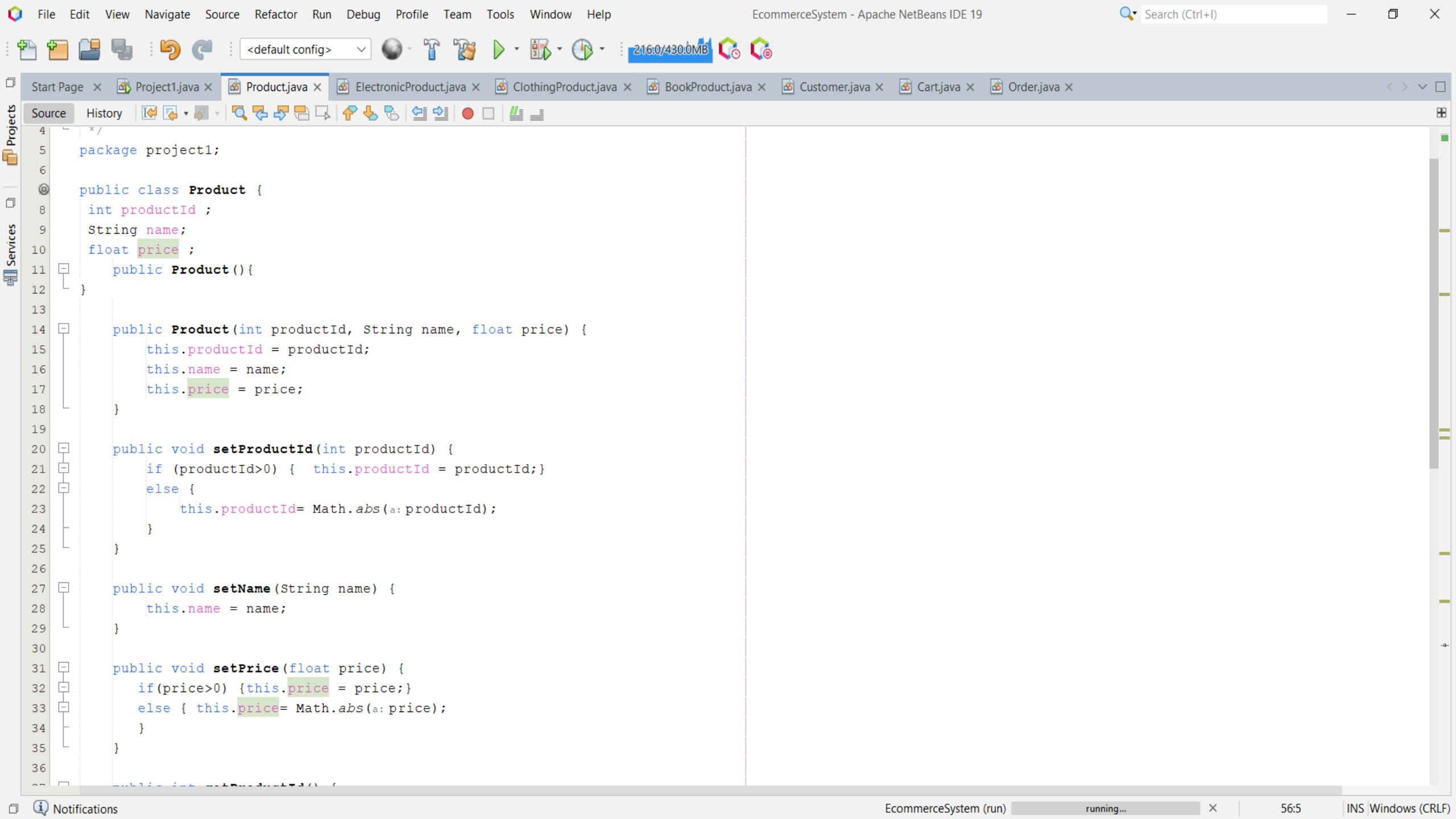


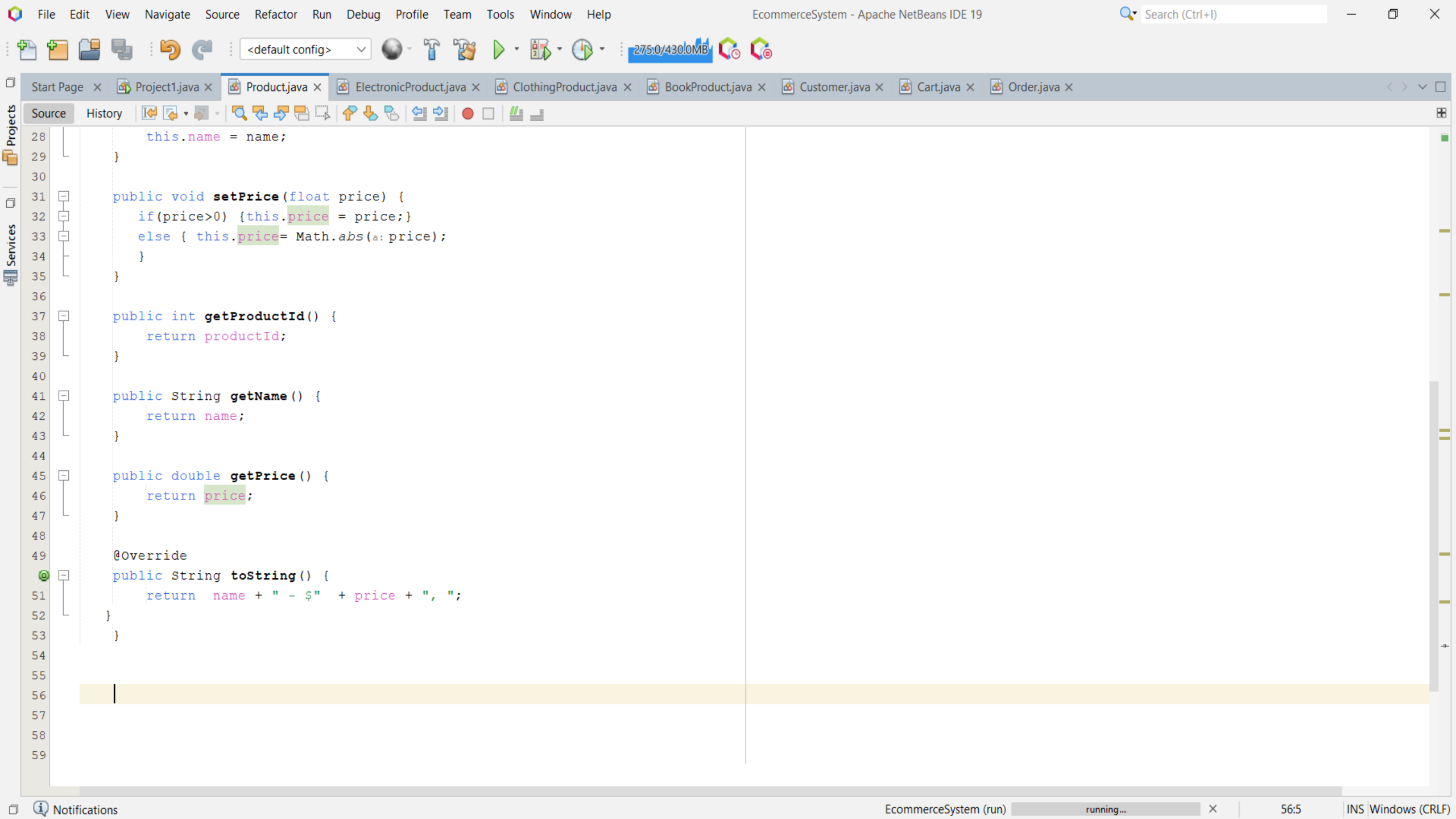
```

5 package project1;
6 import java.util.Scanner;
7 import javax.swing.JOptionPane;
8 public class Project1 {
9
10     public static void main(String[] args) {
11         Scanner scanner = new Scanner(System.in);
12
13         ElectronicProduct electronicProduct = new ElectronicProduct( brand: "smartphone", warrantyPeriod:1, productId: 1, name: "Samsung", price: 599.9f );
14         ClothingProduct clothingproduct = new ClothingProduct( size: "Medium", fabric: "Cotton", productId: 2 , name: "T-shirt", price: 19.99f);
15         BookProduct bookProduct = new BookProduct(author: "O'Reilly", publisher: "X Publications", productId: 3, name: "OOP", price: 39.99f);
16
17         JOptionPane.showMessageDialog(parentComponent: null, message: "Welcome to the E-Commerce System! ");
18         int customerId = Integer.parseInt(s: JOptionPane.showInputDialog(message: "Enter your id:"));
19         JOptionPane.showMessageDialog(parentComponent: null, "you Id " + customerId );
20         String name = JOptionPane.showInputDialog(message: "Enter your name:");
21         JOptionPane.showMessageDialog(parentComponent: null, "Hello " + name);
22         String address = JOptionPane.showInputDialog(message: "Enter your address:");
23         JOptionPane.showMessageDialog(parentComponent: null, "your address " + address);
24
25         Customer customer = new Customer(customerId, name, address);
26
27         int nomproducts= Integer.parseInt(s: JOptionPane.showInputDialog(message: "Enter num of products "));
28         Cart cart=new Cart(customerId,nProducts: nomproducts);
29
30         for (int i = 0; i < nomproducts; i++) {
31             JOptionPane.showMessageDialog(parentComponent: null, message: "choose product to add");
32             JOptionPane.showMessageDialog(parentComponent: null, message: "1- smartphone, 2- T-shirt, 3- Oop");
33             int productId = Integer.parseInt(s: JOptionPane.showInputDialog(message: "Enter Your choise"));
34             Product product;
35             switch (productId) {
36                 case 1:
37                     product = electronicProduct;

```

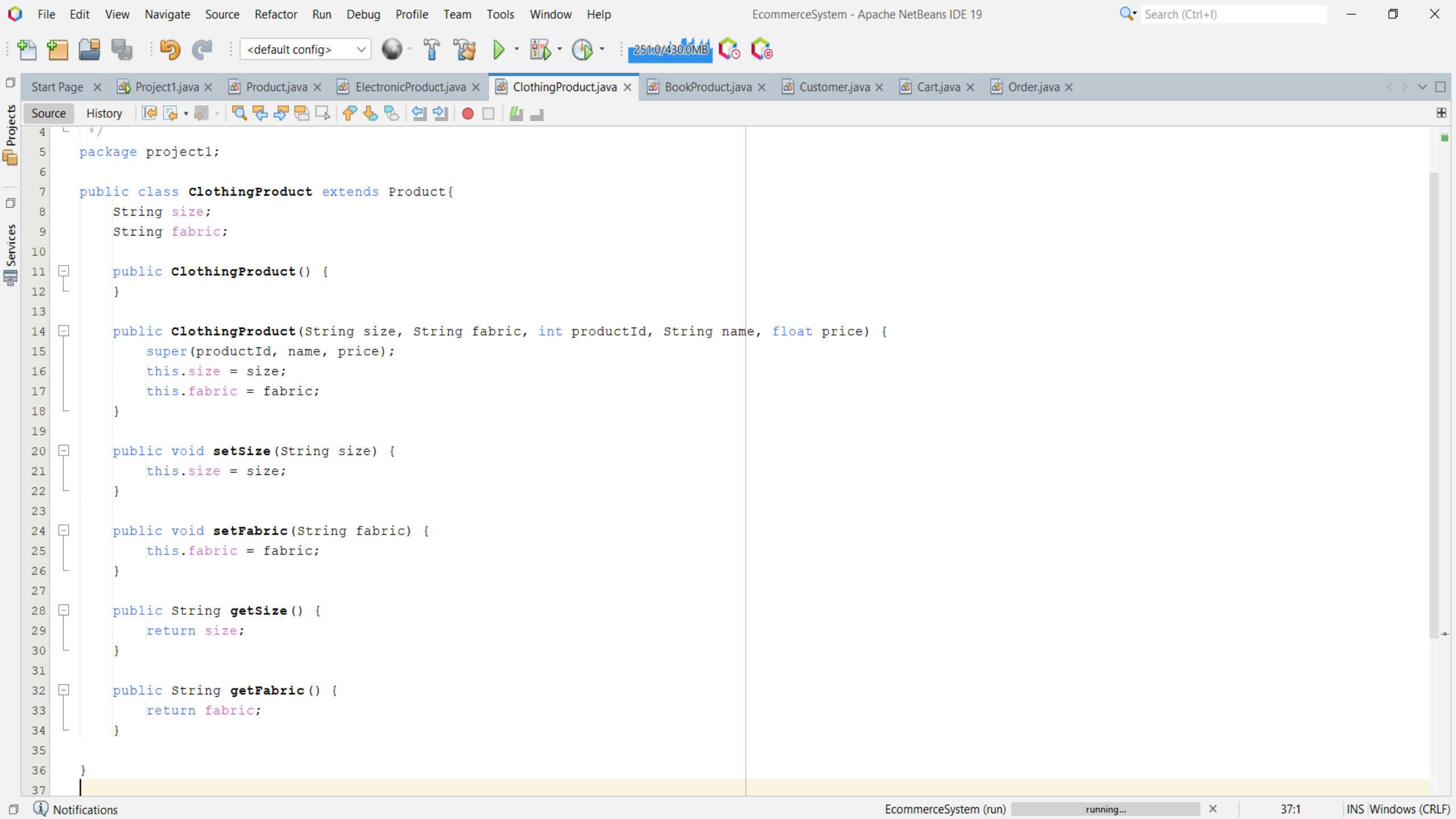
```
switch (productId) {
36     case 1:
37         product = electronicProduct;
38         break;
39     case 2:
40         product = clothingproduct;
41         break;
42     case 3:
43         product = bookProduct;
44         break;
45     default:
46         JOptionPane.showMessageDialog(parentComponent: null, message: "Invalid product ID. Please try again.");
47         i--;
48         continue;
49 }
50 cart.addproduct(product);
51 }
52
53 JOptionPane.showMessageDialog(parentComponent: null, message: " would you like to place the order ? 1=yes/2-no");
54 int choice = Integer.parseInt(s: JOptionPane.showInputDialog(message: "Enter your choice: "));
55 if (choice == 1) {
56     Order order = new Order(customerId: customer.getCustomerId(), orderId: 1 );
57     cart.placeorder(o: order, c: cart);
58     order.printOrderInfo();
59 } else {
60     JOptionPane.showMessageDialog(parentComponent: null, message: "Thank you for using our E-Commerce system!");
61 }
62
63 }
64 }
65
66
67
```

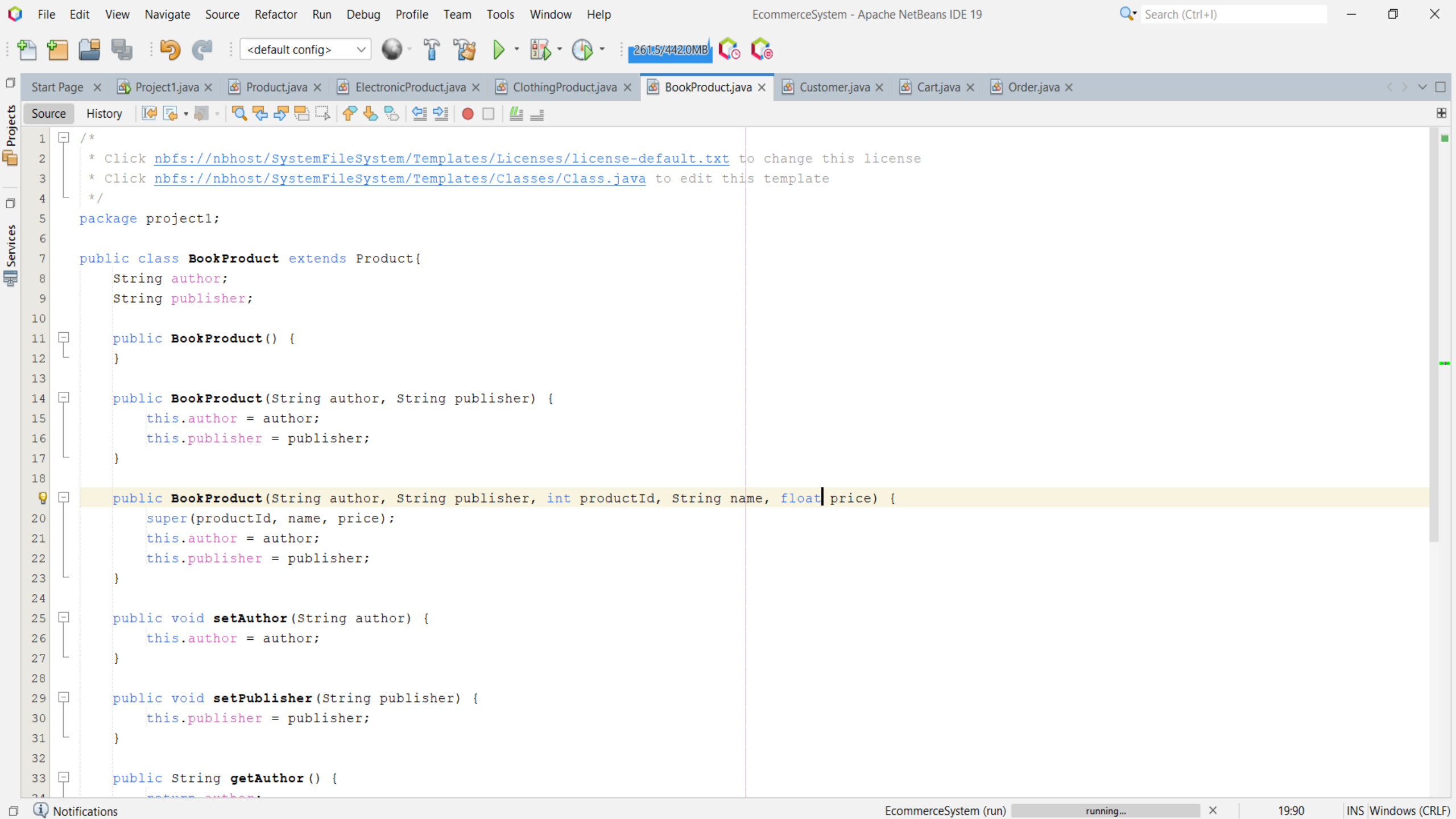




```
1  /*
2   * Click nbfs://nbhost/SystemFileSystem/Templates/Licenses/license-default.txt to change this license
3   * Click nbfs://nbhost/SystemFileSystem/Templates/Classes/Class.java to edit this template
4   */
5  package project1;
6
7  public class ElectronicProduct extends Product {
8      String brand;
9      int warrantyPeriod;
10
11     public ElectronicProduct() {
12     }
13
14     public ElectronicProduct(String brand, int warrantyPeriod, int productId, String name, float price) {
15         super(productId, name, price);
16         this.brand = brand;
17         this.warrantyPeriod = warrantyPeriod;
18     }
19
20     public void setBrand(String brand) {
21         this.brand = brand;
22     }
23
24     public void setWarrantyPeriod(int warrantyPeriod) {
25         if (warrantyPeriod > 0) { this.warrantyPeriod = warrantyPeriod; }
26         else {
27             this.warrantyPeriod = Math.abs(warrantyPeriod);
28         }
29     }
30
31     public String getBrand() {
32         return brand;
33     }
34 }
```

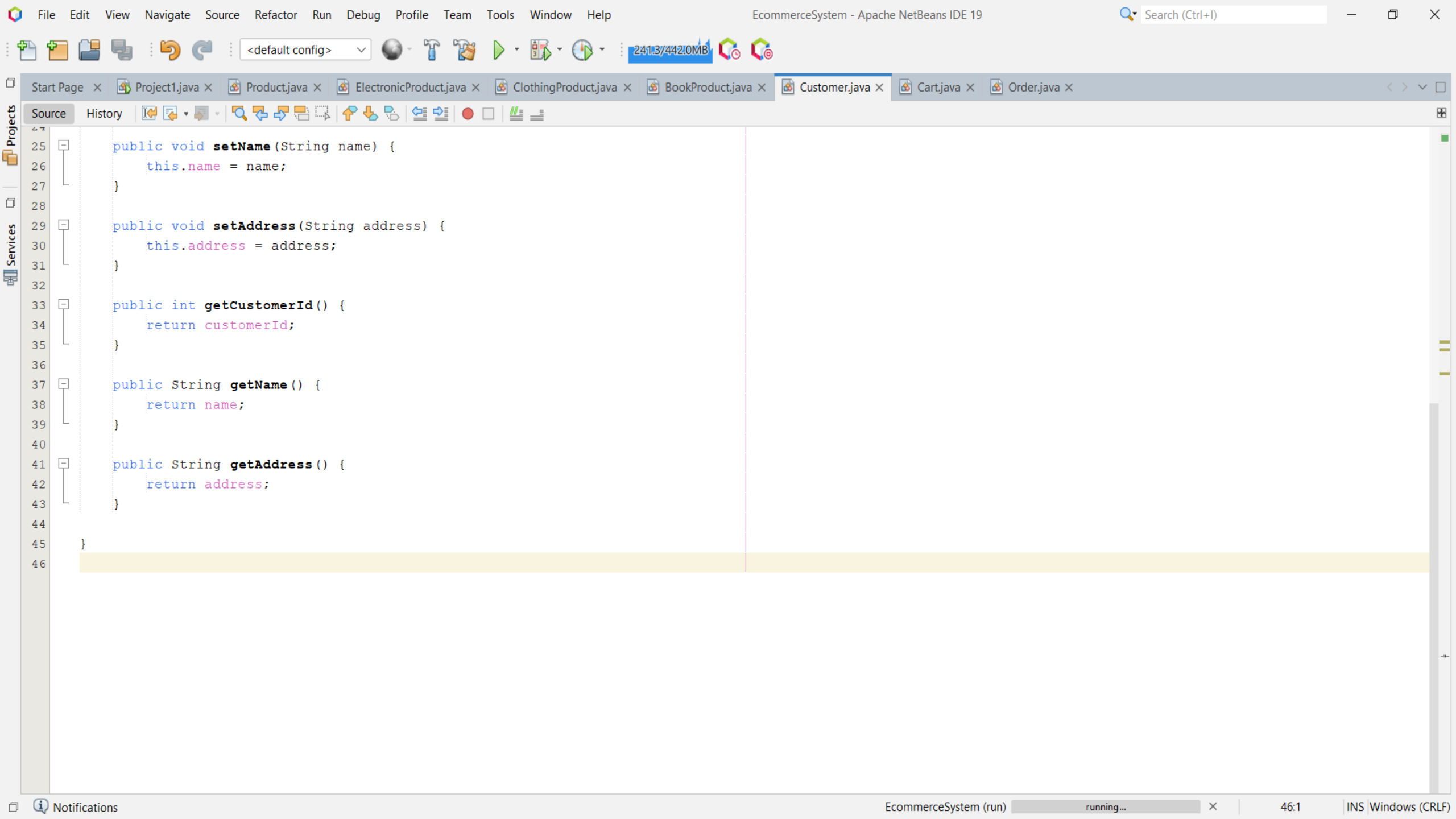
```
13 public ElectronicProduct(String brand, int warrantyPeriod, int productId, String name, float price) {
14     super(productId, name, price);
15     this.brand = brand;
16     this.warrantyPeriod = warrantyPeriod;
17 }
18
19
20 public void setBrand(String brand) {
21     this.brand = brand;
22 }
23
24 public void setWarrantyPeriod(int warrantyPeriod) {
25     if (warrantyPeriod > 0) { this.warrantyPeriod = warrantyPeriod; }
26     else {
27         this.warrantyPeriod = Math.abs(warrantyPeriod);
28     }
29 }
30
31 public String getBrand() {
32     return brand;
33 }
34
35 public int getWarrantyPeriod() {
36     return warrantyPeriod;
37 }
38
39
40
41 }
42
```






```
15     this.author = author;
16     this.publisher = publisher;
17 }
18
19 public BookProduct(String author, String publisher, int productId, String name, float price) {
20     super(productId, name, price);
21     this.author = author;
22     this.publisher = publisher;
23 }
24
25 public void setAuthor(String author) {
26     this.author = author;
27 }
28
29 public void setPublisher(String publisher) {
30     this.publisher = publisher;
31 }
32
33 public String getAuthor() {
34     return author;
35 }
36
37 public String getPublisher() {
38     return publisher;
39 }
40
41 }
42
43
```

```
5 package project1;
6
7 public class Customer {
8     int customerId;
9     String name;
10    String address;
11
12    public Customer(int customerId, String name, String address) {
13        this.customerId = customerId;
14        this.name = name;
15        this.address = address;
16    }
17
18    public void setCustomerId(int customerId) {
19        if (customerId > 0) { this.customerId = customerId; }
20        else {
21            this.customerId = Math.abs(customerId);
22        }
23    }
24
25    public void setName(String name) {
26        this.name = name;
27    }
28
29    public void setAddress(String address) {
30        this.address = address;
31    }
32
33    public int getCustomerId() {
34        return customerId;
35    }
36
37    public String getName() {
```

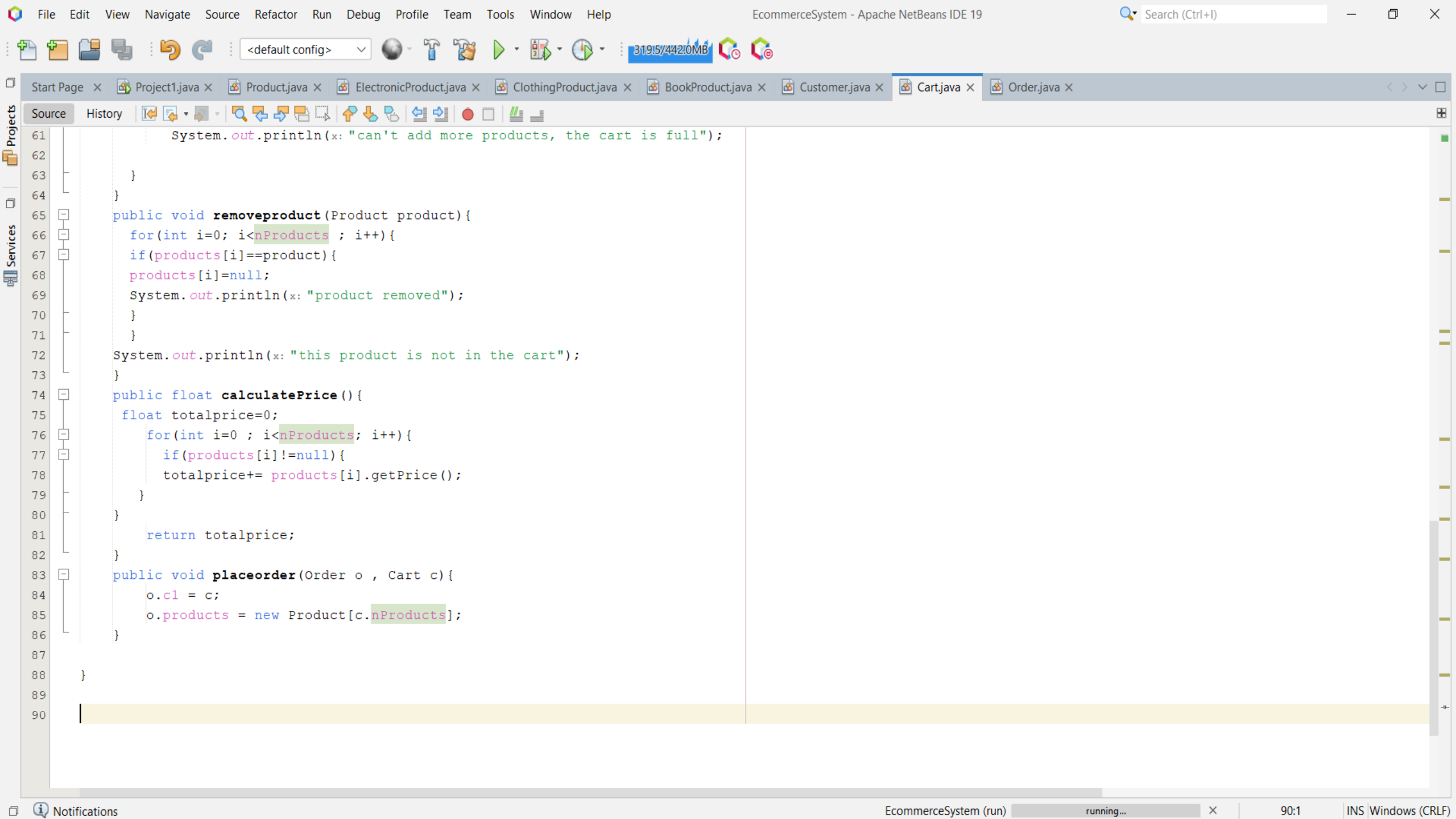


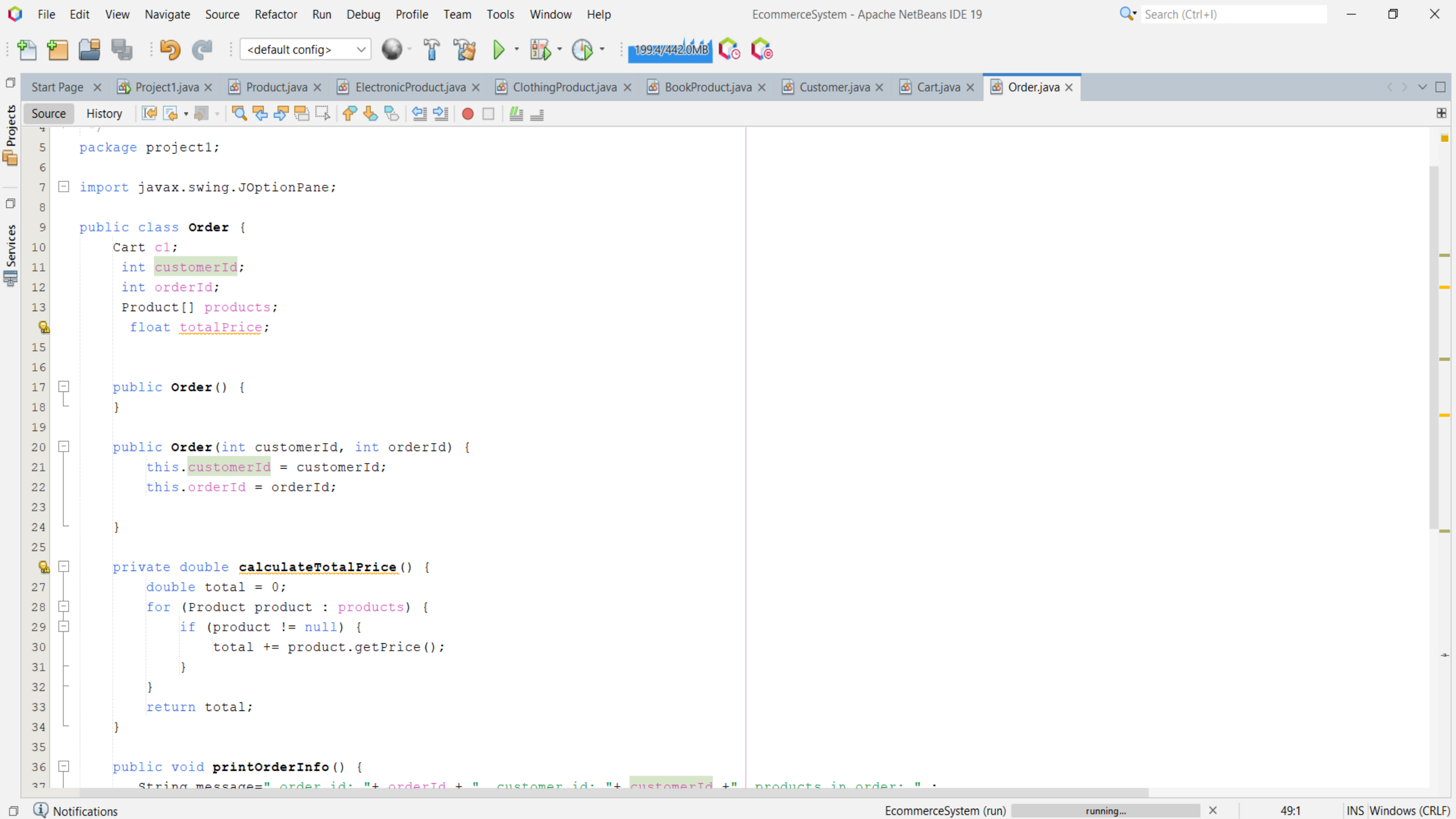
```
4  */
5  package project1;
6
7  public class Cart {
8      int customerId;
9      int nProducts;
10     Product[] products ;
11
12     public Cart() {
13     }
14
15     public Cart(int customerId, int nProducts) {
16         this.customerId = customerId;
17         this.nProducts = nProducts;
18         products = new Product[nProducts];
19     }
20
21     public void setCustomerId(int customerId) {
22         if (customerId>0) {this.customerId = customerId;}
23         else {
24             this.customerId= Math.abs(a: customerId);
25         }
26     }
27
28
29     public void setnProducts(int nProducts) {
30         if(nProducts>0){ this.nProducts = nProducts;}
31         else{
32             this.nProducts = Math.abs(a: nProducts);
33         }
34     }
35 }
36
```

```

33 |
34 |     }
35 | }
36 |
37 | public void setProducts(Product[] products) {
38 |     this.products = products;
39 | }
40 |
41 |
42 | public int getCustomerId() {
43 |     return customerId;
44 | }
45 |
46 | public int getnProducts() {
47 |     return nProducts;
48 | }
49 |
50 | public Product[] getProducts() {
51 |     return products;
52 | }
53 |
54 | public void addproduct(Product product){
55 |     for (int i=0 ; i<nProducts ;i++ ){
56 |         if (products[i]==null){
57 |             products[i]=product;
58 |             break;
59 |         }
60 |         else if (i == nProducts-1)
61 |             System.out.println(x: "can't add more products, the cart is full");
62 |
63 |     }
64 | }
65 | public void removeproduct(Product product){

```





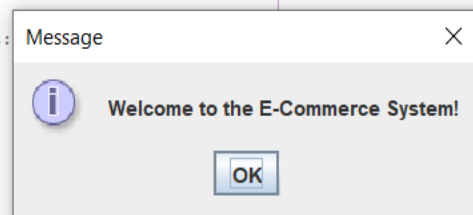
Source History

```
28     for (Product product : products) {
29         if (product != null) {
30             total += product.getPrice();
31         }
32     }
33     return total;
34 }
35
36 public void printOrderInfo() {
37     String message=" order id: "+ orderId + ", customer id: "+ customerId +", products in order: " ;
38     for (int i = 0 ; i<c1.nProducts ; i++){
39         if(c1.products[i]!=null){
40             message+=  c1.products[i].toString();
41         }
42     }
43
44     message+= " total price: $ "+ c1.calculatePrice();
45     JOptionPane.showMessageDialog( parentComponent:null,message);
46 }
47 }
48
49
```



```

36      switch (productId) {
37          case 1:
38              product = electronicProduct;
39              break;
40          case 2:
41              product = clothingproduct;
42              break;
43          case 3:
44              product = bookProduct;
45              break;
46          default:
47              JOptionPane.showMessageDialog(parentComponent: null, message: "Please try again.");
48              i--;
49              continue;
50      }
51      cart.addproduct(product);
52
53      JOptionPane.showMessageDialog(parentComponent: null, message: " would you like to place the order ? 1=yes/2=no");
54      int choice = Integer.parseInt(s: JOptionPane.showInputDialog(message: "Enter your choice: "));
    
```



```

run:
    
```

```
switch (productId) {
36     case 1:
37         product = electronicProduct;
38         break;
39     case 2:
40         product = clothingproduct;
41         break;
42     case 3:
43         product = bookProduct;
44         break;
45     default:
46         JOptionPane.showMessageDialog(parentComponent: null, message: ". Please try again.");
47         i--;
48         continue;
49 }
50 cart.addproduct(product);
51 }
52
53 JOptionPane.showMessageDialog(parentComponent: null, message: " would you like to place the order ? 1-yes/2-no");
54 int choice = Integer.parseInt(s: JOptionPane.showInputDialog(message: "Enter your choice: "));
```

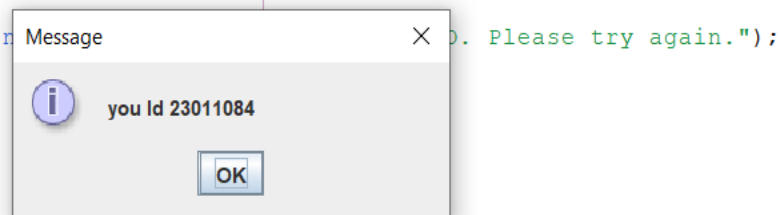
Input

Enter your id:

OK Cancel

```
run:
```

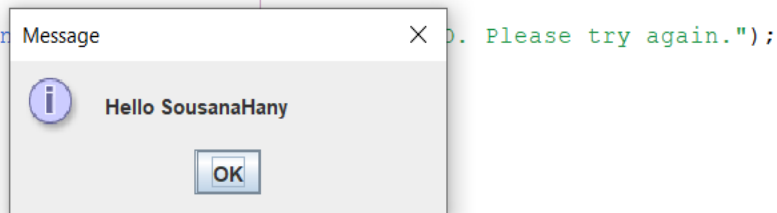
```
36     switch (productId) {
37         case 1:
38             product = electronicProduct;
39             break;
40         case 2:
41             product = clothingproduct;
42             break;
43         case 3:
44             product = bookProduct;
45             break;
46         default:
47             JOptionPane.showMessageDialog(parentComponent: null, message: "Please try again.");
48             i--;
49             continue;
50     }
51     cart.addproduct(product);
52
53     JOptionPane.showMessageDialog(parentComponent: null, message: " would you like to place the order ? 1-yes/2-no");
54     int choice = Integer.parseInt(s: JOptionPane.showInputDialog(message: "Enter your choice: "));
```



```
run:
|
```



```
switch (productId) {
36     case 1:
37         product = electronicProduct;
38         break;
39     case 2:
40         product = clothingproduct;
41         break;
42     case 3:
43         product = bookProduct;
44         break;
45     default:
46         JOptionPane.showMessageDialog(parentComponent: null, message: "Please try again.");
47         i--;
48         continue;
49 }
50 cart.addproduct(product);
51 }
52
53 JOptionPane.showMessageDialog(parentComponent: null, message: " would you like to place the order ? 1-yes/2-no");
54 int choice = Integer.parseInt( JOptionPane.showInputDialog(message: "Enter your choice: ") );
```



run:


```
switch (productId) {
    case 1:
        product = electronicProduct;
        break;
    case 2:
        product = clothingProduct;
        break;
    case 3:
        product = bookProduct;
        break;
    default:
        JOptionPane.showMessageDialog(parentComponent: null, message: "Please try again.");
        i--;
        continue;
}
cart.addproduct(product);

JOptionPane.showMessageDialog(parentComponent: null, message: " would you like to place the order ? 1-yes/2-no");
choice = Integer.parseInt(s: JOptionPane.showInputDialog(message: "Enter your choice: "));
```

Output

EcommerceSystem (run) #2 × EcommerceSystem (run) #3 ×

run:

FileEditViewNavigateSourceRefactorRunDebugProfileTeamToolsWindowHelp

Search (Ctrl+I)

625/5716.0MB

Start PageProject1.javaProduct.javaElectronicProduct.javaClothingProduct.javaBookProduct.javaCustomer.javaCart.javaOrder.java

SourceHistory

switch (productId) {
36 case 1:
37 product = electronicProduct;
38 break;
39 case 2:
40 product = clothingproduct;
41 break;
42 case 3:
43 product = bookProduct;
44 break;
45 default:
46 JOptionPane.showMessageDialog(parentComponent:
47 i--;
48 continue;
49 }
50 cart.addproduct(product);
51 }
52
53 JOptionPane.showMessageDialog(parentComponent:null, message:" would you like to place the order ? 1-yes/2-no");
54 int choice = Integer.parseInt(JOptionPane.showInputDialog(message:"Enter your choice: "));

Input

?

Enter num of products

4

OKCancel

Output

EcommerceSystem (run) #2EcommerceSystem (run) #3

run:

NotificationsOutput

EcommerceSystem (run) #3running... (2 more...)65:5INS

Services



EcommerceSystem (run) #3

running...

× (2 more...)

65:5

INS

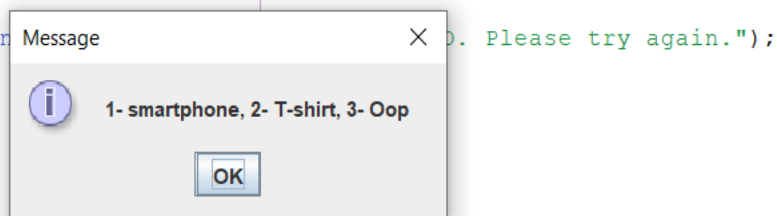
Message



choose product to add

OK

```
switch (productId) {
36     case 1:
37         product = electronicProduct;
38         break;
39     case 2:
40         product = clothingproduct;
41         break;
42     case 3:
43         product = bookProduct;
44         break;
45     default:
46         JOptionPane.showMessageDialog(parentComponent: null, message: "Please try again.");
47         i--;
48         continue;
49 }
50 cart.addproduct(product);
51 }
52
53 JOptionPane.showMessageDialog(parentComponent: null, message: " would you like to place the order ? 1-yes/2-no");
54 int choice = Integer.parseInt(s: JOptionPane.showInputDialog(message: "Enter your choice: "));
```



Output

EcommerceSystem (run) #2 × EcommerceSystem (run) #3 ×

run:

```

36      switch (productId) {
37          case 1:
38              product = electronicProduct;
39              break;
40          case 2:
41              product = clothingproduct;
42              break;
43          case 3:
44              product = bookProduct;
45              break;
46          default:
47              JOptionPane.showMessageDialog(parentComponent: null, message: "Please try again.");
48              i--;
49              continue;
50      }
51      cart.addproduct(product);
52
53      JOptionPane.showMessageDialog(parentComponent: null, message: " would you like to place the order ? 1-yes/2-no");
54      int choice = Integer.parseInt(s: JOptionPane.showInputDialog(message: "Enter your choice: "));
    
```

Input

?

Enter Your choise

2

OK

Cancel

run:

Message

choose product to add

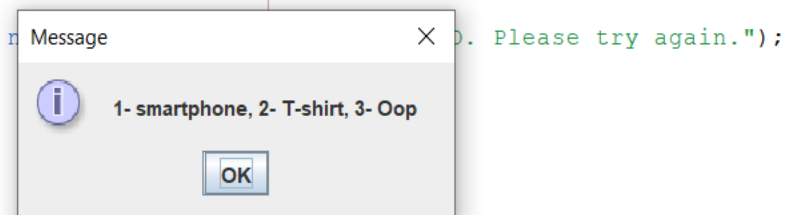
OK

Services Projects

```

36     switch (productId) {
37         case 1:
38             product = electronicProduct;
39             break;
40         case 2:
41             product = clothingproduct;
42             break;
43         case 3:
44             product = bookProduct;
45             break;
46         default:
47             JOptionPane.showMessageDialog(parentComponent, null, "Please try again.");
48             i--;
49             continue;
50     }
51     cart.addproduct(product);
52 }
53
54 JOptionPane.showMessageDialog(parentComponent: null, message: " would you like to place the order ? 1-yes/2-no");
55 int choice = Integer.parseInt(s: JOptionPane.showInputDialog(message: "Enter your choice: "));

```



EcommerceSystem (run) #2 × EcommerceSystem (run) #3 ×

FileEditViewNavigateSourceRefactorRunDebugProfileTeamToolsWindowHelp

Search (Ctrl+I)

686.3/740.0MB

Start PageProject1.javaProduct.javaElectronicProduct.javaClothingProduct.javaBookProduct.javaCustomer.javaCart.javaOrder.java

SourceHistory

switch (productId) {
36 case 1:
37 product = electronicProduct;
38 break;
39 case 2:
40 product = clothingproduct;
41 break;
42 case 3:
43 product = bookProduct;
44 break;
45 default:
46 JOptionPane.showMessageDialog(parentComponent: null, message: ". Please try again.");
47 i--;
48 continue;
49 }
50 cart.addproduct(product);
51 }
52
53 JOptionPane.showMessageDialog(parentComponent: null, message: " would you like to place the order ? 1-yes/2-no");
54 int choice = Integer.parseInt(s: JOptionPane.showInputDialog(message: "Enter your choice: "));

Input

?

Enter Your choice

3

OK

Cancel

Output

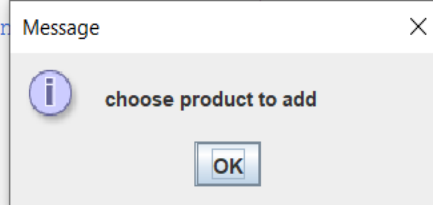
EcommerceSystem (run) #2EcommerceSystem (run) #3

run:

NotificationsOutput

EcommerceSystem (run) #3running... (2 more...)65:5INS

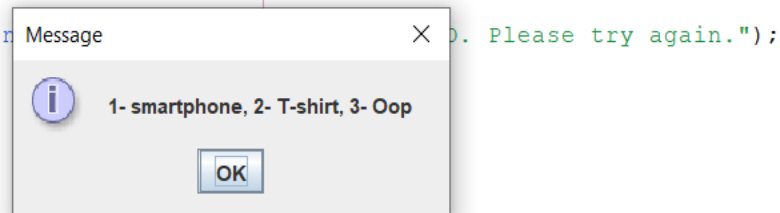
```
switch (productId) {
36     case 1:
37         product = electronicProduct;
38         break;
39     case 2:
40         product = clothingproduct;
41         break;
42     case 3:
43         product = bookProduct;
44         break;
45     default:
46         JOptionPane.showMessageDialog(parentComponent: null, message: "Please try again.");
47         i--;
48         continue;
49 }
50 cart.addproduct(product);
51 }
52
53 JOptionPane.showMessageDialog(parentComponent: null, message: " would you like to place the order ? 1-yes/2-no");
54 int choice = Integer.parseInt( JOptionPane.showInputDialog(message: "Enter your choice: ") );
```



run:

```

36      switch (productId) {
37          case 1:
38              product = electronicProduct;
39              break;
40          case 2:
41              product = clothingproduct;
42              break;
43          case 3:
44              product = bookProduct;
45              break;
46          default:
47              JOptionPane.showMessageDialog(parentComponent: null, message: "Please try again.");
48              i--;
49              continue;
50      }
51      cart.addproduct(product);
52
53      JOptionPane.showMessageDialog(parentComponent: null, message: " would you like to place the order ? 1-yes/2-no");
54      int choice = Integer.parseInt(s: JOptionPane.showInputDialog(message: "Enter your choice: "));
    
```



run:

FileEditViewNavigateSourceRefactorRunDebugProfileTeamToolsWindowHelp

Search (Ctrl+I)

323.5/864.0MB

Start PageProject1.javaProduct.javaElectronicProduct.javaClothingProduct.javaBookProduct.javaCustomer.javaCart.javaOrder.java

SourceHistory

switch (productId) {
36 case 1:
37 product = electronicProduct;
38 break;
39 case 2:
40 product = clothingproduct;
41 break;
42 case 3:
43 product = bookProduct;
44 break;
45 default:
46 JOptionPane.showMessageDialog(parentComponent:
47 i--;
48 continue;
49 }
50 cart.addproduct(product);
51 }
52
53 JOptionPane.showMessageDialog(parentComponent:null, message:" would you like to place the order ? 1-yes/2-no");
54 int choice = Integer.parseInt(s: JOptionPane.showInputDialog(message:"Enter your choice: "));

Input

?

Enter Your choise

2

OKCancel

Output

EcommerceSystem (run) #2EcommerceSystem (run) #3

run:

NotificationsOutput

EcommerceSystem (run) #3running... (2 more...)65:5INS

The screenshot shows an IDE with a Java file. The code is a switch statement that handles product selection based on a productId. The switch statement has three cases: 1 for electronicProduct, 2 for clothingproduct, and 3 for bookProduct. Each case sets the product variable and breaks. The default case increments a counter i and continues the loop. After the switch statement, the product is added to the cart. The code is as follows:

```
36 switch (productId) {
37     case 1:
38         product = electronicProduct;
39         break;
40     case 2:
41         product = clothingproduct;
42         break;
43     case 3:
44         product = bookProduct;
45         break;
46     default:
47         JOptionPane.showMessageDialog(parentComponent: null, message: "Please try again.");
48         i++;
49         continue;
50 }
51 cart.addproduct(product);
52
53 JOptionPane.showMessageDialog(parentComponent: null, message: " would you like to place the order ? 1-yes/2-no");
54 int choice = Integer.parseInt(s: JOptionPane.showInputDialog(message: "Enter your choice: "));
```

Overlaid on the code is a Java Swing dialog box titled "Message". It has an information icon and the text "choose product to add". There is an "OK" button at the bottom.

Message

choose product to add

OK

EcommerceSystem (run) #2 × EcommerceSystem (run) #3 ×

FileEditViewNavigateSourceRefactorRunDebugProfileTeamToolsWindowHelp

Search (Ctrl+I)

613.3/864.0MB

Start PageProject1.javaProduct.javaElectronicProduct.javaClothingProduct.javaBookProduct.javaCustomer.javaCart.javaOrder.java

SourceHistory

switch (productId) {
36 case 1:
37 product = electronicProduct;
38 break;
39 case 2:
40 product = clothingproduct;
41 break;
42 case 3:
43 product = bookProduct;
44 break;
45 default:
46 JOptionPane.showMessageDialog(parentComponent:
47 i--;
48 continue;
49 }
50 cart.addproduct(product);
51 }
52
53 JOptionPane.showMessageDialog(parentComponent:null, message:" would you like to place the order ? 1-yes/2-no");
54 int choice = Integer.parseInt(JOptionPane.showMessageDialog(message:"Enter your choice: "));

Input

?

Enter Your choice

1

OKCancel

Output

EcommerceSystem (run) #2EcommerceSystem (run) #3

run:

NotificationsOutput

EcommerceSystem (run) #3running... (2 more...)65:5INS

```
switch (productId) {
    case 1:
        product = electronicProduct;
        break;
    case 2:
        product = clothingproduct;
        break;
    case 3:
        product = bookProduct;
        break;
    default:
        JOptionPane.showMessageDialog(parentComponent, "Please try again.");
        i--;
        continue;
}
cart.addproduct(product);

JOptionPane.showMessageDialog(parentComponent: null, message: " would you like to place the order ? 1-yes/2-no");
choice = Integer.parseInt(s: JOptionPane.showInputDialog(message: "Enter your choice: "));
```

Output

EcommerceSystem (run) #2 × EcommerceSystem (run) #3 ×

run:

```
switch (productId) {  
36     case 1:  
37         product = electronicProduct;  
38         break;  
39     case 2:  
40         product = clothingproduct;  
41         break;  
42     case 3:  
43         product = bookProduct;  
44         break;  
45     default:  
46         JOptionPane.showMessageDialog(parentComponent: null, message: ". Please try again.");  
47         i--;  
48         continue;  
49 }  
50 cart.addproduct(product);  
51 }  
52  
53 JOptionPane.showMessageDialog(parentComponent: null, message: " would you like to place the order ? 1-yes/2-no");  
54 int choice = Integer.parseInt( JOptionPane.showInputDialog(message: "Enter your choice: "));
```

Input

Enter your choice:

OK Cancel

```
switch (productId) {
    case 1:
        product = electronicProduct;
        break;
    case 2:
        product = clothingProduct;
        break;
    case 3:
        product = bookProduct;
        break;
    default:
        JOptionPane.showMessageDialog(
            i--,
            "order id: 1, customer name: " + customerName);
        continue;
}
```

Message

order id: 1, customer id: 23011084, products in order: T-shirt - \$19.99, OOP - \$39.99, T-shirt - \$19.99, Samsung - \$599.9, total price: \$ 679.87

OK

Output

EcommerceSystem (run) #2 × EcommerceSystem (run) #4 ×

run: