```
70
 71
 72
 73
            public float calcPrice() {
PROBLEMS (13)
               OUTPUT
                        DEBUG CONSOLE TERMINAL
                                                  PORTS
PS C:\Users\sherr\OneDrive\Desktop\UNI FINAL> cd "c:\Users\sherr\OneDrive\Desktop\iiiii\"; if ($?) { javac Main.java }; if ($?) { java Main }
Welcome to our E-Commerce system! Please Enter your name:
sherry
Enter your ID:
23011302
Enter your address:
alex
How many products do you want to add to your cart?
Which products do you want to add?
(1) Mobile Phone
(2) Java Book
(3)TShirt
1
Which products do you want to add?
(1) Mobile Phone
(2) Java Book
(3)TShirt
Your total price is: 639.89
Confirm the order? click 1 for yes
1
Name: Mobile Phone
Price: 599.9
ID: 1
Name: OOP
Price: 39.99
ID: 3
Your total is: 639.89
PS C:\Users\sherr\OneDrive\Desktop\iiiii>
```

1

```
public class Main {
  3
          public static void main(String[] args){
  4
           Product[] products = new Product[nprod];
 38
           for (int i=0;i<nprod;i++){
 39
              System.out.println(x:"Which products do you want to add?\n(1) Mobile Phone\n(2)Java Book\n(3)TShirt");
 40
              int choice = sc.nextInt();
 41
 42
              switch (choice) {
 43
                  case 1:
 44
                  products[i] = ep;
 45
                  break:
 46
                  case 2:
 47
                  products[i] = book;
 48
                  break;
 49
                  case 3:
 50
                  products[i] = cp;
 51
                  break;
 52
                  default:
 53
                  System.out.println(x:"Invalid Choice");
 54
                  i--;
 55
                  break;
 56
 57
              cart.setProducts(products);
 58
              float totalPrice = cart.calcPrice();
 59
              System.out.println("Your total price is: "+totalPrice);
 60
              System.out.println(x: "Confirm the order? click 1 for yes");
 61
              int choice2 = sc.nextInt();
 62
 63
              switch (choice2){
 64
                  case 1:
                  cart.placeOrder(products);
 65
 66
                  break:
 67
                  default:
                  System.out.println(x:"enter ID of order you want to remove: ");
 68
                  int IDr = sc.nextInt();
 69
                  switch (IDr)
 70
                  case(1):
 71
                  cart.removeProduct(ep);
 72
 73
                  System.out.println("product removed. now your total is: "+cart.calcPrice());
PROBLEMS (13)
            OUTPUT DEBUG CONSOLE TERMINAL PORTS
(3)TShirt
Your total price is: 639.89
Confirm the order? click 1 for yes
```

```
BookProduct.java 1 Cart.java 2 ClothingProduct.java 1 ElectronicProduct.java 1 Main.java 3 X Product.java 1
    C: > Users > sherr > OneDrive > Desktop > iiiiii > □ Main.java > 😭 Main > ۞ main(String[])
           import java.util.Scanner;
       2
       3
          public class Main {
               Run | Debug
               public static void main(String[] args){
       4
       5
                   Cart cart = new Cart();
2
                ElectronicProduct ep = new ElectronicProduct();
       6
       7
                ep.setName(name: "Mobile Phone");
       8
                ep.setBrand(brand: "Samsung Galaxy Note 20");
       9
                ep.setWarrantyPeriod(warrantyPeriod:1);
      10
                ep.setPrice(price:599.9);
      11
                ep.setProductID(productID:1);
      12
                ClothingProduct cp = new ClothingProduct();
                cp.setFabric(fabric:"Cotton");
      13
                cp.setName(name:"T-Shirt");
      14
      15
                cp.setPrice(price:19.99);
      16
                cp.setSize(size:"Medium");
      17
                cp.setProductID(productID:2);
      18
                BookProduct book = new BookProduct();
      19
                book.setAuthor(author: "O'Rielly");
      20
                book.setName(name:"OOP");
      21
                book.setPrice(price:39.99);
      22
                book.setProductID(productID:3);
      23
                book.setPublisher(publisher: "X Publications");
                Customer customer = new Customer();
      24
      25
                Scanner sc = new Scanner (System.in);
                System.out.println(x:"Welcome to our E-Commerce system! Please Enter your name: ");
      26
      27
                String name = sc.nextLine();
                customer.setName(name);
      28
      29
                System.out.println(x:"Enter your ID: ");
                int id = sc.nextInt();
      30
      31
                customer.setCustomerID(id);
                System.out.println(x:"Enter your address: ");
      32
                String address = sc.nextLine();
      33
      34
                sc.nextLine();
      35
                customer.setAddress(name);
                System.out.println(x: "How many products do you want to add to your cart?");
      36
      37
                int nprod = sc.nextInt();
                Deaduct[1 maducts now Deaduct[mand].
     PROBLEMS (13)
                OUTPUT DEBUG CONSOLE TERMINAL PORTS
     (3)TShirt
     Your total price is: 639.89
    Confirm the order? click 1 for yes
```

```
class Cart {
                         53
                                   public void removeProduct(Product wanted) {
                                               SHIT LEPTT;
                         05
uct.class
                         66
uct.java
                         67
                                       setNProducts(getNProducts() - 1);
                         68
                         69
                                       setProducts(pros2);
roduct.class
                         70
roduct.java
                         71
class
                         72
.java
                         73
                                  public float calcPrice() {
Product.class
                         74
                                       float totalPrice = 0;
Product.java
                         75
                                       for (int i = 0; i < products.length; i++) {
                                           totalPrice += products[i].getPrice();
                         76
                         77
ass
                                       return totalPrice;
                         78
va
                         79
.iml
                         80
                                  public void PrintProductInfo(Product[] product) {
                         81
                                       for (int i = 0; i < product.length; i++) {
                         82
                                           System.out.println("Name: " + product[i].getName());
                         83
                                           System.out.println("Price: " + product[i].getPrice());
                         84
                                           System.out.println("ID: " + product[i].getProductID());
                         85
                         86
                         87
                                       System.out.println("Your total is: "+ calcPrice());
                         88
                         89
                                   public void placeOrder(Product[] product) {
                         90
                                       PrintProductInfo(product);
                         91
                         92
                         93
                         94
```

PROBLEMS (1) OUTPUT DEBUG CONSOLE TERMINAL **PORTS**

C: > Users > sherr > OneDrive > Desktop > iiiiii > [Cart.java > 'tart.java > 'tart

(3)TShirt

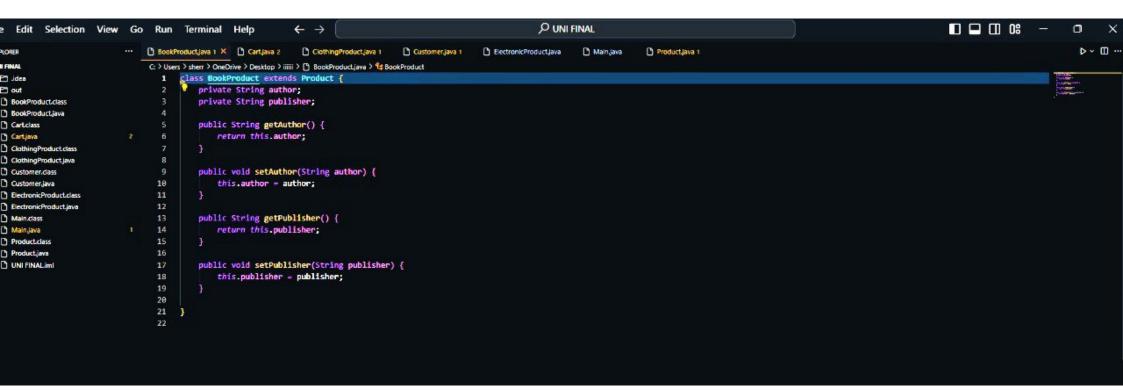
```
ON THUAL
                                   ClothingProduct.java 1
BookProductjava 1
                    Cartjava 2
                                                          Customer.java 1
                                                                            ElectronicProduct.java 1
                                                                                                    Main java 3
                                                                                                                   Productjava 1 X
C: > Users > sherr > OneDrive > Desktop > iiiiii > [] Product,java > ...
        import java.lang.Math;
       public class Product{
           private int productID;
           private String name;
   4
           private double price;
           public int getProductID() {
   8
                return this.productID;
   9
  10
  11
           public void setProductID(int productID){
           if (productID>0)
  12
  13
                this.productID = productID;
  14
           else
  15
           this.productID = Math.abs(productID);
  16
  17
  18
  19
           public String getName() {
  20
                return this.name;
  21
  22
  23
           public void setName(String name) {
  24
                this.name - name;
  25
  26
           public double getPrice() {
  27
  28
                return this.price;
  29
  30
                                                                                                                                                                       class wir (
  31
           public void setPrice(double price) {
  32
                if (price>0)
  33
                this.price = price;
  34
  35
                this.price - Math.abs(price);
  36
  38
 PROBLEMS (III)
             OUTPUT DEBUG CONSOLE TERMINAL
 (3)TShirt
```

```
BookProduct.java 1
                    Cart.java 2
                                   ClothingProduct.java 1
                                                           Customer.java 1 X BelectronicProduct.java
                                                                                                                   Product.java 1
                                                                                                    Main.java
C: > Users > sherr > OneDrive > Desktop > iiiiii > [] Customer.java > ...
       import java.lang.Math;
       class Customer {
   2
           private int CustomerID;
   3
            private String address;
   4
           private String name;
   6
   7
            public int getCustomerID() {
   8
                return this.CustomerID;
   9
  10
            public void setCustomerID(int CustomerID) {
  11
  12
                if (CustomerID >0)
  13
                this.CustomerID = CustomerID;
                else
  14
                this.CustomerID = Math.abs(CustomerID);
  15
  16
  17
            public String getAddress() {
  18
                return this.address;
  19
  20
  21
            public void setAddress(String address) {
  22
                this.address = address;
  23
  24
  25
            public String getName() {
  26
  27
                return this.name;
  28
  29
            public void setName(String name) {
  30
                this.name = name;
  31
  32
  33
  34
  35
```

```
C; > Users > sherr > OneDrive > Desktop > iiiiii > [¹] Main.java > 😉 Main > ۞ main(String[])
      public class Main {
           public static void main(String[] args){
  4
               switch (choice2){
 63
 64
                   case 1:
 65
                   cart.placeOrder(products);
 66
                   break:
                   default:
 67
                   System.out.println(x:"enter ID of order you want to remove: ");
 68
 69
                   int IDr = sc.nextInt();
                   switch (IDr)
 70
                   case(1):
 71
 72
                   cart.removeProduct(ep);
                   System.out.println("product removed. now your total is: "+cart.calcPrice());
 73
 74
                   break:
 75
                   case(2):
                   cart.removeProduct(cp);
 76
                   System.out.println("product removed. now your total is: "+cart.calcPrice());
 77
 78
                   break;
                   case(3):
 79
                   cart.removeProduct(book);
 80
                   System.out.println("product removed. now your total is: "+cart.calcPrice());
 81
 82
                   break;
                   default:
 83
 84
                   System.out.println(x:"invalid id");
                   break;
 85
 86
 87
 88
 89
 90
 91
 92
```

```
O UNI FINAL
Edit Selection View Go Run Terminal Help
                                                                 \leftarrow \rightarrow
                         ··· BookProduct.java 1
                                                   Cartjava 2 X ClothingProduct.java 1
                                                                                           Customer.java 1
                                                                                                             ☐ ElectronicProduct,iava
                                                                                                                                     Main java
                                                                                                                                                    Product.java 1
                               C: > Users > sherr > OneDrive > Desktop > iiiiii > [] Cart.java > % Cart
                                      import java.util.Arrays;
dea
out
                                      class Cart
SookProduct.class
                                          Customer customer = new Customer();
                                          private int customerID = customer.getCustomerID();
                                          private int nProducts;
art java
Jothing Product class
                                          Product[] products = new Product[nProducts];
Jothing Product Java
                                 8
                                           public int getcustomerID() {
ustomer.class
                                               return this.customerID;
ustomer.java
                                 10
                                 11
lectronicProduct.class
                                 12
lectronicProduct.java
                                 13
                                          public void setCustomerID(int CustomerID) {
                                 14
                                               if (CustomerID > 0)
                                 15
                                                   this.customerID = CustomerID;
roduct.class
                                 16
                                               else
roductjava
                                 17
JNI FINALimi
                                                   this.customerID = Math.abs(CustomerID);
                                 18
                                 19
                                           public int getNProducts() {
                                 20
                                               return this.nProducts;
                                 21
                                 22
                                           public void setNProducts(int nProducts) {
                                 24
                                               if (nProducts > 0)
                                 26
                                                   this.nProducts = nProducts;
                                               else
                                 28
                                                   this.nProducts = Math.abs(nProducts);
                                 29
                                                                                                                                                                                                 s Edit Schoolen Wore So Rue Torninal Holp 4 4
                                 30
                                           public Product[] getProducts() {
                                 32
                                               return this.products;
                                 33
                                 34
                                 35
                                          public void setProducts(Product[] products) {
                                 36
                                               this.products - products;
                                 37
                                 38
                               PROBLEMS (1) OUTPUT DEBUG CONSOLE TERMINAL PORTS
                               (3)TShirt
```

```
C: > Users > sherr > OneDrive > Desktop > iiiiii > [] Cart.java > 4 Cart
                                class Cart {
                          37
uct.class
                          38
luct.java
                                    public void addProduct(Product product) {
                          39
                          40
                                        int emptySpace = -1;
                                        for (int i = 0; i < products.length; i++) {
                          41
                                             if (products[i] == null) {
roduct.class
                          42
roduct.java
                                                 emptySpace = i;
                          43
.class
                          44
                                                 break;
.java
                          45
Product.class
                          46
Product.java
                          47
                                        if (emptySpace != -1)
                                             products[emptySpace] = product;
                          48
                          49
                                        else
ass
                                             System.out.println(x: "Your cart is full");
                          50
ava.
                          51
L.iml
                          52
                          53
                                    public void removeProduct(Product wanted) {
                                        Product[] pros2 = new Product[products.length - 1];
                          54
                                        int indexOfRemovedPro = 0;
                          55
                                        for (int i = 0; i < products.length; itt) {
                          56
                                             if (products[i].getProductID() == wanted.getProductID())
                          57
                                                 indexOfRemovedPro = i;
                          58
                          59
                                             break;
                          60
                          61
                                        int shifter = 0;
                                        for (int i = 0; i < products.length; i++) {
                          62
                                             if (i != indexOfRemovedPro) {
                          63
                          64
                                                 pros2[shifter] = products[i];
                          65
                                                 shifter++;
                          66
                          67
                                        setNProducts(getNProducts() - 1);
                          68
                          69
                                        setProducts(pros2);
                          70
                          71
                          72
                          73
                                    public float calcPrice() {
                         PROBLEMS (1)
                                     OUTPUT DEBUG CONSOLE TERMINAL
                         (3)TShirt
                         Your total price is: 639.89
```



```
ClothingProduct.java 1 X Customer.java 1
                                                                                                                  Product.java 1
BookProduct.java 1
                    Cartjava 2
                                                                             ☐ ElectronicProduct.java
                                                                                                    Main.java
C: > Users > sherr > OneDrive > Desktop > IIIIII > ClothingProduct.java > 4 ClothingProduct
       class ClothingProduct extends Product{
           private String size;
           private String fabric;
           public String getSize() {
               return this.size;
   8
           public void setSize(String size) {
   9
                this.size = size;
  10
  11
  12
           public String getFabric() {
  13
               return this.fabric;
  14
  15
  16
  17
           public void setFabric(String fabric) {
                this.fabric = fabric;
  18
  19
  20
  21 }
  22
```

```
Customer.java 1
BookProduct.java 1
                                    ClothingProduct.java 1

☐ ElectronicProduct.java 1 X ☐ Main.java

                                                                                                                     Product.java 1
                     Cart.java 2
C: > Users > sherr > OneDrive > Desktop > iiiiii > [] ElectronicProduct.java > 45 ElectronicProduct
       class ElectronicProduct extends Product {
            private String brand;
   2
            private int warrantyPeriod;
   3
   4
   5
            public String getBrand() {
                return this.brand;
   6
   8
            public void setBrand(String brand) {
   9
  10
                this.brand = brand;
  11
  12
            public int getWarrantyPeriod() {
  13
                return this.warrantyPeriod;
  14
  15
  16
            public void setWarrantyPeriod(int warrantyPeriod) {
  17
                if (warrantyPeriod > 0)
  18
                this.warrantyPeriod = warrantyPeriod;
  19
                else
  20
                this.warrantyPeriod = Math.abs(warrantyPeriod);
  21
  22
  23
  24
```

25