out.println("Do You want to remove any product?1-Yes 2-No");
int r=s.nextInt();
if(r==1){
    System.out.println("what transiction do you want to remove?");
    int i=s.nextInt();
    cart.removeproduct((i-1)); //as index of array starts from zer0.if he wants to remove product 3 then it
}

System.out.println("your total is: " + cart.calculateprice() + "Do you want to place the order?1.yes 2.no");
int n = s.nextInt();
cart.placeorder(n);
if (n == 1) {
    Order o = new Order(cart);
    o.printorderinfo();
    System.out.println("Thank you "+name+" for using our Ecommerce system!");
} else if (n == 2) {
    System.out.println("your cart is empty now.\n Thank you "+name+"for using our Ecommerce system!");
} else {
    System.out.println("invalid input");
}
}
}
```

```
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) {  
        this.productid= Math.abs(productid);  
    }  
  
    public String getName() {  
        return name;  
    }  
}
```

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

```
}
```



```
public class ElectronicProduct extends product {  
    private String brand;  
    private int warrantyperiod;  
  
    public ElectronicProduct(String brand, int warrantyperiod, int productid, String name, float price) {  
        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);  
    }  
}
```



```
public class ClothingProduct extends product {
```

```
    private String size;
```

```
    private String fabric;
```

```
    public ClothingProduct(String size, String fabric, int productid, String name, float price) {
```

```
        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 Customer {  
    protected int customerid;  
    protected String name;  
    protected String address;  
  
    public Customer(int customerid, String name, String address) {  
        this.customerid = customerid;  
        this.name = name;  
        this.address = address;  
    }  
  
    public int getCustomerid() {  
        return customerid;  
    }  
  
    public void setCustomerid(int customerid) {  
        this.customerid = Math.abs(customerid);  
    }  
  
    public String getName() {  
        return name;  
    }  
  
    public void setName(String name) {  
        this.name = name;  
    }  
}
```

```
public void setCustomerId(int customerId) {  
    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;  
}
```

```
}
```

```
public class BookProduct extends product {  
    private String author;  
    private String publisher;  
  
    public BookProduct(String author, String publisher, int productid, String name, float price) {  
        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;  
    }  
}
```


product.java x Ecommerce.java x product.java x ElectronicProduct.java x ClothingProduct.java x Cus

Source History



```
public class Cart {  
    protected int customerid;  
    protected int nproduct;  
    protected product[] arr;  
  
    public product[] getArr() {  
        return arr;  
    }  
    public void setArr(product[] arr) {  
        this.arr = new product[nproduct];  
    }  
  
    public int getCustomerId() {  
        return customerid;  
    }  
    public void setCustomerId(int customerid) {  
        this.customerid= customerid ;  
    }  
  
    public int getNproduct() {  
        return nproduct;  
    }  
}
```

```
public void setNproduct(int nproduct) {
    this.nproduct=Math.abs(nproduct);
    arr = new product[this.nproduct];
}

public void addProduct(product product){
    for (int i = 0; i < nproduct; i++) { // 0 1 2 3 size : 4
        if(arr[i]==null) { // *
            arr[i] = product;
            return;
        }
    }

    System.out.println("the cart is full,can not add more products.");
}

public void removeproduct(int in){
    if(in>=0&&in<nproduct){
        arr[in]=null;
    } else{ System.out.println("invalid index,cannot remove product.");
    }}

public float calculateprice(){
float total=0;
for(int i=0;i<nproduct;i++){
    if(arr[i]!=null){
        total+=arr[i].getPrice();
    }return total;
}
```

```
    }}  
    public float calculateprice() {  
float total=0;  
for(int i=0;i<nproduct;i++){  
    if(arr[i]!=null){  
        total+=arr[i].getPrice();}  
    }return total;  
}  
public void placeorder(int n){  
    switch(n){  
        case 1: System.out.println("your order has been placed successfully.");  
        break;  
        case 2:for (int i = 0; i < arr.length; i++) {  
            arr[i]=null;  
        }break;  
    }  
}}
```



```
public class Order {  
    private int customerid;  
    private int orderid;  
    private product[] arr;  
    private float totalprice;  
    private static int number ; //order id  
  
    public Order(Cart c) { //associatoin  
        number ++;  
        this.customerid = c.getCustomerid(); //from cart  
        this.orderid = number; //can't use (Math.random) as we can get similar IDs  
        this.arr = c.getArr();  
        this.totalprice = c.calculateprice();  
    }  
  
    public void printorderinfo() {  
        System.out.println("Here's your order's summary: ");  
        System.out.println("Order id: "+orderid);  
        System.out.println("Customer id: "+customerid);  
        System.out.println("ordered products: ");  
        for (int i = 0; i < arr.length; i++) {  
            if (arr[i] != null) {  
                System.out.println("name : " + arr[i].getName());  
                System.out.println("price : " + arr[i].getPrice() + " $");  
            }  
        }  
        System.out.println("total price: "+totalprice);  
    }  
}
```


<default config>

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...va Ecommerce1.java × product.java × ElectronicProduct.java × ClothingProduct.java × Customer.java × BookProduct.java × Cart.java × Order.java

Source History

Output - ecommerce1 (run) ×

```
run:
Welcome to our Ecommerce system
Please Enter your name:
shahd ashraf
Enter your id:
23011091
Enter your address:
agami
How many many products you want to add to your cart?
3
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
Which product would you like to add?
1.smartphone
2.T-shirt
3.OOP
3
Do You want to remove any product?1-Yes 2-No
1
what transiction do you want to remove?
1
your total is: 59.980003Do you want to place the order?1.yes 2.no
1
your order has been placed successfully.
Here's your order's summary:
Order id: 1
Customer id: 23011091
ordered products:
```

```
1
what transaction do you want to remove?
1
your total is: 59.980003Do you want to place the order?1.yes 2.no
1
your order has been placed successfully.
Here's your order's summary:
Order id: 1
Customer id: 23011091
ordered products:
name : t-shirt
price : 19.99 $
name : OOP
price : 39.99 $
total price: 59.980003
Thank you shahd ashraf for using our Ecommerce system!
BUILD SUCCESSFUL (total time: 27 seconds)
```