***using System;***

***using System.Collections.Generic;***

***public class Customer***

***{***

***private string name;***

***private string address;***

***private List<Order> orders;***

***public Customer (string name, string address)***

***{***

***this.name = name;***

***this.address = address;***

***this. orders = new List<Order> ();***

***}***

***public void addOrder (Order order)***

***{***

***this. orders.Add(order);***

***}***

***public void removeOrder (Order order)***

***{***

***this. orders. Remove(order);***

***}***

***() public string getName***

***{***

***return this.name;***

***}***

***() public string getAddress***

***{***

***return this. Address;***

***}***

***() public List<Order> getOrders***

***{***

***return this. orders;***

***}***

***}***

***public class Order***

***{***

***private DateTime date;***

***private string status;***

***private List<OrderDetail> orderDetails;***

***private Payment payment;***

***public Order (DateTime date, string status)***

***{***

***this. date = date;***

***this. status = status;***

***this. orderDetails = new List<OrderDetail> ();***

***this. payment = null;***

***}***

***public void addOrderDetail (OrderDetail orderDetail)***

***{***

***this. orderDetails. Add(orderDetail);***

***}***

***public void removeOrderDetail (OrderDetail orderDetail)***

***{***

***this. orderDetails. Remove(orderDetail);***

***}***

***public void setPayment (Payment payment)***

***{***

***this. payment = payment;***

***}***

***public DateTime getDate ()***

***{***

***return this. Date;***

***}***

***public string getStatus ()***

***{***

***return this.status;***

***}***

***public List<OrderDetail> getOrderDetails ()***

***{***

***return this.orderDetails;***

***}***

***public Payment getPayment ()***

***{***

***return this. payment;***

***}***

***public double calcSubTotal ()***

***{***

***double subTotal = 0;***

***foreach (OrderDetail orderDetail in this.orderDetails)***

***{***

***subTotal += orderDetail.calcSubTotal();***

***}***

***return subtotal;***

***}***

***public double calcTax ()***

***{***

***double tax = 0;***

***foreach (OrderDetail orderDetail in this.orderDetails)***

***{***

***tax += orderDetail.calcTax();***

***}***

***return tax;***

***}***

***public double calcTotal()***

***{***

***return this.calcSubTotal() + this.calcTax();***

***}***

***public double calcTotalWeight ()***

***{***

***double totalWeight = 0;***

***foreach (OrderDetail orderDetail in this.orderDetails)***

***{***

***totalWeight += orderDetail.calcWeight();***

***}***

***return totalWeight;***

***}***

***}***

***public class Item***

***{***

***private decimal shippingWeight;***

***private string description;***

***public decimal ShippingWeight***

***{***

***get {return shippingWeight;}***

***set {shippingWeight = value;}***

***}***

***public string Description***

***{***

***get {return description;}***

***set {description = value;}***

***}***

***public decimal GetPriceForQuantity (int quantity)***

***{***

***decimal pricePerUnit = num;***

***decimal totalPrice = pricePerUnit \* quantity;***

***return totalPrice;***

***}***

***public decimal GetTax (decimal price)***

***{***

***decimal taxRate = num;***

***decimal tax = price \* taxRate;***

***return tax;***

***}***

***public bool InStock (int quantity)***

***{***

***int stockQuantity =num;***

***return quantity <= stockQuantity;***

***}***

***}***

***public abstract class Payment***

***{***

***private double amount;***

***public Payment (double amount)***

***{***

***this.amount = amount;***

***}***

***public double getAmount()***

***{***

***return this.amount;***

***}***

***public abstract bool authorized ();***

***}***

***public class Cash: Payment***

***{***

***private double cashTendered;***

***public Cash (double amount, double cashTendered): base(amount)***

***{***

***this.cashTendered = cashTendered;***

***}***

***public double getCashTendered()***

***{***

***return this.cashTendered;***

***}***

***public override bool authorized ()***

***{***

***return true;***

***}***

***}***

***public class Check : Payment***

***{***

***private string name;***

***private string bankID;***

***public Check (double amount, string name, string bankID): base(amount)***

***{***

***this.name = name;***

***this.bankID = bankID;***

***}***

***public string getName ()***

***{***

***return this.name;***

***}***

***public string getBankID()***

***{***

***return this.bankID;***

***}***

***public override bool authorized ()***

***{***

***return true;***

***}***

***}***

***public class Credit: Payment***

***{***

***private string name;***

***private string type;***

***private DateTime expDate;***

***public Credit (double amount, string name, string type, DateTime expDate) : base(amount)***

***{***

***this.name = name;***

***this.type = type;***

***this.expDate = expDate;***

***}***

***public string getName()***

***{***

***return this.name;***

***}***

***public string getType()***

***{***

***return this.type;***

***}***

***public DateTime getExpDate()***

***{***

***return this.expDate;***

***}***

***public override bool authorized ()***

***{***

***return true;***

***}***

***}***

***public class OrderDetail***

***{***

***private int quantity;***

***private string status;***

***public int Quantity***

***{***

***get {return quantity;}***

***set {quantity = value;}***

***}***

***public string Status***

***{***

***get {return status;}***

***set {status = value;}***

***}***

***public decimal CalcTax ()***

***{***

***decimal taxRate = num;***

***decimal tax = Quantity \* taxRate;***

***return tax;***

***}***

***public decimal CalcSubtota ()***

***{***

***decimal subtotal = Quantity;***

***return subtotal;***

***}***

***public decimal CalcWeight ()***

***{***

***decimal weight = Quantity;***

***return weight;***

***}***

***}***