

```
Start Page x EcommerceSystem.java x Product.java x ElectronicProduct.java x ClothingProduct.java x BookProduct.java x Customer.java x Cart.java x Order.java x
Source History
2 import java.util.Scanner;
3 public class EcommerceSystem {
4     public static void main(String[] args) {
5         Scanner input= new Scanner(System.in);
6         ElectronicProduct smartphone =new ElectronicProduct(productId:1,name: "smartphone", (float) 599.9,brand: "samsung",warrantyPeriod: 1);
7         ClothingProduct tshirt= new ClothingProduct(productId:2,name: "T-shirt",(float)19.99, size: "medium", fabric:"cotton");
8         BookProduct oop= new BookProduct (productId:3,name: "oop", (float)39.99,author:"O'Reilly",publisher:"Xpublications");
9         System.out.println("Enter your id :");
10        int customerId= input.nextInt();
11        input.nextLine();
12        System.out.println("Enter your name");
13        String customerName= input.nextLine();
14        System.out.println("Enter your address");
15        String address= input.nextLine();
16        Customer customer= new Customer(customerId: customerId,name: customerName,address);
17        System.out.println("How many products do you want to order?");
18        int numProduct =input.nextInt();
19        Product[] Products=new Product[numProduct];
20        Cart cart=new Cart(customerId: customerId,sProducts:numProduct,Products);
21        for(int i=0; i<numProduct;i++){
22            System.out.println("Enter product type (1 for electronic , 2 for clothing , 3 for book)");
23            int producttype=input.nextInt();
24            switch (producttype) {
25                case 3:
26                    cart.addProduct(product: oop, index: i);
27                    break;
28                case 2:
29                    cart.addProduct(product: tshirt, index: i);
30                    break;
31                case 1:
32                    cart.addProduct(product: smartphone, index: i);
33                    break;
34                default:
35                    System.out.println("Invalid");
36                    break;
37            }
38        }
39        System.out.println("Do you want to place an order?(1 for yes , 2 for no)");
```

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21 for(int i=0; i<numProduct;i++){
22     System.out.println("Enter product type (1 for electronic , 2 for clothing , 3 for book)");
23     int producttype=input.nextInt();
24     switch(producttype){
25         case 3:
26             cart.addProduct(product: oop, index: i);
27             break;
28         case 2:
29             cart.addProduct(product: tshirt, index: i);
30             break;
31         case 1:
32             cart.addProduct(product: smartphone, index: i);
33             break;
34         default:
35             System.out.println("invalid");
36             break;
37     }
38     System.out.println("do you want to place an order?(1 for yes , 2 for no)");
39     int choice=input.nextInt();
40     switch(choice){
41         case 1:
42             cart.placeOrder();
43             break;
44         case 2:
45             System.out.println("the order is cancelled");
46             break;
47         default:
48             System.out.println("invalid");
49             break;
50     }
51 }
52 }
53 }
54 }
55 }

```

```

4  */
5  package javaapplication26;
6  public class Product {
7      protected int productId;
8      protected String name;
9      protected float price;
10
11      public int getProductId() {
12          return productId;
13      }
14      public String getName() {
15          return name;
16      }
17      public float getPrice() {
18          return price;
19      }
20      public void setProductId(int product) {
21          if(productId>0){
22              this.productId = product;
23          }
24          else
25              this.productId=Math.abs(product);
26      }
27      public void setName(String name) {
28          this.name = name;
29      }
30      public void setPrice(float price) {
31          if(price>=0)
32              this.price = price;
33          else
34              this.price=Math.abs(price);
35      }
36      public Product(int productId, String name, float price) {
37          this.productId = Math.abs(productId);
38          this.name = name;
39          this.price = Math.abs(price);
40      }

```

```

 * @author Nour
 */
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=Math.abs(a: warrantyPeriod);
    }

    public String getBrand() {
        return brand;
    }

    public int getWarrantyPeriod() {
        return warrantyPeriod;
    }

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

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

```

```
2  /**
3   *
4   * @author Nour
5   */
6  public class ClothingProduct extends Product {
7      private String size;
8      private String fabric;
9
10     public ClothingProduct(int productId, String name, float price, String size, String fabric) {
11         super(productId, name, price);
12         this.fabric=fabric;
13         this.size=size;
14     }
15
16     public String getSize() {
17         return size;
18     }
19
20     public void setSize(String size) {
21         this.size = size;
22     }
23
24     public String getFabric() {
25         return fabric;
26     }
27
28     public void setFabric(String fabric) {
29         this.fabric = fabric;
30     }
31 }
```

```
/*
 * Click nbfs://nbhost/SystemFileSystem/Templates/Licenses/license-default.txt to change this license
 * Click nbfs://nbhost/SystemFileSystem/Templates/Classes/Class.java to edit this template
 */
```

```
package javaapplication26;

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;
    }
}
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*/
@author Nour
*/
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(a: 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 Customer(int customerid, String name, String address) {
        this.customerid = Math.abs(a: customerid);
        this.name = name;
        this.address = address;
    }
}

```

```

package javaapplication26;
public class Cart {
    private int customerId;
    private int nProducts;
    private Product[] Products;
    public int getCustomerId() {
        return customerId;
    }
    public void setCustomerId(int customerId) {
        if(customerId>=0)
            this.customerId = customerId;
        else
            this.customerId=Math.abs(a.customerId);
    }
    public int getnProducts() {
        return nProducts;
    }
    public void setnProducts(int nProducts) {
        this.nProducts = Math.abs(s: nProducts);
    }
    public Product[] getProducts() {
        return Products;
    }
    public void setProducts(Product[] Products) {
        this.Products =new Product[this.nProducts];
    }
    public Cart(int customerId, int nProducts, Product[]Products) {
        this.customerId = customerId;
        this.nProducts = nProducts;
        this.Products=Products;
    }
    public void addProduct(Product product, int index){
        if (index>=0 && index< nProducts)
            Products[index]=product;
        else
            System.out.println(x: "invalid");
    }
}

```



```

1  }
2  public void setnProducts(int nProducts) {
3      this.nProducts = Math.abs(nProducts);
4  }
5  public Product[] getProducts() {
6      return Products;
7  }
8  public void setProducts(Product[] Products) {
9      this.Products = new Product[this.nProducts];
10 }
11 public Cart(int customerid, int nProducts, Product[] Products) {
12     this.customerid = customerid;
13     this.nProducts = nProducts;
14     this.Products = Products;
15 }
16 public void addProduct(Product product, int index) {
17     if (index >= 0 && index < nProducts)
18         Products[index] = product;
19     else
20         System.out.println(x: "invalid");
21 }
22 public void removeProduct(int index) {
23     if (index >= 0 && index < nProducts)
24         Products[index] = null;
25     else
26         System.out.println(x: "invalid");
27 }
28 public float calculatePrice() {
29     float totalPrice = 0;
30     for (int i = 0; i < nProducts; i++) {
31         if (Products[i] != null)
32             totalPrice = totalPrice + Products[i].getPrice();
33     }
34     return totalPrice;
35 }
36 public void placeOrder() {
37     Order order = new Order(customerid: customerid, orderId: 1, products: Products, totalPrice: calculatePrice());
38     order.printOrderInfo();
39 }

```

```
package javaapplication26;

public class Order {
    private int customerId;
    private int orderId;
    private Product[] products;
    private float totalprice;
    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 float getTotalprice() {
        return totalprice;
    }
    public void setTotalprice(float totalprice) {
        this.totalprice = totalprice;
    }
    public Order(int customerId, int orderId, Product[] products, float totalprice) {
        this.customerId = Math.abs(a: customerId);
        this.orderId = orderId;
        this.products = products;
        this.totalprice = totalprice;
    }
    public void printorderinfo() {
        System.out.println("order id:"+orderId);
        System.out.println("customer id:"+customerId);
        System.out.println(x: "products:");
        for(Product product : products){
            System.out.println(product.getName()+"-$"+product.getPrice());
        }
        System.out.println("Total price:"+totalprice);
    }
}
```

Output - JavaApplication26 (run) #2 X



```
run:
Enter your id :
23011556
Enter your name
malak ahmed
Enter your address
address
How many products do you want to order?
4
Enter product type (1 for electronic , 2 for clothing , 3 for book)
2
Enter product type (1 for electronic , 2 for clothing , 3 for book)
3
Enter product type (1 for electronic , 2 for clothing , 3 for book)
2
Enter product type (1 for electronic , 2 for clothing , 3 for book)
1
do you want to place an order?(1 for yes , 2 for no)
1
order id:1
customer id:23011556
products:
T-shirt-$19.99
oop-$39.99
T-shirt-$19.99
smartphone-$599.9
Total price:679.87
BUILD SUCCESSFUL (total time: 49 seconds)
```