1)

```java
package e_commerce_system;

public class E_Commerce_system {

    public static void main(String[] args) {
        System.out.println("Welcome to the E_commerce System !");

        Customer cust = new Customer();
        ElectronicProduct e = new ElectronicProduct("samsung",1,1,"smartphone",599.99f);
        ClothingProduct c = new ClothingProduct("medium","cotton",2,"T_shirt",19.99f);
        BookProduct b = new BookProduct("O` Reilly","X Publications",3,"OOP",39.99f);
```

```
    Cart car = new Cart();

    car.addproduct(e, c, b);

    order o =new order();

    o.setTotalprice(car.calculateprice());

    o.setProducts(car.getProducts());

    o.setCutomerId(cust.getCustomerId());

   o.printOrderInfo();

  }


}
```

```java
package e_commerce_system;


public class product {

    int product_Id ;

    String name ;

    float price ;


    public product(int product_Id, String name, float price)
    {

        this.product_Id = product_Id;

        this.name = name;

        this.price = price;

    }


    public product() {
```

```java
    }

    public int getProduct_Id() {

        return product_Id;

    }


    public void setProduct_Id(int product_Id) {

        this.product_Id = product_Id;

    }


    public String getName() {

        return name;

    }

    public void setName(String name) {

        this.name = name;

    }
```

```java
public float getPrice() {

    return price;

}


public void setPrice(float price) {

    this.price = price;

}


}
```

```java
package e_commerce_system;


public class ElectronicProduct extends product {

    String brand ;

    int WarrantyPeriod ;


    public ElectronicProduct(String brand, int
WarrantyPeriod, int product_Id, String name, float price)
{

        super(product_Id, name, price);

        this.brand = brand;

        this.WarrantyPeriod = WarrantyPeriod;

    }


    public String getBrand() {
```

```java
        return brand;

    }


    public void setBrand(String brand) {

        this.brand = brand;

    }


    public int getWarrantyPeriod() {

        return WarrantyPeriod;

    }


    public void setWarrantyPeriod(int WarrantyPeriod) {

        this.WarrantyPeriod = WarrantyPeriod;

    }
```

```java
}




package e_commerce_system;




public class ClothingProduct extends product {


    String size , fabric ;


    public ClothingProduct(String size, String fabric, int
product_Id, String name, float price) {

        super(product_Id, name, price);

        this.size = size;

        this.fabric = fabric;
```

```java
    }

    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
}




package e_commerce_system;



public class BookProduct extends product {

    String author , publisher ;


    public BookProduct(String author, String publisher, int
product_Id, String name, float price) {

        super(product_Id, name, price);

        this.author = author;

        this.publisher = publisher;
```

```java
    }

    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
}


package e_commerce_system;

import java.util.Scanner;


public class Customer {

    Scanner input=new Scanner(System.in);

    int customerId;

    String name , address ;


    public Customer() {

        System.out.println("please enter your Id");

        customerId = input.nextInt();
```

```java
        customerId=Math.abs(customerId);

            System.out.println("please enter your name");

            name =input.next();

                System.out.println("please enter your address");

                address  = input.next();




}




public int getCustomerId() {

    return customerId;

}

public void setCustomerId(int customerId) {

    this.customerId = customerId;

}
```

```java
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
}



package e_commerce_system;

import java.util.Scanner;


public class Cart {

    Scanner input = new Scanner(System.in);

     int customerId , nproduct ;

     product[]products;

    public Cart() {


    }

    public void addproduct(ElectronicProduct obj1
,ClothingProduct obj2 ,BookProduct obj3){
```

```java
        System.out.println("How many products you want
to add to your cart");

    nproduct = input.nextInt();

    products = new product[nproduct];

  for(int i=0 ; i<nproduct ; i++){

    System.out.println("which product would you like to
add? "+" 1- "+obj1.name+ " 2- "+obj2.name+ " 3-
"+obj3.name);

    int num = input.nextInt();

    switch(num){

       case 1 :

         products[i]=obj1;

         break;

       case 2 :

         products[i]=obj2;

         break;

       case 3 :

         products[i]=obj3;
```

```java
            break;
        default:
            System.out.println("this number is not available");
    }

}

}
public void removeproduct(){

}
    public float calculateprice(){
    float p =0 ;
    for(int i=0; i<products.length;i++){
        p+= products[i].price;
    }
```

```java
        return p;

    }

    public void placeorder(){



    }



    public product[] getProducts() {

        return products;

    }



    public void setProducts(product[] products) {

        this.products = products;

    }

}
```

```java
package e_commerce_system;

import java.util.Scanner;


public class order  {

    Scanner input = new Scanner(System.in);

    int cutomerId,orderId ;

        product[]products;

        float totalprice;

        public void printOrderInfo(){

            System.out.println("your total is
$"+getTotalprice()+" Would you like to place the order ?
"+"1- yes "+"2- no");

            int num= input.nextInt();

            switch(num){

                case 1 :
```

```java
                System.out.println("Here is your order
summary: \n order Id : "+num +"\n customer id :
"+getCutomerId()+"\n products:") ;

                for(int i = 0 ; i<products.length;i++){

                    System.out.println(products[i].name + " -
$"+products[i].price);

                }

                System.out.println("Total price:
$"+getTotalprice());

                break;
            case 2:

                System.out.println("THANKs");

                break;
        }
    }

    public float getTotalprice() {
        return totalprice;
```

```java
    }

    public void setTotalprice(float totalprice) {

        this.totalprice = totalprice;

    }


    public product[] getProducts() {

        return products;

    }


    public void setProducts(product[] products) {

        this.products = products;

    }


    public int getCutomerId() {

        return cutomerId;

    }
```

```java
    public void setCutomerId(int cutomerId) {

        this.cutomerId = cutomerId;

    }


    public int getOrderId() {

        return orderId;

    }


    public void setOrderId(int orderId) {

        this.orderId = orderId;

    }

}
```