Midterm - Retail store

Exam – Retail Store

***Description***

 Create a Receipt class that could be used by a retail store. Items to include as data members are receipt number, date of purchase, customer number, customer name and address, customer phone number, item number, description, unit price, and quantity purchased. Choose data types that are appropriate for each field.  Create private class variables and the necessary Properties.

Constructor:

A constructor should be created that takes in all of the class members and sets them to the appropriate properties. Do not create any other constructors.

Property validation:

In the Set for each of the Properties perform this validation to ensure that improper values are not being set.

·         Receipt number should be greater than zero

·         Customer number should be greater than zero

·         Item number should be greater than zero and less than 9999

·         Unit price should be greater than zero and less than 9999

·         Quantity purchased should be greater than zero

For simplicity, you may assume each receipt is for a single ticket item and contains a single item number.

Methods:

·         Create a method that calculates the total cost using the quantity and unit price.

·         Override the ToString ( ) method to return the information about the customer (name and phone number) and the total cost of the item purchased so that it appears this way –

Customer {customer first name} {customer last name}

Phone: {customer phone number}

Total Purchases: {calculated total cost}

Use monetary formatting when displaying the total cost

***Testing***

Create a Unit Test class that contains test methods which are testing for the following:

·         Each of the 5 validation items should be tested with individual test methods. Create a test method that shows a valid input and an invalid input. (You’ll have 10 test methods)