

Output - EcommerceSystem (run) X

```
run:  
Welcome to E-Commerce System!  
Please enter your ID:  
23011923  
Please enter your name:  
Madawi  
Please enter your address:  
Alex  
How many products would you like to add to your cart?  
2  
Which product would you like to add? 1-SmartPhone 2-T-shirt 3-OOP  
1  
Which product would you like to add? 1-SmartPhone 2-T-shirt 3-OOP  
2  
Your total is $619.800048828125. Would you like to place the order? 1-Yes 2-No  
1  
Here is your Order summary:  
your orderId:1  
your customer ID:23011923  
the Products:  
smartPhone$599.9  
T-shirt$19.9  
the totalPrice619.800048828125$  
BUILD SUCCESSFUL (total time: 1Y seconds)
```

```
import java.util.Scanner;
public class EcommerceSystem {

    /**
     * @param args the command line arguments
     */
    public static void main(String[] args) {
        // TODO code application logic here

        Scanner input=new Scanner(source: System.in);
        System.out.println(x: "Welcome to E-Commerce System!");

        System.out.println(x: "Please enter your ID:");
        int customerId = input.nextInt();
        input.nextLine();

        System.out.println(x: "Please enter your name:");
        String name = input.nextLine();

        System.out.println(x: "Please enter your address:");
        String address = input.nextLine();

        Customer c1 = new Customer(customerId, name, address);

        System.out.println(x: "How many products would you like to add to your cart?");
        int nProducts = input.nextInt();

        Cart cart = new Cart(customerId, nProducts);

        ElectronicProduct E1= new ElectronicProduct(productId: 1, name: "smartPhone", price: 599.9f, brand: "Apple", WarrantyPeriod:1);
        ClothingProduct Cc= new ClothingProduct(productId: 2, name: "T-shirt", price: 19.9f, Size: "medium", Fabric: "Satan");
        BookProduct B1=new BookProduct(productId: 3, name: "OOP", price: 39.99f, author: "O'Reilly", publisher: "X Publications");
```

```
for (int i = 0; i < nProducts; i++) {
    System.out.println("Which product would you like to add? 1-SmartPhone 2-T-shirt 3-OOP");
    int choice = input.nextInt();
    input.nextLine();
    switch (choice) {
        case 1:
            cart.addProduct(product:E1, index: i);
            break;
        case 2:
            cart.addProduct(product:Cc, index: i);
            break;
        case 3:
            cart.addProduct(product:B1, index: i);
            break;
        default:
            System.out.println("Invalid choice!");
    }
}

System.out.println("Your total is $" + cart.CalculateProduct() + ". Would you like to place the order? 1-Yes 2-No");
int decision = input.nextInt();
if (decision == 1) {

    Order order = new Order(customerId, orderId:1, Products:cart.getProducts()); //array of products
    order.printOrderInfo();
} else {
    System.out.println("Order not placed. Thank you for shopping with us!");
    System.out.println("Hope to see you next time");
}
```

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

```
19     this.productId=Math.abs(a: productId);
20     this.name=name;
21     this.price=Math.abs(a: price);
22   }
23
24   □ public int getProductId() {
25     return productId;
26   }
27
28   □ public void setProductId(int productId) {
29
30     this.productId = productId;
31   }
32
33   □ public String getName() {
34     return name;
35   }
36
37   □ public void setName(String name) {
38     this.name = name;
39   }
40
41   □ public float getPrice() {
42     return price;
43   }
44
45   □ public void setPrice(float price) {
46
47     this.price = price;
48   }
49
50
51   }
52 }
```

```
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 madaw
10  */
11 public class ElectronicProduct extends Product {
12     private String brand;
13     private int WarrantyPeriod;
14
15
16     public ElectronicProduct(int productId, String name, float price, String brand, int WarrantyPeriod) {
17         super(productId, name, price);
18         this.brand = brand;
19         this.WarrantyPeriod = Math.abs(WarrantyPeriod);
20     }
21
22     public String getBrand() {
23         return brand;
24     }
25
26     public void setBrand(String brand) {
27         this.brand = brand;
28     }
29
30     public int getWarrantyPeriod() {
31         return WarrantyPeriod;
32     }
33
34     public void setWarrantyPeriod(int WP) {
```

```
8
9     *
10    * @author madaw
11    */
12
13   public class ElectronicProduct extends Product {
14       private String brand;
15       private int WarrantyPeriod;
16
17       public ElectronicProduct(int productId, String name, float price, String brand, int WarrantyPeriod) {
18           super(productId, name, price);
19           this.brand = brand;
20           this.WarrantyPeriod = Math.abs(a: WarrantyPeriod);
21       }
22
23       public String getBrand() {
24           return brand;
25       }
26
27       public void setBrand(String brand) {
28           this.brand = brand;
29       }
30
31       public int getWarrantyPeriod() {
32           return WarrantyPeriod;
33       }
34
35       public void setWarrantyPeriod(int WP) {
36           this.WarrantyPeriod = WP;
37       }
38
39   }
40
41 }
```

```
/*
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 */
package ecommerceSystem;

/**
 *
 * @author madaw
 */
public class ClothingProduct extends Product {
    private String Size;
    private String Fabric;

    public ClothingProduct(int productId, String name, float price, String Size, String Fabric) {
        super(productId, name, price);
        this.Size=Size;
        this.Fabric=Fabric;
    }

    public String getSize() {
        return Size;
    }

    public void setSize(String Size) {
        this.Size = Size;
    }

    public String getFabric() {
        return Fabric;
    }
}
```

```
public class ClothingProduct extends Product {  
    private String Size;  
    private String Fabric;  
  
    public ClothingProduct(int productId, String name, float price, String Size, String Fabric) {  
        super(productId, name, price);  
        this.Size = Size;  
        this.Fabric = Fabric;  
    }  
  
    public String getSize() {  
        return Size;  
    }  
  
    public void setSize(String Size) {  
        this.Size = Size;  
    }  
  
    public String getFabric() {  
        return Fabric;  
    }  
  
    public void setFabric(String Fabric) {  
        this.Fabric = Fabric;  
    }  
}
```

```
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*/
package ecommerceSystem;

/**
 *
 * @author madaw
 */
public class BookProduct extends Product {
    private String author;
    private String publisher;

    public BookProduct(int productId, String name, float price, String author, String publisher) {
        super(productId, name, price);
        this.author = author;
        this.publisher = publisher;
    }

    public String getAuthor() {
        return author;
    }

    public void setAuthor(String author) {
        this.author = author;
    }

    public String getPublisher() {
        return publisher;
    }
}
```

```
public class BookProduct extends Product {
    private String author;
    private String publisher;

    public BookProduct(int productId, String name, float price, String author, String publisher) {
        super(productId, name, price);
        this.author = author;
        this.publisher = publisher;
    }

    public String getAuthor() {
        return author;
    }

    public void setAuthor(String author) {
        this.author = author;
    }

    public String getPublisher() {
        return publisher;
    }

    public void setPublisher(String publisher) {
        this.publisher = publisher;
    }
}
```

```
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4   */
5  package ecommerceSystem;
6
7  /**
8   *
9   * @author madaw
10  */
11 public class Customer {
12     private int customerId;
13     private String name;
14     private String address;
15
16
17
18
19     public Customer(int customerId, String name, String address) {
20         this.customerId = Math.abs(customerId);
21         this.name = name;
22         this.address = address;
23     }
24
25     public int getCustomerId() {
26         return customerId;
27     }
28
29     public void setCustomerId(int cId) {
30         this.customerId = cId;
31     }
32
33     public String getName() {
34         return name;
35     }
36 }
```

```
20     this.customerId = Math.abs(a: customerId);
21     this.name = name;
22     this.address = address;
23 }
24
25 [-] public int getCustomerId() {
26     return customerId;
27 }
28
29 [-] public void setCustomerId(int cId) {
30     this.customerId = cId;
31 }
32
33 [-] public String getName() {
34     return name;
35 }
36
37 [-] public void setName(String name) {
38     this.name = name;
39 }
40
41 [-] public String getAddress() {
42     return address;
43 }
44
45 [-] public void setAddress(String address) {
46     this.address = address;
47 }
48 }
49
50
51
52
53 }
```

```
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4   */  
5  package ecommerceSystem;  
6  
7  /**  
8   *  
9   * @author madaw  
*/  
10 public class Cart {  
11     private int customerId;  
12     private int nProducts;  
13     private Product[] Products;  
14  
15     public Cart(int customerId, int nProducts) {  
16         this.customerId = Math.abs(a: customerId);  
17         this.nProducts = nProducts;  
18         this.Products = new Product[this.nProducts];  
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 int getnProducts() {  
30         return nProducts;  
31     }  
32  
33 }  
34
```

```
Drive\Java\stem.java
  public class Product {
    int nProducts;
    Product[] Products;
    public void setnProducts(int nProducts) {
        this.nProducts = nProducts;
    }
    public Product[] getProducts() {
        return Products;
    }
    public void setProducts(Product[] Products) {
        this.Products = Products;
    }
    public void addProduct(Product product,int index){
        if(index>=0&&index<nProducts)
            Products[index]=product;
        else
            System.out.println("invalid");
    }
    public void removeProduct(Product product,int in){
        if(in>=0&&in<nProducts)
            Products[in]=null;
        else
            System.out.println("invalid");
    }
    public double calculateProduct(){
        float totalPrice=0;
        for(int i=0;i<nProducts;i++){
            if(Products[i]!=null){
                totalPrice+=Products[i].price;
            }
        }
        return totalPrice;
    }
}
  I
```

```
...va Opp.java X EcommerceSystem.java X Product.java X ElectronicProduct.java X ClothingProduct.java X BookProduct.java X Customer.java X Cart.java X Order.java...
1 public void addProduct(Product product, int index){
2     if(index>=0&&index<nProducts)
3         Products[index]=product;
4     else
5         System.out.println("invalid");
6
7 }
8 public void removeProduct(Product product, int in){
9     if(in>=0&&in<nProducts)
10        Products[in]=null;
11     else
12         System.out.println("invalid");
13 }
14 public double CalculateProduct(){
15     float totalPrice=0;
16     for(int i=0;i<nProducts;i++){
17         if(Products[i]!=null){
18             totalPrice+=Products[i].getPrice();
19         }
20     }
21     return totalPrice;
22 }
23 public void PlaceOrder(){
24     System.out.println("customerId"+customerId);
25     System.out.println("Total price:"+CalculateProduct()+"$");
26 }
27 }
28 }
29 }
30 }
31 }
```

```
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*/
package ecommerceSystem;

/**
 *
 * @author madaw
 */
public class Order {
    private int customerId;
    private int orderId;
    private Product[] Products;
    private float totalPrice;

    public Order(int customerId,int orderId ,Product[] Products) {
        this.customerId = Math.abs(a: customerId);
        this.orderId = Math.abs(a: orderId);
        this.Products =Products ;
        this.totalPrice = Math.abs(a: totalPrice);
    }
    private double calculateTotalProduct(){
        float total=0;
        for(int i=0;i<Products.length;i++){
            if(Products[i]!=null){
                total+=Products[i].getPrice(); // هنا السعر للمجموع ، اذا تحقق الشرط
            }
        }
        return total;
    }
}
```

```
run:  
Welcome to E-Commerce System!  
Please enter your ID:  
23011923  
Please enter your name:  
Madawi  
Please enter your address:  
Alex  
How many products would you like to add to your cart?  
3  
Which product would you like to add? 1-SmartPhone 2-T-shirt 3-OOP  
1  
Which product would you like to add? 1-SmartPhone 2-T-shirt 3-OOP  
2  
Which product would you like to add? 1-SmartPhone 2-T-shirt 3-OOP  
3  
Your total is $659.7900390625. Would you like to place the order? 1-Yes 2-No  
1  
Here is your Order summary:  
your orderId:1  
your customer ID:23011923  
the Products:  
smartPhone$599.9  
T-shirt$19.9  
OOP$39.99  
the totalPrice659.7900390625$  
BUILD SUCCESSFUL (total time: 18 seconds)
```