

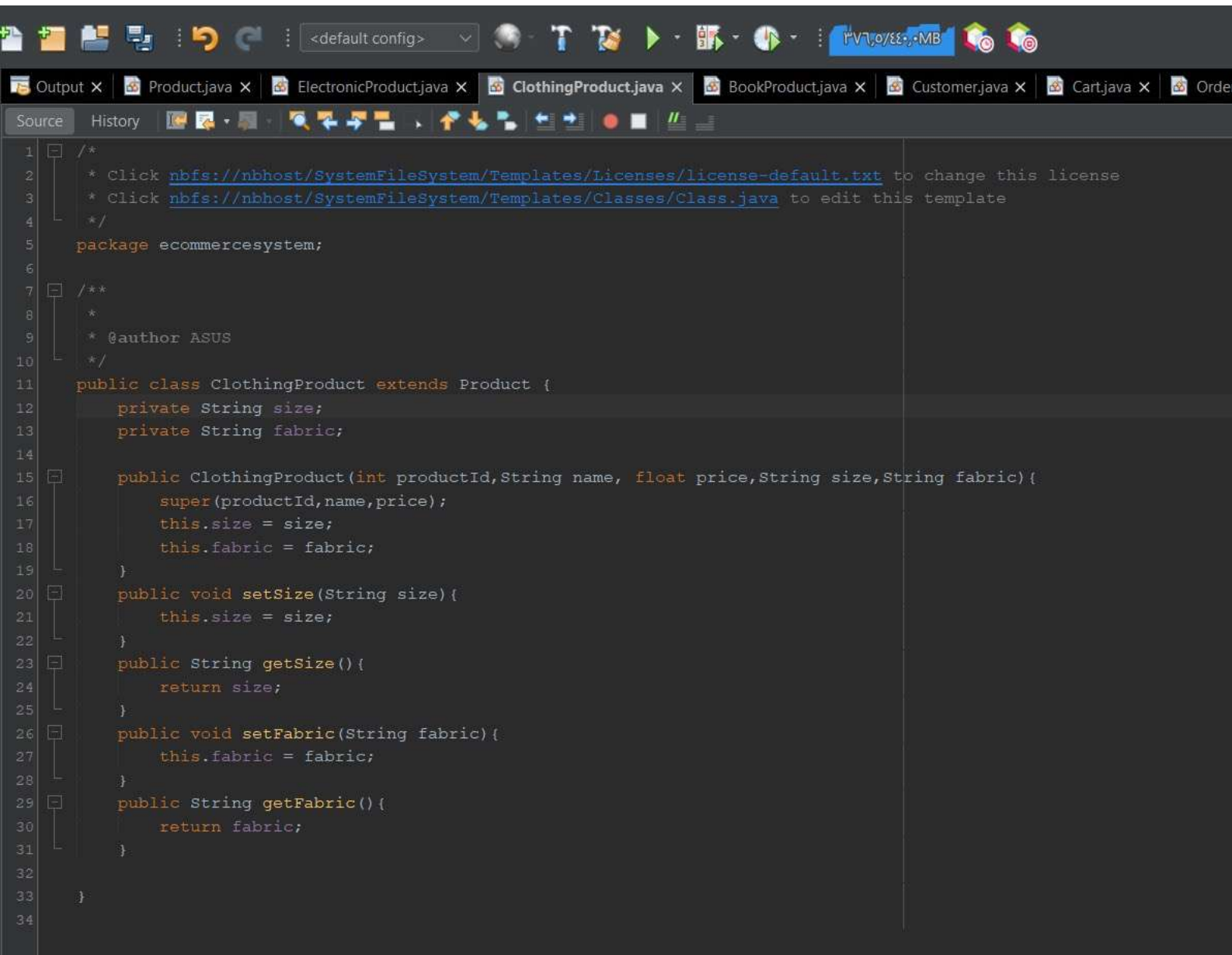
The screenshot shows an IDE window with the following tabs: Output, Product.java, ElectronicProduct.java, ClothingProduct.java, BookProduct.java, Customer.java, Cart.java, and Order.java. The 'Product.java' tab is active, displaying the source code of the Product class. The code includes a package declaration, a class declaration, private fields for productId, name, and price, and several methods for initialization, setting, and getting these values. The code is as follows:

```
9  * @author ASUS
10 */
11
12 public class Product {
13     private int productId;
14     private String name;
15     private float price;
16
17     public Product() {
18
19     }
20
21     public Product(int productId, String name, float price) {
22         this.productId = Math.abs(productId);
23         this.name = name;
24         this.price = Math.abs(price);
25     }
26
27     public void setProductId(int productId) {
28         this.productId = Math.abs(productId);
29     }
30
31     public int getProductId() {
32         return productId;
33     }
34
35     public void setName(String name) {
36         this.name = name;
37     }
38
39     public String getName() {
40         return name;
41     }
42
43     public void setPrice(float price) {
44         this.price = Math.abs(price);
45     }
46
47     public float getPrice() {
48         return price;
49     }
50 }
```

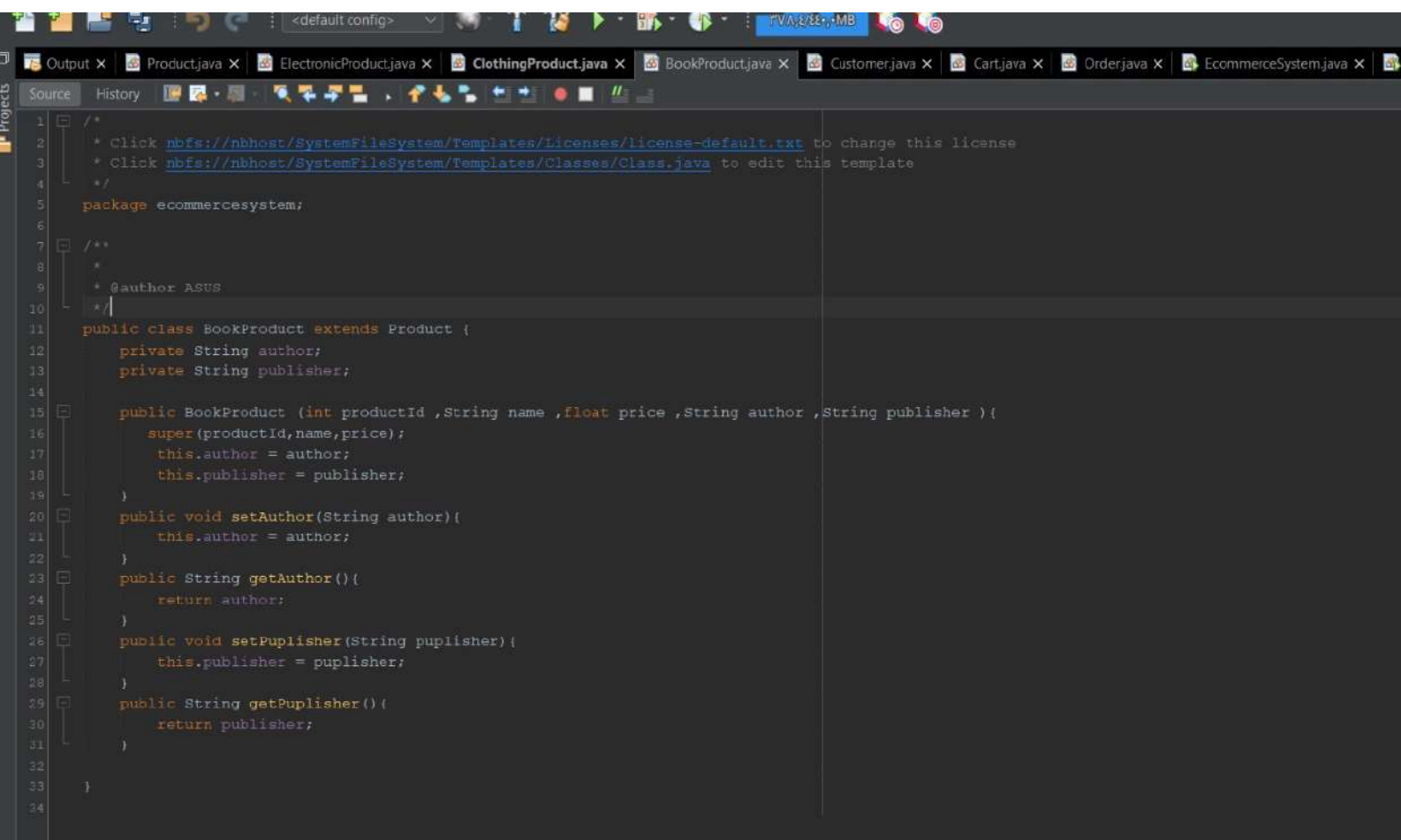
Output × Product.java × ElectronicProduct.java × ClothingProduct.java × BookProduct.java × Customer.java × Cart.java × Order.java

Source History

```
1  /*
2   * Click nbfs://nbhost/SystemFileSystem/Templates/Licenses/license-default.txt to change this license
3   * Click nbfs://nbhost/SystemFileSystem/Templates/Classes/Class.java to edit this template
4   */
5   package ecommercessystem;
6
7   /**
8    *
9    * @author ASUS
10   */
11  public class ElectronicProduct extends Product {
12      private String brand;
13      private int warrantyPeriod;
14
15      public ElectronicProduct(int productId,String name,float price,String brand,int warrantyPriod){
16          super(productId,name,price);
17          this.brand = brand;
18          this.warrantyPeriod = Math.abs(a: warrantyPeriod);
19      }
20      public void setBrand(String brand){
21          this.brand = brand;
22      }
23      public String getBrand(){
24          return brand;
25      }
26      public void setWarrantyPeriod(int warrantyPriod){
27          this.warrantyPeriod = Math.abs(a: warrantyPriod);
28      }
29      public int getWarrantyPeriod(){
30          return warrantyPeriod;
31      }
32  }
33
```



```
1  /*
2   * Click nbfs://nbhost/SystemFileSystem/Templates/Licenses/license-default.txt to change this license
3   * Click nbfs://nbhost/SystemFileSystem/Templates/Classes/Class.java to edit this template
4   */
5   package ecommercessystem;
6
7   /**
8    *
9    * @author ASUS
10   */
11   public class ClothingProduct extends Product {
12       private String size;
13       private String fabric;
14
15       public ClothingProduct(int productId,String name, float price,String size,String fabric){
16           super(productId,name,price);
17           this.size = size;
18           this.fabric = fabric;
19       }
20       public void setSize(String size){
21           this.size = size;
22       }
23       public String getSize(){
24           return size;
25       }
26       public void setFabric(String fabric){
27           this.fabric = fabric;
28       }
29       public String getFabric(){
30           return fabric;
31       }
32   }
33
34
```



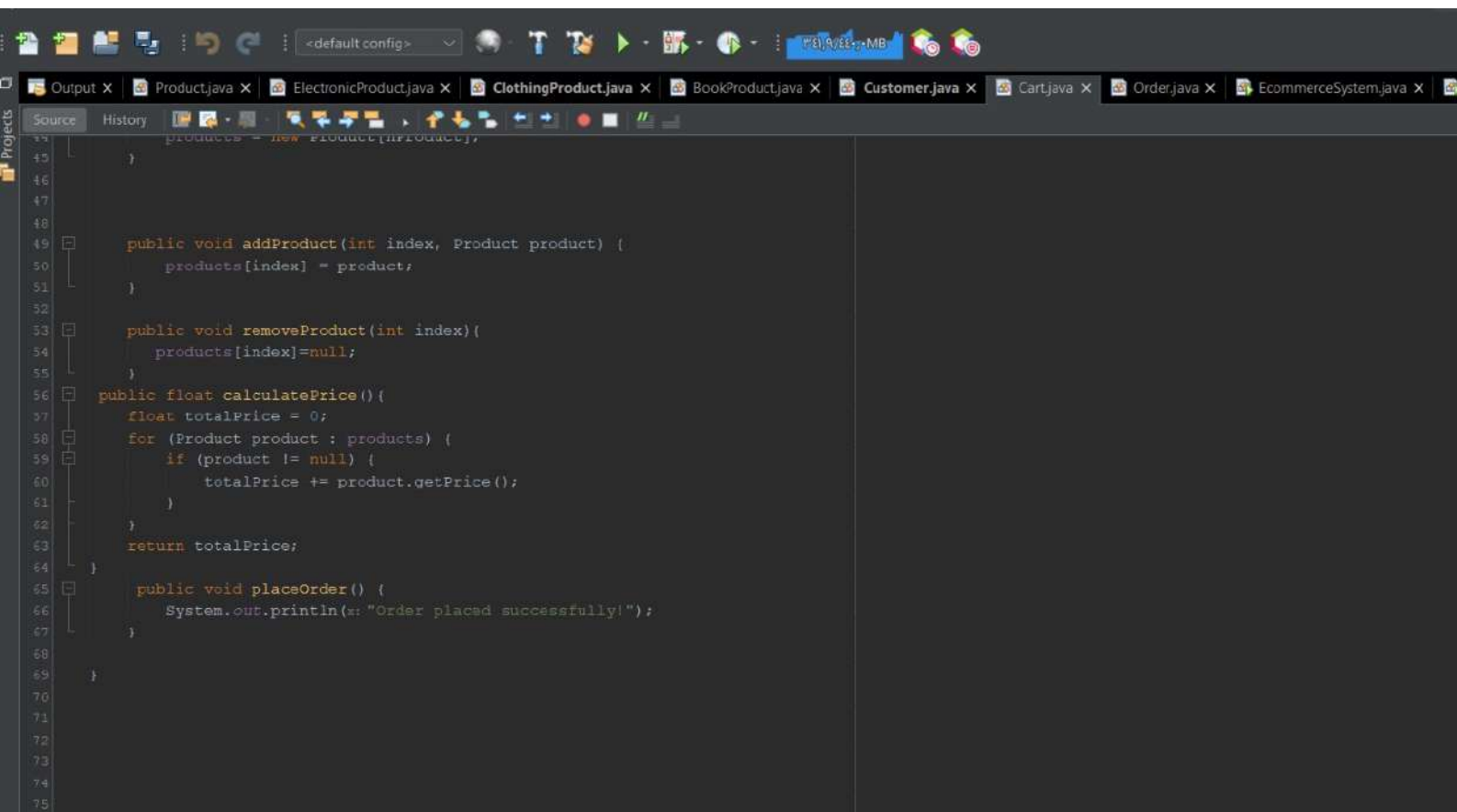
```
1  /*
2   * Click nbfs:///nbhost/SystemFileSystem/Templates/Licenses/license-default.txt to change this license
3   * Click nbfs:///nbhost/SystemFileSystem/Templates/Classes/Class.java to edit this template
4   */
5   package ecommercesystem;
6
7   /**
8    *
9    * @author ASUS
10   */
11  public class BookProduct extends Product {
12      private String author;
13      private String publisher;
14
15      public BookProduct (int productId ,String name ,float price ,String author ,String publisher ){
16          super(productId,name,price);
17          this.author = author;
18          this.publisher = publisher;
19      }
20      public void setAuthor(String author){
21          this.author = author;
22      }
23      public String getAuthor(){
24          return author;
25      }
26      public void setPuplisher(String puplisher){
27          this.publisher = puplisher;
28      }
29      public String getPuplisher(){
30          return publisher;
31      }
32  }
33
34  }
```

Output × Product.java × ElectronicProduct.java × ClothingProduct.java × BookProduct.java × Customer.java × Cart.java × Order.java × E

Source History

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

```
Output x Product.java x ElectronicProduct.java x ClothingProduct.java x BookProduct.java x Customer.java x Cart.java x Order.java x EcommerceSystem.java x Ne
Source History
10  */
11  public class Cart {
12      private int customerId;
13      private int nProduct;
14      private Product[] products;
15
16      public int getCustomerId() {
17          return customerId;
18      }
19
20      public void setCustomerId(int customerId) {
21          this.customerId = Math.abs(a: customerId);
22      }
23
24      public int getnProduct() {
25          return nProduct;
26      }
27
28      public void setnProduct(int nProduct) {
29          this.nProduct = Math.abs(a: nProduct);
30      }
31
32      public Product[] getProducts() {
33          return products;
34      }
35
36      public void setProducts(Product[] products) {
37          this.products = products;
38      }
39
40      public Cart(int customerId, int nProduct) {
41
42          this.customerId = Math.abs(a: customerId);
43          this.nProduct = Math.abs(a: nProduct);
44          products = new Product[nProduct];
45      }
46  }
```



The screenshot shows an IDE window with multiple tabs open: Output, Product.java, ElectronicProduct.java, ClothingProduct.java, BookProduct.java, Customer.java, Cart.java, Order.java, and EcommerceSystem.java. The EcommerceSystem.java tab is active, displaying the following Java code:

```
44 products = new Product[nProduct];
45 }
46
47
48
49 public void addProduct(int index, Product product) {
50     products[index] = product;
51 }
52
53 public void removeProduct(int index){
54     products[index]=null;
55 }
56
57 public float calculatePrice(){
58     float totalPrice = 0;
59     for (Product product : products) {
60         if (product != null) {
61             totalPrice += product.getPrice();
62         }
63     }
64     return totalPrice;
65 }
66
67 public void placeOrder() {
68     System.out.println("Order placed successfully!");
69 }
70
71
72
73
74
75
```

Output × Product.java × ElectronicProduct.java × ClothingProduct.java × BookProduct.java × Customer.java × Cart.java × Order.java × EcommerceSystem.java

Source History

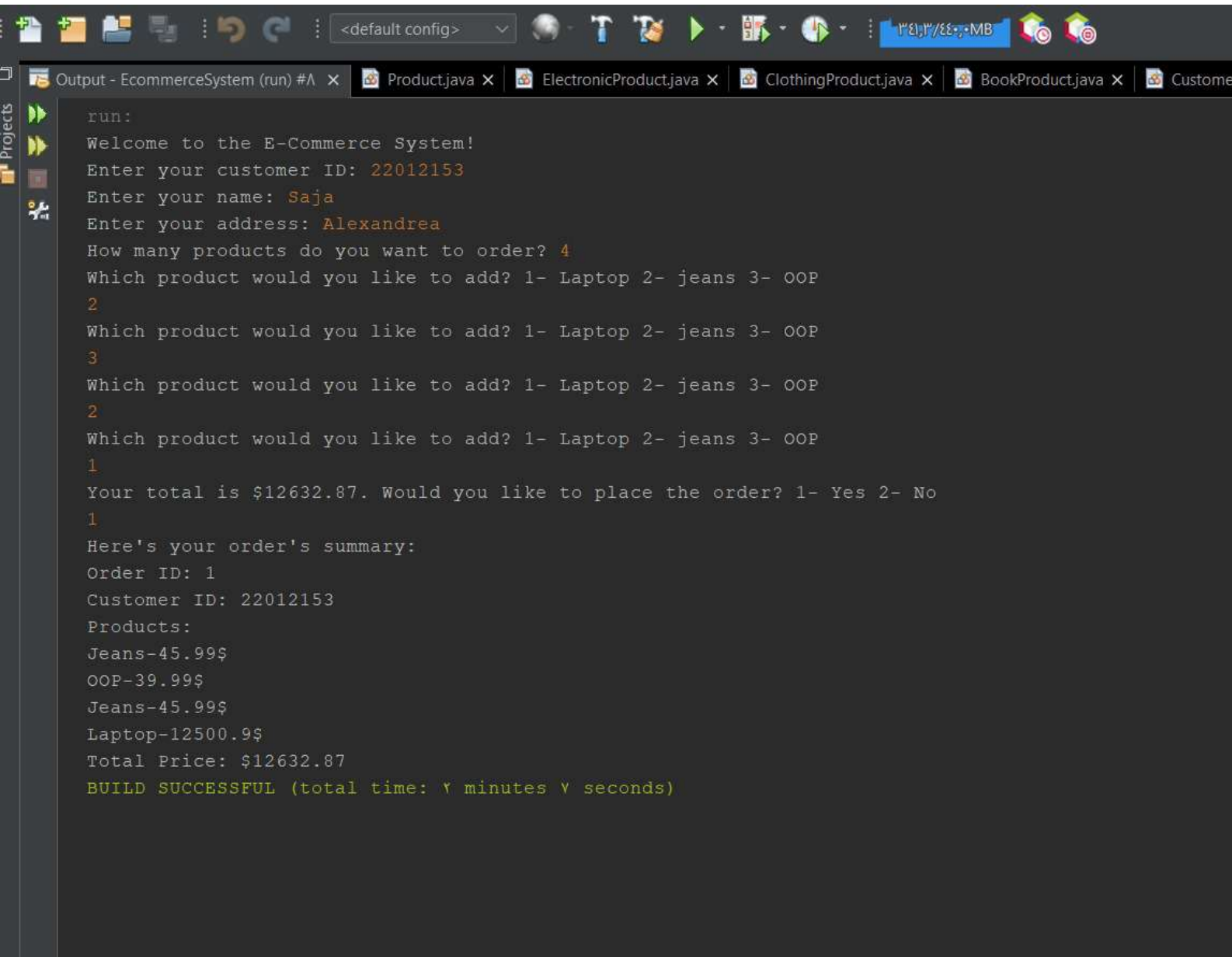
```
8  *
9  * @author ASUS
10 * /
11 public class Order {
12     private int customerId;
13     private int orderId;
14     private Product[] products;
15     private float totalPrice;
16
17     public Order(int customerId, int orderId, Product[] products) {
18         this.customerId = Math.abs(customerId);
19         this.orderId = Math.abs(orderId);
20         this.products = products;
21         this.totalPrice = calculateTotalPrice();
22     }
23
24     public int getCustomerId() {
25         return customerId;
26     }
27
28     public void setCustomerId(int customerId) {
29         this.customerId = customerId;
30     }
31
32     public int getOrderId() {
33         return orderId;
34     }
35
36     public void setOrderId(int orderId) {
37         this.orderId = orderId;
38     }
39
40     public Product[] getProducts() {
41         return products;
42     }
43 }
```



```
Output x Product.java x ElectronicProduct.java x ClothingProduct.java x BookProduct.java x Customer.java x Cart.java x Order.java x EcommerceSystem.java x NewMain.java x
Source History
43 public void setProducts(Product[] products) {
44     this.products = products;
45 }
46
47 public float getTotalPrice() {
48     return totalPrice;
49 }
50
51 public void setTotalPrice(float totalPrice) {
52     this.totalPrice = totalPrice;
53 }
54 private float calculateTotalPrice() {
55     float totalPrice = 0;
56     for (Product product : products) {
57         totalPrice += product.getPrice();
58     }
59     return totalPrice;
60 }
61
62
63 public void printOrderInfo() {
64     System.out.println("Order ID: " + orderId);
65     System.out.println("Customer ID: " + customerId);
66     System.out.println("Products:");
67
68     for (Product product : products) {
69
70         System.out.println(product.getName()+"-"+ product.getPrice()+"$");
71
72     }
73
74     System.out.println("Total Price: $" + totalPrice);
75 }
76
77 }
```

```
Output X Product.java X ElectronicProduct.java X ClothingProduct.java X BookProduct.java X Customer.java X Cart.java X Order.java X EcommerceSystem.java X NewMain.java X
Source History
4  /**
5  package ecommercesystem;
6
7  import java.util.Scanner;
8
9  /**
10   *
11   * @author ASUS
12   */
13  public class EcommerceSystem {
14
15      /**
16       * @param args the command line arguments
17       */
18      public static void main(String[] args) {
19          Scanner sc = new Scanner(System.in);
20          // Create an electronic product
21          ElectronicProduct electronicProduct = new ElectronicProduct(productId:1, name: "Laptop", price: 12500.90f, brand: "ASUS", warrantyPeriod: 2);
22
23          // Create a clothing product
24          ClothingProduct clothingProduct = new ClothingProduct(productId:2, name: "Jeans", price: 45.99f, size: "free size", fabric: "denim");
25
26          // Create a book product
27          BookProduct bookProduct = new BookProduct(productId:3, name: "OOP", price: 39.99f, author: "O'Reilly", publisher: "X Publications");
28
29          // Create a customer
30          System.out.println("Welcome to the E-Commerce System!");
31          System.out.print("Enter your customer ID: ");
32          int customerId = sc.nextInt();
33          System.out.print("Enter your name: ");
34          String name = sc.next();
35          System.out.print("Enter your address: ");
36          String address = sc.next();
37          Customer customer = new Customer(customerId, name, address);
```

```
Output x Product.java x ElectronicProduct.java x ClothingProduct.java x BookProduct.java x Customer.java x Cart.java x Order.java x EcommerceSystem.java x NewMain.java x
Source History
39 // Create a shipping cart for the customer
40 System.out.print("How many products do you want to order? ");
41 int nProducts = sc.nextInt();
42 Cart cart = new Cart(customerId: customer.getCustomerId(), nProduct: nProducts);
43
44 // Add products to the cart
45 for (int i = 0; i < nProducts; i++) {
46     System.out.println("Which product would you like to add? 1- Laptop 2- jeans 3- OOF");
47     int choice = sc.nextInt();
48     switch (choice) {
49         case 1:
50             cart.addProduct(index: i, product: electronicProduct );
51             break;
52         case 2:
53             cart.addProduct(index: i, product: clothingProduct);
54             break;
55         case 3:
56             cart.addProduct(index: i, product: bookProduct);
57             break;
58         default:
59             System.out.println("Invalid choice!");
60     }
61 }
62 cart.calculatePrice();
63
64 System.out.println("Your total is $" + cart.calculatePrice() + ". Would you like to place the order? 1- Yes 2- No");
65 int placeOrder = sc.nextInt();
66 if (placeOrder == 1) {
67
68     Order order = new Order(customerId: customer.getCustomerId(), orderId: 1, products: cart.getProducts());
69     System.out.println("Here's your order's summary:");
70     order.printOrderInfo();
71 } else {
72     System.out.println("Order cancelled.");
73 }
74
75 }
```



```
run:
Welcome to the E-Commerce System!
Enter your customer ID: 22012153
Enter your name: Saja
Enter your address: Alexandria
How many products do you want to order? 4
Which product would you like to add? 1- Laptop 2- jeans 3- OOP
2
Which product would you like to add? 1- Laptop 2- jeans 3- OOP
3
Which product would you like to add? 1- Laptop 2- jeans 3- OOP
2
Which product would you like to add? 1- Laptop 2- jeans 3- OOP
1
Your total is $12632.87. Would you like to place the order? 1- Yes 2- No
1
Here's your order's summary:
Order ID: 1
Customer ID: 22012153
Products:
Jeans-45.99$
OOP-39.99$
Jeans-45.99$
Laptop-12500.9$
Total Price: $12632.87
BUILD SUCCESSFUL (total time: 7 minutes 7 seconds)
```