

```

public class Product {
    int productId;
    String name;
    float price;
public Product (int pId, String n, float p) {
    productId = Math.abs((int) pId);
    name = n;
    price = Math.abs((float) p);
}

    public int getProductId() {
        return productId;
    }

    public void setProductId(int productId) {
        if(productId>0)
            this.productId = productId;
        else
            this.productId =Math.abs((int) productId);
    }

    public String getName() {
        return name;
    }

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

    public float getPrice() {
        return price;
    }

    public void setPrice(float price) {
        if(price>0)
            this.price = price;
        else
            this.price =Math.abs((float) price);
    }
}

```

Activate Windows
Go to Settings to activate Windows.

```

Source History
23         else
24             this.productId =Math.abs((int) productId);
25     }
26     public String getName() {
27         return name;
28     }
29     public void setName(String name) {
30         this.name = name;
31     }
32     public float getPrice() {
33         return price;
34     }
35     public void setPrice(float price) {
36         if(price>0)
37             this.price = price;
38         else
39             this.price =Math.abs((float) price);
40     }
41 }
42
43

```

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The screenshot shows the NetBeans IDE interface with the 'ElectronicProduct.java' file open. The code defines a class that extends 'Product' and includes attributes for brand and warranty period, along with their respective getters and setters.

```
10 //
11 public class ElectronicProduct extends Product {
12     String brand;
13     int warrantyPeriod;
14
15     public ElectronicProduct(int pId, String n, float p, String b, int wP) {
16         super(pId, n, p);
17         brand = b;
18         warrantyPeriod = wP;
19     }
20
21     public String getBrand() {
22         return brand;
23     }
24
25     public void setBrand(String brand) {
26         this.brand = brand;
27     }
28
29     public int getWarrantyPeriod() {
30         return warrantyPeriod;
31     }
32
33     public void setWarrantyPeriod(int warrantyPeriod) {
34         if(warrantyPeriod>0)
35             this.warrantyPeriod = warrantyPeriod;
36         else
37             this.warrantyPeriod =Math.abs(- productId);
38     }
39
40 }
41
```

At the bottom right of the editor, there is a message: "Activate Windows Go to Settings to activate Windows."

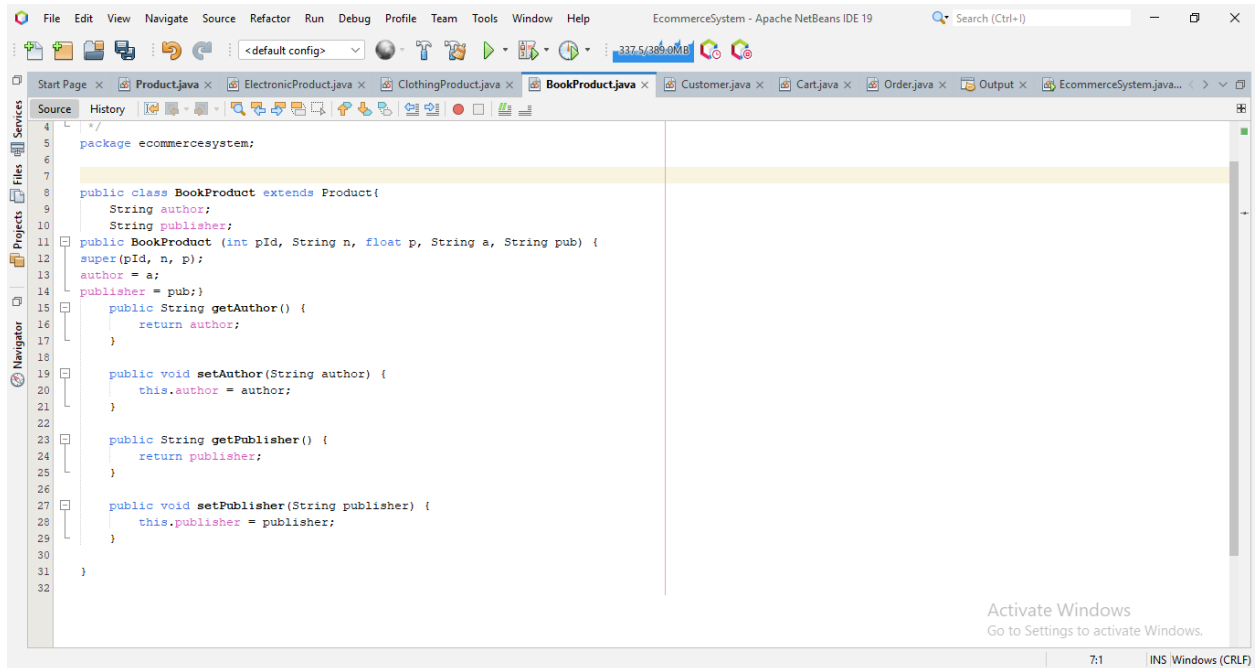
1:1 INS Windows (CRLF)

The screenshot shows the NetBeans IDE interface with the 'ClothingProduct.java' file open. The code defines a class that extends 'Product' and includes attributes for fabric and size, along with their respective getters and setters.

```
10 //
11 public class ClothingProduct extends Product {
12     String fabric;
13     String size;
14     public ClothingProduct(int pId, String n, float p, String s, String f) {
15         super(pId, n, p);
16         size = s;
17         fabric = f;
18     }
19
20     public String getFabric() {
21         return fabric;
22     }
23
24     public void setFiber(String fabric) {
25         this.fabric = fabric;
26     }
27
28     public String getSize() {
29         return size;
30     }
31
32     public void setSize(String size) {
33         this.size = size;
34     }
35
36 }
37
```

At the bottom right of the editor, there is a message: "Activate Windows Go to Settings to activate Windows."

1:1 INS Windows (CRLF)

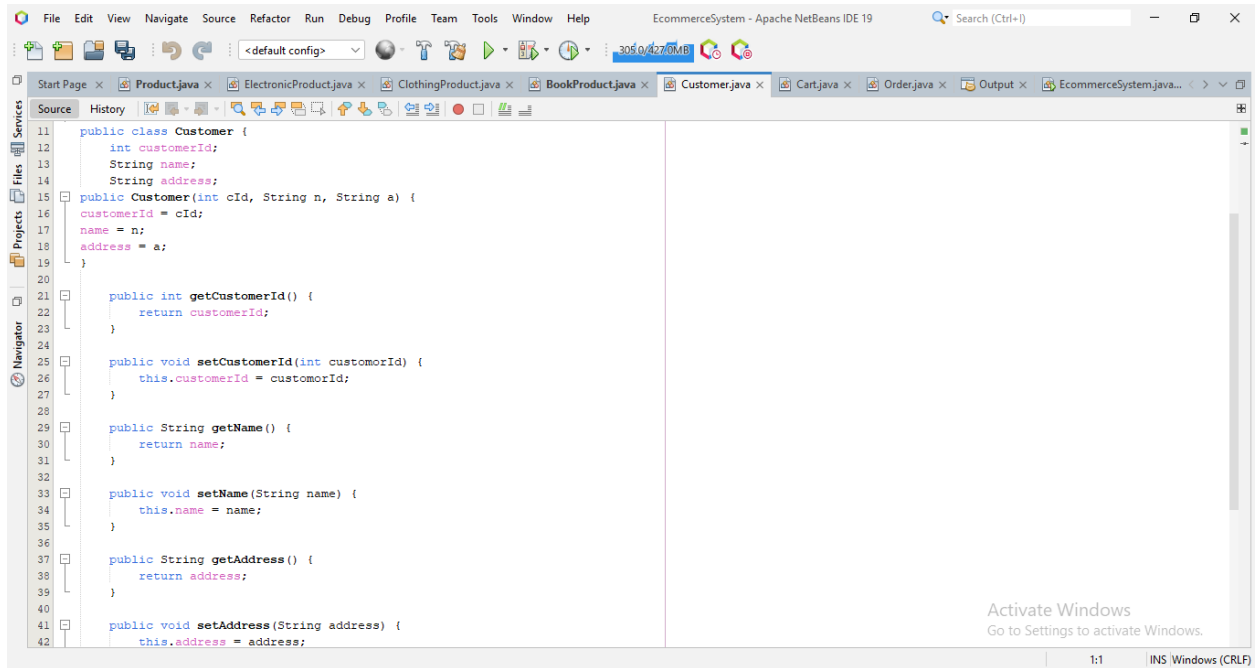


This screenshot shows the NetBeans IDE with the `BookProduct.java` file open. The code defines a `BookProduct` class that extends the `Product` class. It includes attributes for `author` and `publisher`, a constructor, and getter/setter methods for both attributes. The interface includes a `Navigator` on the left and a `Services` pane on the right. The status bar at the bottom indicates the file is at line 7:1 and uses the `INS Windows (CRLF)` encoding.

```
4  */
5  package ecommercesystem;
6
7
8  public class BookProduct extends Product{
9      String author;
10     String publisher;
11
12     public BookProduct (int pId, String n, float p, String a, String pub) {
13         super(pId, n, p);
14         author = a;
15         publisher = pub;}
16
17     public String getAuthor() {
18         return author;
19     }
20
21     public void setAuthor(String author) {
22         this.author = author;
23     }
24
25     public String getPublisher() {
26         return publisher;
27     }
28
29     public void setPublisher(String publisher) {
30         this.publisher = publisher;
31     }
32 }
```

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7:1 INS Windows (CRLF)



This screenshot shows the NetBeans IDE with the `Customer.java` file open. The code defines a `Customer` class with attributes for `customerId`, `name`, and `address`. It includes a constructor and getter/setter methods for each attribute. The interface includes a `Navigator` on the left and a `Services` pane on the right. The status bar at the bottom indicates the file is at line 1:1 and uses the `INS Windows (CRLF)` encoding.

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

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1:1 INS Windows (CRLF)

The screenshot shows the NetBeans IDE interface with the 'Customer.java' file open. The code defines a 'Customer' class with attributes 'customerId', 'name', and 'address'. It includes methods for getting and setting these attributes. The IDE's left sidebar shows the 'Projects' and 'Navigator' views. The bottom status bar indicates the file is at line 36, column 1, and the encoding is 'INS Windows (CRLF)'. A watermark 'Activate Windows' is visible in the bottom right corner.

```
15 public Customer(int cId, String n, String a) {
16     customerId = cId;
17     name = n;
18     address = a;
19 }
20
21 public int getCustomerId() {
22     return customerId;
23 }
24
25 public void setCustomerId(int customerId) {
26     this.customerId = customerId;
27 }
28
29 public String getName() {
30     return name;
31 }
32
33 public void setName(String name) {
34     this.name = name;
35 }
36
37 public String getAddress() {
38     return address;
39 }
40
41 public void setAddress(String address) {
42     this.address = address;
43 }
44
45 }
```

The screenshot shows the NetBeans IDE interface with the 'Cart.java' file open. The code defines a 'Cart' class with attributes 'customerId', 'nProducts', 'products', and 'length'. It includes methods for getting and setting these attributes, as well as an 'addProducts' method. The IDE's left sidebar shows the 'Projects' and 'Navigator' views. The bottom status bar indicates the file is at line 44, column 25, and the encoding is 'INS Windows (CRLF)'. A watermark 'Activate Windows' is visible in the bottom right corner.

```
13 public class Cart {
14     int customerId;
15     int nProducts;
16     Product[] products;
17     int length;
18     public int getCustomerId() {
19         return customerId;
20     }
21
22     public void setCustomerId(int customerId) {
23
24         this.customerId = customerId;
25     }
26
27     public int getnProducts() {
28         return nProducts;
29     }
30     public Product[] getProducts() {
31         return products;
32     }
33
34     public void setProducts(Product[] products) {
35         this.products = products;
36     }
37
38     public void setnProducts(int nProducts) {
39         this.nProducts = nProducts;
40         products = new Product[nProducts];
41         length=nProducts;
42     }
43     public void addProducts(Product p,int i) {
```

EcommerceSystem - Apache NetBeans IDE 19

```
43 public void addProducts(Product p,int i){
44     products[i]=p;
45 }
46 public void removeProduct(int i){
47     products[i]=null;
48     length--;
49 }
50 public float calculatePrice(Product products[]){
51     float total=0;
52     for(int i=0;i<nProducts;i++){
53         if(products[i]==null)
54             continue;
55         else
56             total+=products[i].getPrice();
57     }
58     return total;
59 }
60 public void placeOrder(int customerId){
61     Scanner input=new Scanner(System.in);
62     Order o=new Order();
63     System.out.println("would you like to place order? 1_yes 2_no");
64     int place =input.nextInt();
65     int order=1;
66     if(place==1){
67         o.printOrderInfo(customerId, orderId:order, totalPrice: calculatePrice(products), length, products,nProducts);
68     }
69     else{
70         System.out.println("do you want to remove an item? 1-yes 2-no");
71         int x=input.nextInt();
72         if(x==1){
73             System.out.println("wich item you wish to remove?");
74         }
75     }
76 }
```

74:25 INS Windows (CRLF)

EcommerceSystem - Apache NetBeans IDE 19

```
56 total+=products[i].getPrice();
57 }
58 return total;
59 }
60 public void placeOrder(int customerId){
61     Scanner input=new Scanner(System.in);
62     Order o=new Order();
63     System.out.println("would you like to place order? 1_yes 2_no");
64     int place =input.nextInt();
65     int order=1;
66     if(place==1){
67         o.printOrderInfo(customerId, orderId:order, totalPrice: calculatePrice(products), length, products,nProducts);
68     }
69     else{
70         System.out.println("do you want to remove an item? 1-yes 2-no");
71         int x=input.nextInt();
72         if(x==1){
73             System.out.println("wich item you wish to remove?");
74             int index=input.nextInt();
75             index--;
76             removeProduct(index);
77             o.printOrderInfo(customerId, orderId:order, totalPrice: calculatePrice(products), length, products,nProducts);
78         }
79         System.out.println("wish you a happy day :)");
80     }
81 }
82 }
83 }
84 }
85 }
86 }
87 }
```

87:1 INS Windows (CRLF)

EcommerceSystem - Apache NetBeans IDE 19

```
public class Order {
    int customorId;
    int orderId;
    float totalPrice;
    int nProducts;
    Product[] products=new Product[nProducts];
    public int getCustomorId() {
        return customorId;
    }

    public void setCustomorId(int customorId) {
        if(customorId>0)
            this.customorId = customorId;
        else
            this.customorId = Math.abs(-: orderId);
    }

    public int getOrderId() {
        return orderId;
    }

    public void setOrderId(int orderId) {
        if(orderId>0)
            this.orderId = orderId;
        else
            this.orderId = orderId;
    }

    public float getTotalPrice() {
        return totalPrice;
    }
}
```

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78.6 INS Windows (CRLF)

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```
public void setOrderId(int orderId) {
    if(orderId>0)
        this.orderId = orderId;
    else
        this.orderId = orderId;
}

public float getTotalPrice() {
    return totalPrice;
}

public int getnProducts() {
    return nProducts;
}

public void setnProducts(int nProducts) {
    this.nProducts = nProducts;
}

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

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

public void setTotalPrice(float totalPrice) {
    if(totalPrice>0)
        this.totalPrice = totalPrice;
    else
        this.totalPrice = Math.abs(-: totalPrice);
}
```

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80.2 INS Windows (CRLF)

```
48     this.nProducts = nProducts;
49
50
51     public Product[] getProducts() {
52         return products;
53     }
54
55     public void setProducts(Product[] products) {
56         this.products = products;
57     }
58
59     public void setTotalPrice(float totalPrice) {
60         if(totalPrice>0)
61             this.totalPrice = totalPrice;
62         else
63             this.totalPrice = Math.abs(-totalPrice);
64     }
65
66     public void printOrderInfo(int customerId , int orderId, float totalPrice, int length, Product products[],int nProducts){
67         System.out.println("Here is your order summary: ");
68         System.out.println("Order id: "+orderId+"\ncustomer id: "+customerId+"\nnumber of products: "+length);
69         System.out.println("products: ");
70         for(int i=0;i<nProducts;i++){
71             if(products[i]==null)
72                 continue;
73             else{
74                 System.out.println(products[i].getName()+" - $" +products[i].getPrice());
75             }
76         }
77         System.out.println("total price :$"+totalPrice);
78     }
79 }
```

Activate Windows
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```
run:
Welcome to the E-commerce System!
Please enter your id
23011565
Please Enter your name
mennna mohamed mohamed mamdouh
Please enter your address
address

How many products you want to add to the cart?
4
wich product would you like to add? '1' for Samsung Smartphone - '2' for T-shirt - '3' for OOP book by O'Reilly
2
wich product would you like to add? '1' for Samsung Smartphone - '2' for T-shirt - '3' for OOP book by O'Reilly
3
wich product would you like to add? '1' for Samsung Smartphone - '2' for T-shirt - '3' for OOP book by O'Reilly
6
please enter a valid choice
wich product would you like to add? '1' for Samsung Smartphone - '2' for T-shirt - '3' for OOP book by O'Reilly
1
wich product would you like to add? '1' for Samsung Smartphone - '2' for T-shirt - '3' for OOP book by O'Reilly
1
your total is $1259.78
would you like to place order? 1_yes 2_no
2
do you want to remove an item? 1-yes 2-no
1
wich item you wish to remove?
1
```

Activate Windows
Go to Settings to activate Windows.

```
File Edit View Navigate Source Refactor Run Debug Profile Team Tools Window Help
EcommerceSystem - Apache NetBeans IDE 19
Search (Ctrl+I)
Product.java ElectronicProduct.java ClothingProduct.java BookProduct.java Customer.java Cart.java Order.java
Output - EcommerceSystem (run)
EcommerceSystem (run)
4
wich product would you like to add? '1' for Samsung Smartphone - '2' for T-shirt - '3' for OOP book by O'Reilly
3
wich product would you like to add? '1' for Samsung Smartphone - '2' for T-shirt - '3' for OOP book by O'Reilly
6
please enter a valid choice
wich product would you like to add? '1' for Samsung Smartphone - '2' for T-shirt - '3' for OOP book by O'Reilly
1
wich product would you like to add? '1' for Samsung Smartphone - '2' for T-shirt - '3' for OOP book by O'Reilly
1
your total is $1259.78
would you like to place order? 1_yes 2_no
2
do you want to remove an item? 1-yes 2-no
1
wich item you wish to remove?
1
Here is your order summary:
Order id: 1
customer id: 23011565
number of products: 3
products:
OOP - $39.99
Smartphone - $599.9
Smartphone - $599.9
total price :$1239.79
wish you a happy day :)
BUILD SUCCESSFUL (total time: 53 seconds)
```

Thank you 😊