```
welcom to the E-commerce system!
please enter your id
23011645
please enter your name
youssef othman mohammed elsaid
please enter your address
address
how many products you want to add to your cart?
4
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
which product would you like to add? 1- smartphone 2- T-shirt 3- oop
1
would you like to place the order 1-Yes 2-No
1
your total is1259.78
here is your order's summary
order id:1
customer id:0
products:
smartphone - $599.9
T-shirt - $19.99
OOP - $39.99
smartphone - $599.9
Total price: $1259.78
------------------------------------------------------------------------
BUILD SUCCESS
```

Output

```java
public class EcommerceSystem {

    public static void main(String[] args) {

        Scanner input = new Scanner(System.in);
        Customer c1 = new Customer();
        System.out.println("welcom to the E-commerce system!");
        System.out.println("please enter your id");
        c1.setCustomrId(input.nextInt());
        System.out.println("please enter your name");
        c1.setName(input.nextLine());
        input.nextLine();
        System.out.println("please enter your address");
        c1.setName(input.nextLine());


        System.out.println("how many products you want to add to your cart?");
        int nproducttttt = input.nextInt();
        cart cart = new cart(c1.getCustomrId(), nproducttttt);
        cart.addProduct();
        cart.placeOrder();

    }
}
```

```java
public class Order {

private int orderId;
private int customerId;
private product[]products;
private float totalprice;

    public Order(int orderId, int customerId, product[] products, float totalprice) {
        this.orderId = orderId;
        this.customerId = customerId;
        this.products = products;
        this.totalprice = totalprice;
    }

public void printOrderInfo(){

    System.out.println("here is your order's summary");
    System.out.println("order id:"+orderId);
    System.out.println("customer id:"+customerId);
    System.out.println("products:");
    for(int i=0;i<products.length;i++){
    product product=this.products[i];
        System.out.println(products[i].getName()+" - $"+products[i].getPrice());
    }
    System.out.println("Total price: $"+totalprice);
}}
```

```java
import java.util.Scanner;

public class cart {
   private int customerId;
 private   int nproducts;
  private  product[] products;
    Scanner input = new Scanner(System.in);
    public cart() {}
    public cart(int customerId, int nproducts) {
        this.customerId = customerId;
        this.nproducts = nproducts;
        this.products = new product[nproducts];}
 public int getCustomerId() {
        return customerId;}
    public void setCustomerId(int customerId) {
        if (customerId >= 0) {
            this.customerId = customerId;
        } else {
            this.customerId = Math.abs(customerId);}}
 public void setNproducts(int nproducts) {
        if (nproducts >= 0) { this.nproducts = nproducts;
        } else { this.nproducts = Math.abs(nproducts);}}
public int getNproducts() {
        return nproducts;}
 public product[] getProducts() {
        return products;}
    public void addProduct() {
        ElectronicProduct el = new ElectronicProduct(1, "smartphone", 599.9f, "sumsung", 1);
        ClothingProduct col = new ClothingProduct(2, "T-shirt", 19.99f, "medium", "cotton");
        BookProduct bl = new BookProduct(3, "OOP", 39.99f, "O'Reilly", "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 p = input.nextInt();
            switch (p) {
                case 1: products[i] = el; break;
                case 2:  products[i] = col;break;
                case 3: products[i] = bl;break;
             default: System.out.println("NOt included!");break; }}}
public float calculatePrice() {
        float total = 0;
        for (int i = 0; i < nproducts; i++) {
            total += products[i].getPrice();}
        return total;}
    public void placeOrder() {
        System.out.println("would you like to place the order 1-Yes 2-No");
        int place = (input.nextInt());
        if (place == 1) {
            Customer c1 = new Customer();
            System.out.println("your total is" + calculatePrice());
            Order o1 = new Order(1, c1.getCustomrId(), getProducts(), calculatePrice());
            o1.printOrderInfo();
        } else if (place == 2) {System.out.println("your order dosent place");
        } else {System.out.println("invalid number");}}}
```

```java
public class Customer {
    private int customrId;
    private String name;
    private String address;

    public int getCustomrId() {
        return customrId;
    }

    public void setCustomrId(int customrId) {
        if(customrId>=0)
        this.customrId = customrId;
        else
            this.customrId =Math.abs(customrId);
    }

    public String getName() {
        return name;
    }

    public void setName(String name) {
        this.name = name;
    }

    public String getAddress() {
        return address;
    }

    public void setAddress(String address) {
        this.address = address;
    }

}
```

```java
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;
    }

}
```

```java
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;
    }

}
```

```java

public class ElectronicProduct extends product{
  private  String brand;
  private  int warrantyPeriod;

    public ElectronicProduct( int productId, String name, float price,String brand, int warrantyPeriod) {
        super(productId, name, price);
        this.brand = brand;
        this.warrantyPeriod = warrantyPeriod;
    }
    public String getBrand() {
        return brand;
    }

    public void setBrand(String brand) {
        this.brand = brand;
    }

    public int getWarrantyPeriod() {
        return warrantyPeriod;
    }

    public void setWarrantyPeriod(int warrantyPeriod) {
        if(warrantyPeriod>=0)
        this.warrantyPeriod = warrantyPeriod;
        else
             this.warrantyPeriod =  Math.abs( warrantyPeriod);
    }

}
```

```java
public class product {

private    int productId;
private    String name;
 private   float price;
    public product(int productId, String name, float price) {
        this.productId = productId;
        this.name = name;
        this.price = price;
    } public product() {
    }
       public int getProductId() {
        return productId;}
    public void setProductId(int productId) {
        if (productId >= 0) {
            this.productId = productId;
        } else {
            this.productId = Math.abs(productId);}}
    public String getName() {
        return name;
    }
    public void setName(String name) {
        this.name = name;
    }
    public float getPrice() {
        return price;
    }
    public void setPrice(float price) {
        if (price >= 0) {
            this.price = price;
        } else {
            this.price = Math.abs(price);
        }}}

```