**package** Batch\_12;

**class** ShoppingCart {

**public** Item[] cart;

**public** **double** totalprice;

**public** **int** storedItems;

**public** ShoppingCart() {

cart = **new** Item[5];

}

**public** ShoppingCart(**int** cartSize) {

cart = **new** Item[cartSize];

}

**public** **void** addItem(Item input) {

**if** (storedItems < cart.length) {

cart[storedItems] = input;

storedItems++;

}

}

}

//method overriding

**class** Cart **extends** ShoppingCart {

//To add items to the cart

**public** **void** addItem(Item input) {

**if** (storedItems < cart.length) {

cart[storedItems] = input;

storedItems++;

} **else** {

System.***out***.println("Shopping cart is full");

System.***out***.println("Number of items in CART:"+storedItems);

}

}

**public** **double** calculateTotalprice() {

**for** (**int** i = 0; i < 5; i++) {

totalprice =totalprice + cart[i].getTotalprice();

}

**return** totalprice;

}

}

**package** Batch\_12;

**import** java.util.Scanner;

//Interface

**interface** Order {

**void** orderPlaced();

}

**class** Orders **implements** Order{

@Override

**public** **void** orderPlaced() {

System.***out***.println("Order placed successfully");

}

}

//Inheritance

**class** TestCart **extends** Orders{

**public** **static** **void** main(String[] args) {

Scanner myObj = **new** Scanner(System.***in***);

System.***out***.println("Enter users Name: ");

String name = myObj.nextLine();

System.***out***.println("Enter user Password");

String Password = myObj.next();

System.***out***.println("Users Name:"+name);

System.***out***.println("Users Password:"+Password);

Item pen = **new** Item("ball pen", 3, 150);

Item laptop = **new** Item("HP laptop", 1, 25000);

Item mobile = **new** Item("Samsung", 2, 60000);

Item wire = **new** Item("battery", 2, 80000);

Item book = **new** Item("dress", 2, 50000);

//We are calling addItem method

Cart c = **new** Cart ();

c.addItem(pen);

c.addItem(mobile);

c.addItem(laptop);

c.addItem(book);

c.addItem(wire);

c.addItem(pen);

//To calculate total price of those items

System.***out***.println("Total price:"+c.calculateTotalprice());

TestCart t=**new** TestCart();

t.orderPlaced();

}

}

**package** Batch\_12;

**public** **class** Item {

**private** String name;

**private** **double** totalprice;

**private** **int** qty;

**public** Item(String name, **int** qty, **double** unitprice) {

**this**.name = name;

**this**.qty = qty;

totalprice = qty \* unitprice;

System.***out***.println("Product Name:"+getName()+"Product quantity:"+getQty()+"product price:"+getTotalprice());

}

**public** String getName() {

**return** name;

}

**public** **void** setName(String name) {

**this**.name = name;

}

**public** **double** getTotalprice() {

**return** totalprice;

}

**public** **void** setTotalprice(**double** totalprice) {

**this**.totalprice = totalprice;

}

**public** **int** getQty() {

**return** qty;

}

**public** **void** setQty(**int** qty) {

**this**.qty = qty;

}

}