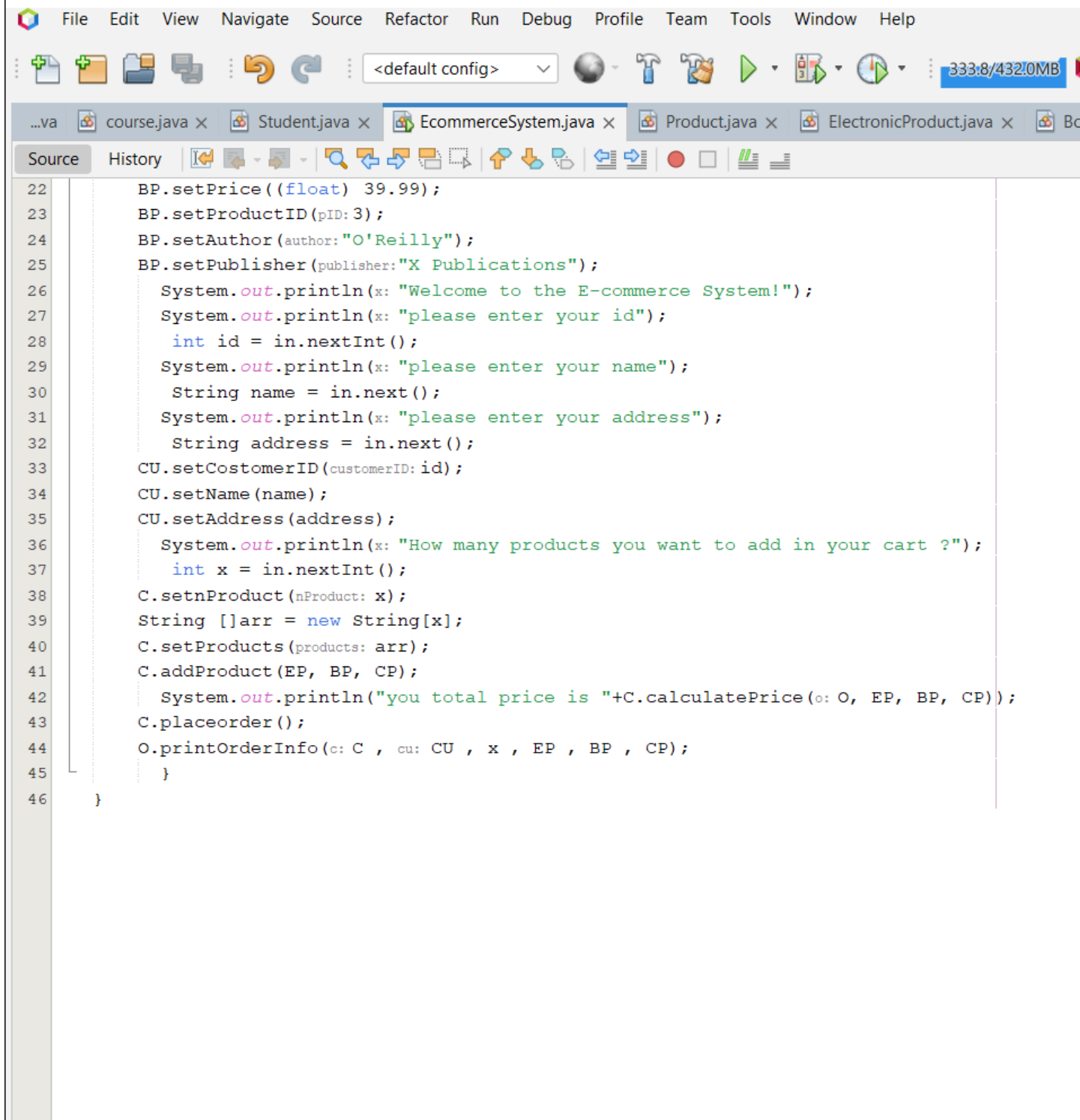
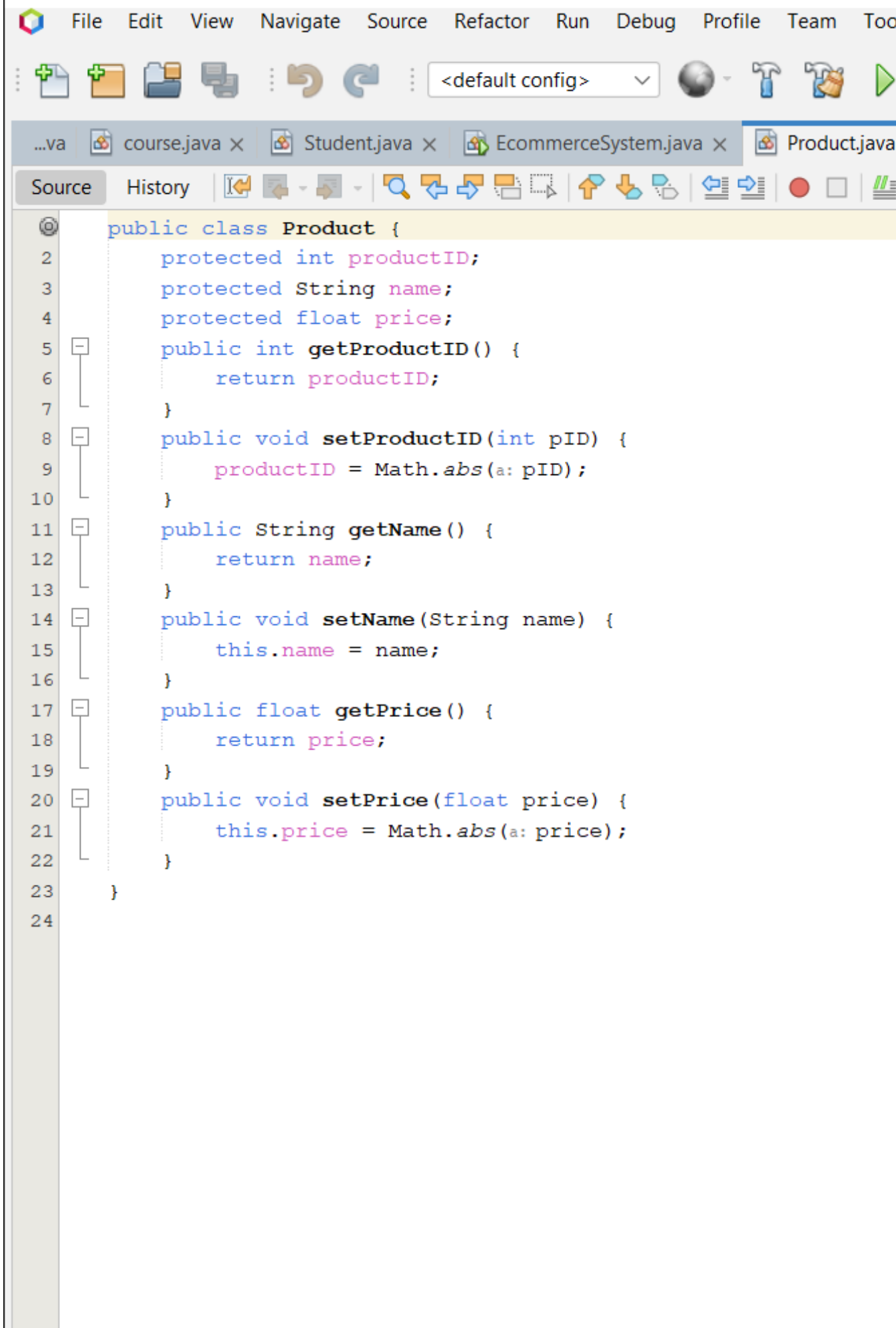
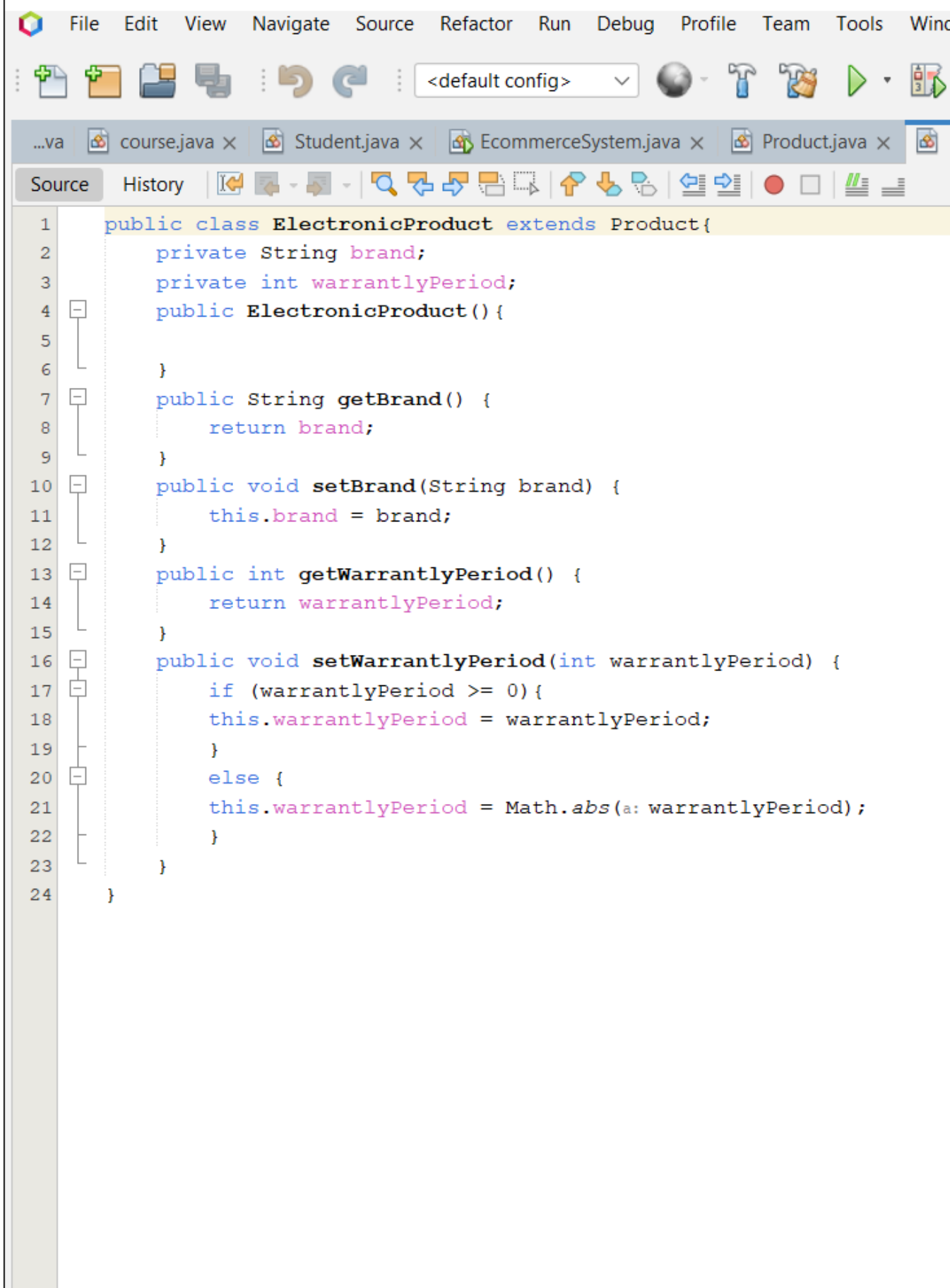


```
1 import java.util.Scanner;
2 public class EcommerceSystem {
3     public static void main(String[] args) {
4         Scanner in = new Scanner(System.in);
5         ElectronicProduct EP = new ElectronicProduct();
6         BookProduct BP = new BookProduct();
7         ClothingProduct CP = new ClothingProduct();
8         Cart C = new Cart();
9         Customer CU = new Customer();
10        Order O = new Order();
11        EP.setName(name: "SmartPhone");
12        EP.setPrice((float) 599.9);
13        EP.setProductID(pID: 1);
14        EP.setBrand(brand: "Samsung");
15        EP.setWarrantlyPeriod(warrantlyPeriod: 1);
16        CP.setName(name: "T-shirt");
17        CP.setPrice((float) 19.99);
18        CP.setProductID(pID: 2);
19        CP.setSize(size: "Medium");
20        CP.setFabric(fabric: "Cotton");
21        BP.setName(name: "OOP");
22        BP.setPrice((float) 39.99);
23        BP.setProductID(pID: 3);
24        BP.setAuthor(author: "O'Reilly");
25        BP.setPublisher(publisher: "X Publications");
26        System.out.println(x: "Welcome to the E-commerce System!");
27        System.out.println(x: "please enter your id");
28        int id = in.nextInt();
29        System.out.println(x: "please enter your name");
30        String name = in.next();
31        System.out.println(x: "please enter your address");
32        String address = in.next();
33        CU.setCustomerID(customerID: id);
34        CU.setName(name);
35        CU.setAddress(address);
36        System.out.println(x: "How many products you want to add in your cart ?");
37        int x = in.nextInt();
```



```
22     BP.setPrice((float) 39.99);
23     BP.setProductID(pID: 3);
24     BP.setAuthor(author: "O'Reilly");
25     BP.setPublisher(publisher: "X Publications");
26     System.out.println(x: "Welcome to the E-commerce System!");
27     System.out.println(x: "please enter your id");
28     int id = in.nextInt();
29     System.out.println(x: "please enter your name");
30     String name = in.next();
31     System.out.println(x: "please enter your address");
32     String address = in.next();
33     CU.setCotomerID(customerID: id);
34     CU.setName(name);
35     CU.setAddress(address);
36     System.out.println(x: "How many products you want to add in your cart ?");
37     int x = in.nextInt();
38     C.setnProduct(nProduct: x);
39     String []arr = new String[x];
40     C.setProducts(products: arr);
41     C.addProduct(EP, BP, CP);
42     System.out.println("you total price is "+C.calculatePrice(o: O, EP, BP, CP));
43     C.placeorder();
44     O.printOrderInfo(c: C , cu: CU , x , EP , BP , CP);
45     }
46 }
```

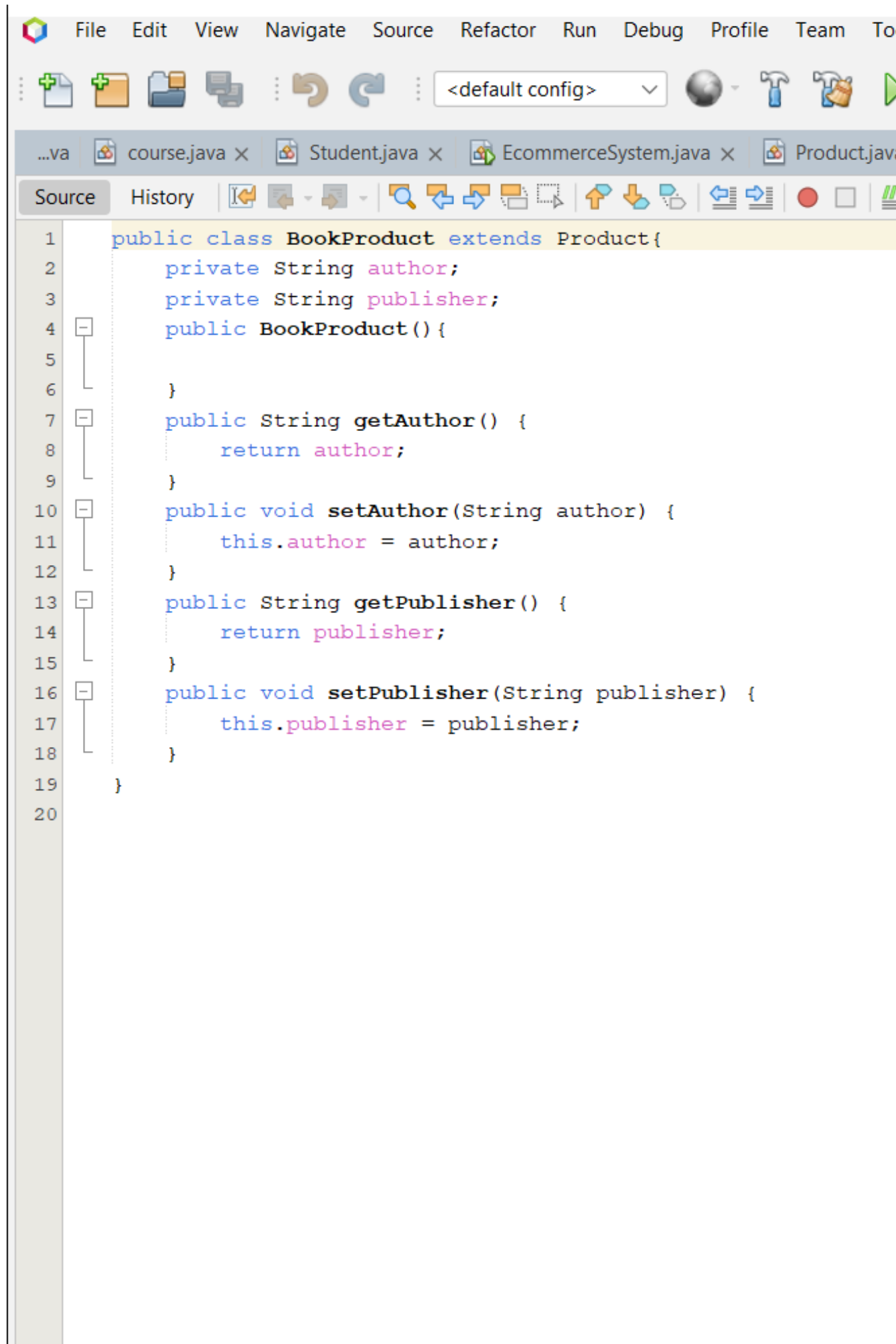


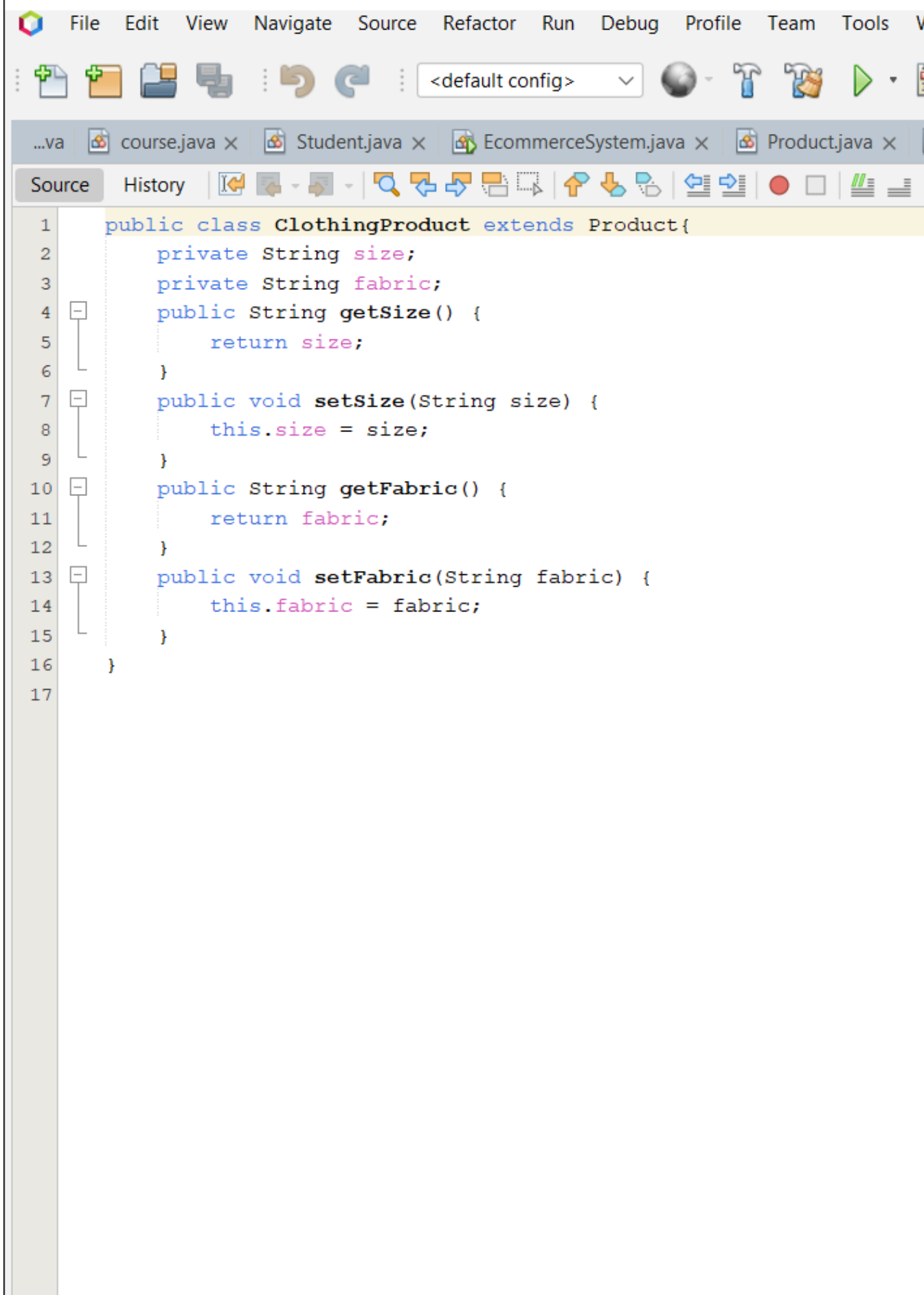


The screenshot shows an IDE window with the following components:

- Menu Bar:** File, Edit, View, Navigate, Source, Refactor, Run, Debug, Profile, Team, Tools, Window.
- Toolbar:** Includes icons for file operations (new, open, save, copy, paste), navigation (back, forward, search), and execution (run, debug, stop).
- Tab Bar:** Shows four open files: ...va, course.java, Student.java, EcommerceSystem.java, and Product.java.
- Source Editor:** Displays the source code of the `ElectronicProduct` class, which extends `Product`. The code includes private fields for `brand` and `warrantlyPeriod`, and public methods for `ElectronicProduct()`, `getBrand()`, `setBrand()`, `getWarrantlyPeriod()`, and `setWarrantlyPeriod()`. The `setWarrantlyPeriod()` method includes an `if` statement to handle negative values using `Math.abs()`.
- Line Numbers:** The left margin shows line numbers from 1 to 24.

```
1 public class ElectronicProduct extends Product {
2     private String brand;
3     private int warrantlyPeriod;
4     public ElectronicProduct() {
5
6     }
7     public String getBrand() {
8         return brand;
9     }
10    public void setBrand(String brand) {
11        this.brand = brand;
12    }
13    public int getWarrantlyPeriod() {
14        return warrantlyPeriod;
15    }
16    public void setWarrantlyPeriod(int warrantlyPeriod) {
17        if (warrantlyPeriod >= 0) {
18            this.warrantlyPeriod = warrantlyPeriod;
19        }
20        else {
21            this.warrantlyPeriod = Math.abs(a: warrantlyPeriod);
22        }
23    }
24 }
```





The screenshot shows an IDE window with the following components:

- Menu Bar:** File, Edit, View, Navigate, Source, Refactor, Run, Debug, Profile, Team, Tools.
- Toolbar:** Includes icons for file operations (new, open, save, copy, paste), navigation (back, forward, search), and execution (run, debug, profile).
- Tab Bar:** Shows four open files: ...va, course.java, Student.java, EcommerceSystem.java, and Product.java.
- Source Editor:** Displays the source code of the `ClothingProduct` class, which extends `Product`. The code is as follows:

```
1 public class ClothingProduct extends Product {  
2     private String size;  
3     private String fabric;  
4     public String getSize() {  
5         return size;  
6     }  
7     public void setSize(String size) {  
8         this.size = size;  
9     }  
10    public String getFabric() {  
11        return fabric;  
12    }  
13    public void setFabric(String fabric) {  
14        this.fabric = fabric;  
15    }  
16 }  
17
```

```
File Edit View Navigate Source Refactor Run Debug Profile Team Tools Window Help
EcommerceSystem - Apache NetBeans IDE 19
Search (Ctrl+I)

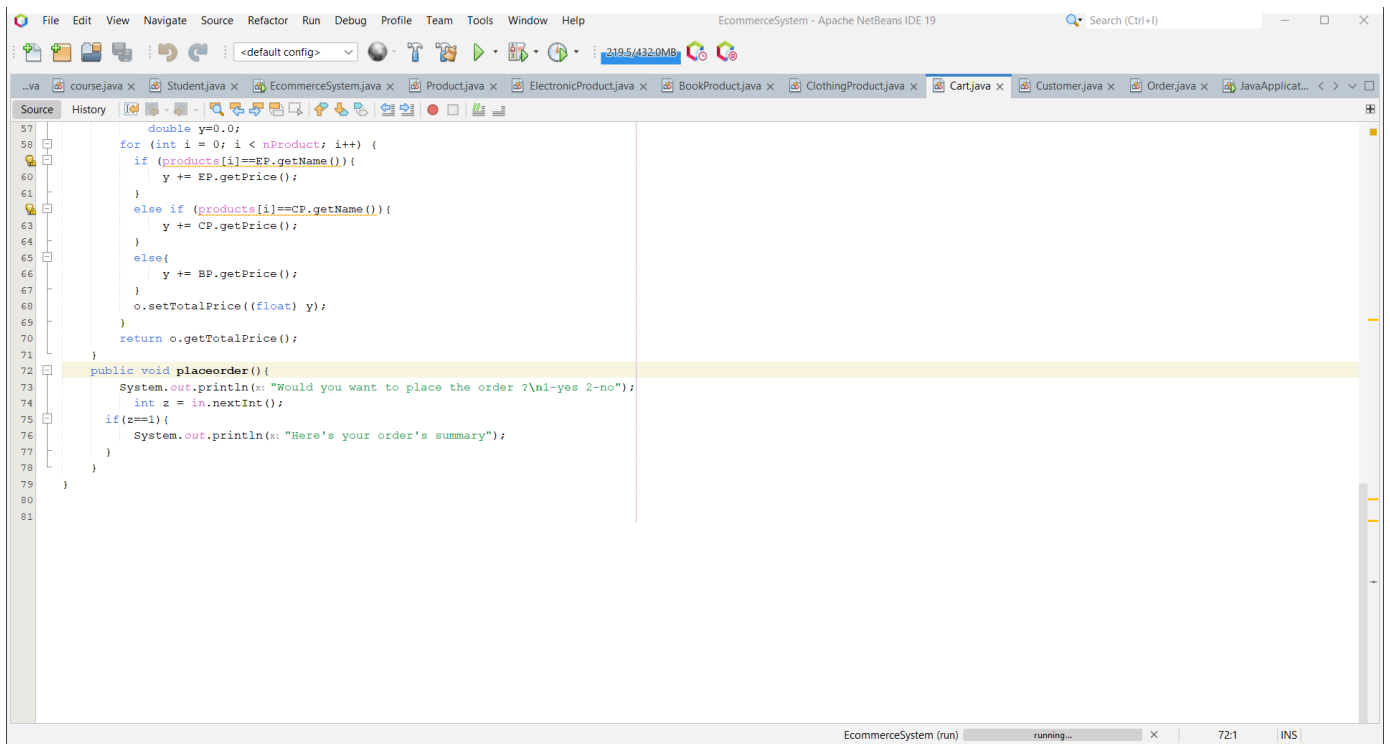
...va course.java x Student.java x EcommerceSystem.java x Product.java x ElectronicProduct.java x BookProduct.java x ClothingProduct.java x Cart.java x Customer.java x Order.java x JavaApplicat...

Source History
1 import java.util.Scanner;
2 public class Cart {
3     Scanner in = new Scanner(System.in);
4     private int customerID;
5     private int nProduct;
6     public String[] products = new String[nProduct];
7     public int getCustomerID() {
8         return customerID;
9     }
10    public void setCustomerID(int customerID) {
11        this.customerID = Math.abs(s: customerID);
12    }
13    public int getnProduct() {
14        return nProduct;
15    }
16    public void setnProduct(int nProduct) {
17        this.nProduct = Math.abs(s: nProduct);
18    }
19    public String[] getProducts() {
20        return products;
21    }
22    public void setProducts(String[] products) {
23        this.products = products;
24    }
25    public void addProduct(ElectronicProduct EP, BookProduct BP, ClothingProduct CP) {
26        for(int i=0; i<products.length; i++){
27            System.out.println("Which product would you add \n"+EP.getProductID()+"- "+EP.getName()+" "+CP.getProductID()+"- "+CP.getName()+" "+BP.getProductID()+"- "+BP.getName());
28            int z = in.nextInt();
29            if( z<products.length ) {
30                if (z==1){
31                    products[i] = EP.getName();
32                }
33                else if (z==2){
34                    products[i] = CP.getName();
35                }
36                else if (z==3){
37                    products[i] = BP.getName();
38                }
39            }
40        }
41    }
42    public void removeProduct(int index) {
43        if (index >= 0 && index < nProduct) {
44            for (int i = index; i < nProduct - 1; i++) {
45                products[i] = products[i + 1];
46            }
47            nProduct--;
48        } else {
49            System.out.println(s: "Invalid index!");
50        }
51    }
52    public float calculatePrice(Order o, ElectronicProduct EP, BookProduct BP, ClothingProduct CP) {
53        o.setTotalPrice(totalPrice: 0);
54        double y=0.0;
55        for (int i = 0; i < nProduct; i++) {
56            if (products[i]==EP.getName()){
57                y += EP.getPrice();
58            }
59            else if (products[i]==CP.getName()){
60                y += CP.getPrice();
61            }
62            else{
63                y += BP.getPrice();
64            }
65        }
66        o.setTotalPrice((float) y);
67        return o.getTotalPrice();
68    }
69    public void placeorder() {
70    }
71    }
72 }
```

```
File Edit View Navigate Source Refactor Run Debug Profile Team Tools Window Help
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Search (Ctrl+I)

...va course.java x Student.java x EcommerceSystem.java x Product.java x ElectronicProduct.java x BookProduct.java x ClothingProduct.java x Cart.java x Customer.java x Order.java x JavaApplicat...

Source History
36    }
37    }
38    }
39    }
40    }
41    System.out.println(s: "invalid number");
42    }
43    }
44    }
45    public void removeProduct(int index) {
46        if (index >= 0 && index < nProduct) {
47            for (int i = index; i < nProduct - 1; i++) {
48                products[i] = products[i + 1];
49            }
50            nProduct--;
51        } else {
52            System.out.println(s: "Invalid index!");
53        }
54    }
55    public float calculatePrice(Order o, ElectronicProduct EP, BookProduct BP, ClothingProduct CP) {
56        o.setTotalPrice(totalPrice: 0);
57        double y=0.0;
58        for (int i = 0; i < nProduct; i++) {
59            if (products[i]==EP.getName()){
60                y += EP.getPrice();
61            }
62            else if (products[i]==CP.getName()){
63                y += CP.getPrice();
64            }
65            else{
66                y += BP.getPrice();
67            }
68        }
69        o.setTotalPrice((float) y);
70        return o.getTotalPrice();
71    }
72    public void placeorder() {
73    }
74    }
75 }
```





```
1 public class Customer {
2     private int customerID;
3     private String name;
4     private String address;
5     public int getCustomerID() {
6         return customerID;
7     }
8     public void setCostomerID(int customerID) {
9         this.customerID = Math.abs(a: customerID);
10    }
11    public String getName() {
12        return name;
13    }
14    public void setName(String name) {
15        this.name = name;
16    }
17    public String getAddress() {
18        return address;
19    }
20    public void setAddress(String address) {
21        this.address = address;
22    }
23 }
24
```

File Edit View Navigate Source Refactor Run Debug Profile Team Tools Window Help EcommerceSystem - Apache NetBeans IDE 19

248.8/428.0MB

Projects x

- <default package>
- BookProduct.java
- Cart.java
- ClothingProduct.java
- Customer.java
- EcommerceSystem.java
- ElectronicProduct.java
- Order.java
- Product.java
- ecommercesystem
- Test Packages
- Libraries
- Test Libraries
- vaApplication1
- vaApplication10
- vaApplication11
- vaApplication12
- vaApplication13
- vaApplication14
- vaApplication15
- vaApplication16
- vaApplication17
- vaApplication18
- vaApplication19
- vaApplication2
- vaApplication20
- vaApplication21
- vaApplication22
- vaApplication23
- vaApplication24
- vaApplication25
- vaApplication26
- vaApplication27
- vaApplication28
- vaApplication29
- vaApplication3
- vaApplication30
- vaApplication31

Source History

```
1 public class Order {
2     private int orderID;
3     private float totalPrice;
4     public int getOrderID() {
5         return orderID;
6     }
7     public void setOrderID(int orderID) {
8         this.orderID = Math.abs(a: orderID);
9     }
10    public float getTotalPrice() {
11        return totalPrice;
12    }
13    public void setTotalPrice(float totalPrice) {
14        this.totalPrice = Math.abs(a: totalPrice);
15    }
16    public void printOrderInfo(Cart c , Customer cu , int x , ElectronicProduct EP , BookProduct BP , ClothingProduct CP) {
17        System.out.println("Order ID : 1\nCustomer ID : "+cu.getCustomerID()+"\nProducts");
18        for(int i=0 ; i<x ; i++){
19            System.out.print(c.products[i]+" - ");
20            if(c.products[i]== EP.getName()){
21                System.out.print(EP.getPrice()+"\n");
22            }
23            else if(c.products[i]== BP.getName()){
24                System.out.print(BP.getPrice()+"\n");
25            }
26            else if(c.products[i]== CP.getName()){
27                System.out.print(CP.getPrice()+"\n");
28            }
29        }
30        System.out.println("Total price : "+getTotalPrice());
31    }
32 }
33
```



EcommerceSystem (run) X

EcommerceSystem (run) #2 X

Welcome to the E-commerce System!

please enter your id

23011071

please enter your name

kholoud

please enter your address

elwerdian

How many products you want to add in your cart ?

4

Which product would you add

1- SmartPhone 2\_ T-shirt 3- OOP

2

Which product would you add

1- SmartPhone 2\_ T-shirt 3- OOP

3

Which product would you add

1- SmartPhone 2\_ T-shirt 3- OOP

2

Which product would you add

1- SmartPhone 2\_ T-shirt 3- OOP

1

you total price is 679.87

Would you want to place the order ?

1-yes 2-no

1

Here's your order's summary

Order ID : 1

Customer ID : 23011071

Products

T-shirt - 19.99

OOP - 39.99

T-shirt - 19.99

SmartPhone - 599.9

Total price : 679.87