Foundations of Object Oriented Programming 202 – In class assessment, May 2014

Create an application which connects to the AdventureWorks database. The database can be copied from S:\Classes\Keith McManus\Data\AdventureLite. mdf. Take a copy to your own computer to avoid a lock.
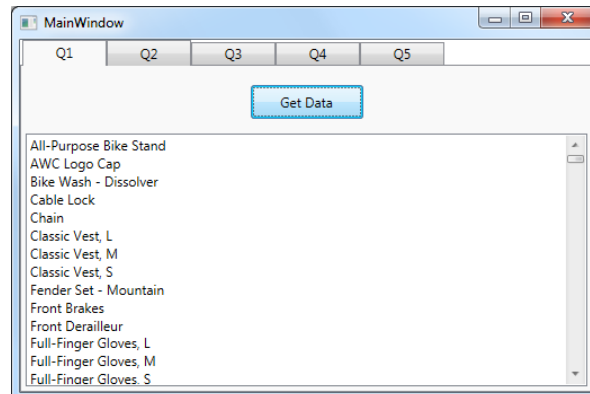A copy is also available on Moodle to download. Exam is open book.

Completed solutions should be uploaded to Moodle for Keith McManus or uploaded to John Kellehers website depending on who you have for class.

Marking Scheme

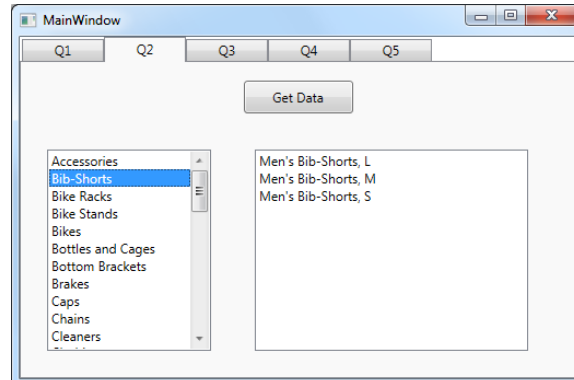| Task	Marks
Connect to Database	5
Tabs	5
Q1	5
Q2	10
Q3	10
Q4	10
Q5	10
Q6	10
Q7	10
Total	75

Question 1:

Retrieve product names and display in a listbox

Question2:

Retrieve product category names from the ProductCategories table and display in a listbox on left of the interface. Selecting an item from this list will display product names in this category in the second listbox.
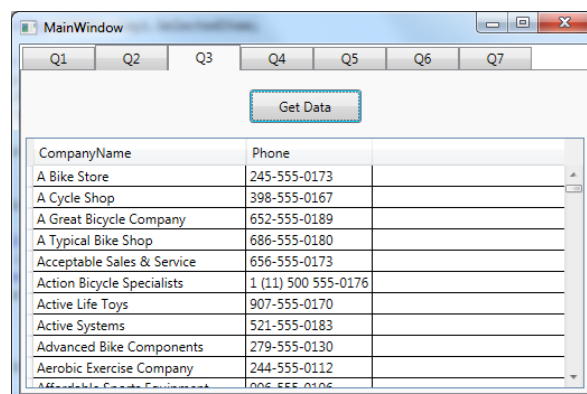

Question 3:

Display the following Customer information from the Customer table in a DataGrid

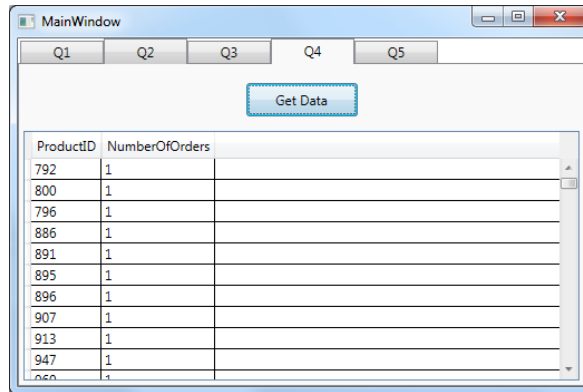1. Company Name
2. Phone Number

If there are duplicates remove them.

Question 4:

Display the Product ID and the number of orders for each product from the SalesOrderDetails table in a DataGrid
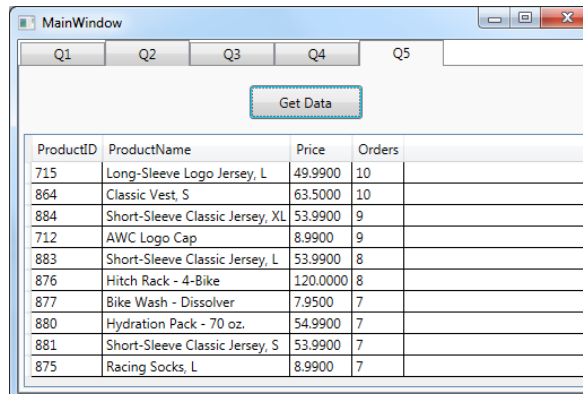
Hint: You will need to group.

ProductID	NumberOfOrders
792	1
800	1
796	1
886	1
891	1
895	1
896	1
907	1
913	1
947	1

MainWindow — Tabs: Q1 Q2 Q3 Q4 Q5 — Get Data button

Question 5:

Retrieve the ProductID, ProductName, Price and Number of Orders for the all products from the SalesOrderDetails table. Display in a DataGrid.

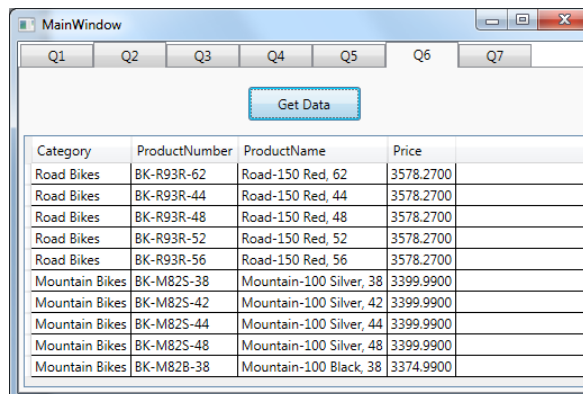Hint: Group and join to achieve this.

ProductID	ProductName	Price	Orders
715	Long-Sleeve Logo Jersey, L	49.9900	10
864	Classic Vest, S	63.5000	10
884	Short-Sleeve Classic Jersey, XL	53.9900	9
712	AWC Logo Cap	8.9900	9
883	Short-Sleeve Classic Jersey, L	53.9900	8
876	Hitch Rack - 4-Bike	120.0000	8
877	Bike Wash - Dissolver	7.9500	7
880	Hydration Pack - 70 oz.	54.9900	7
881	Short-Sleeve Classic Jersey, S	53.9900	7
875	Racing Socks, L	8.9900	7

MainWindow — Tabs: Q1 Q2 Q3 Q4 Q5 — Get Data button

Exercise 6:

Retrieve the top ten products by price from the Products table.

Display
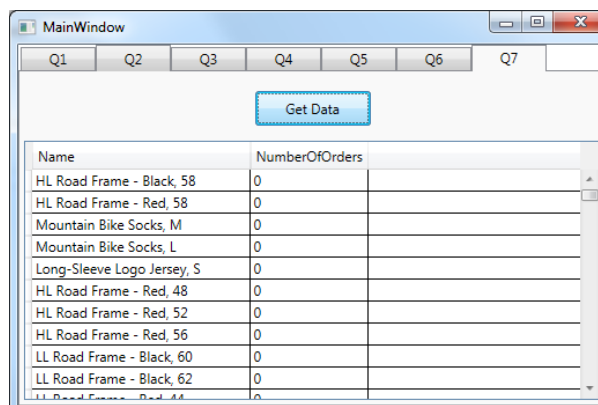- Product Category Name
- ProductNumber
- ProductName
- List Price

Category	ProductNumber	ProductName	Price
Road Bikes	BK-R93R-62	Road-150 Red, 62	3578.2700
Road Bikes	BK-R93R-44	Road-150 Red, 44	3578.2700
Road Bikes	BK-R93R-48	Road-150 Red, 48	3578.2700
Road Bikes	BK-R93R-52	Road-150 Red, 52	3578.2700
Road Bikes	BK-R93R-56	Road-150 Red, 56	3578.2700
Mountain Bikes	BK-M82S-38	Mountain-100 Silver, 38	3399.9900
Mountain Bikes	BK-M82S-42	Mountain-100 Silver, 42	3399.9900
Mountain Bikes	BK-M82S-44	Mountain-100 Silver, 44	3399.9900
Mountain Bikes	BK-M82S-48	Mountain-100 Silver, 48	3399.9900
Mountain Bikes	BK-M82B-38	Mountain-100 Black, 38	3374.9900

MainWindow — Tabs: Q1 Q2 Q3 Q4 Q5 Q6 Q7 — Get Data button

Exercise 7:

Retrieve products which do not have any orders and display the following from the Products table

- Product Name
- Number of Orders

Name	NumberOfOrders
HL Road Frame - Black, 58	0
HL Road Frame - Red, 58	0
Mountain Bike Socks, M	0
Mountain Bike Socks, L	0
Long-Sleeve Logo Jersey, S	0
HL Road Frame - Red, 48	0
HL Road Frame - Red, 52	0
HL Road Frame - Red, 56	0
LL Road Frame - Black, 60	0
LL Road Frame - Black, 62	0

MainWindow — Tabs: Q1 Q2 Q3 Q4 Q5 Q6 Q7 — Get Data button