Assignment 4

IT 340

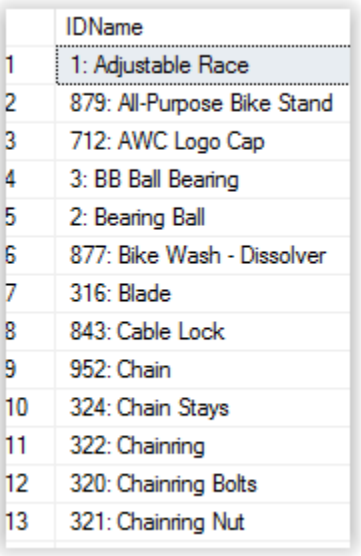
Due Date: April 22, 11 pm

100 points

Using the AdventureWorks2012 database, complete the following SQL queries (10 points each). Use the screenshot for additional guidance.

Submit the Word document in D2L. Name your document as *Assignment4_IT340_YourLastName.docx.* Your document should contain the SQL queries and respective screenshots for your output. 5 points will be deducted if you fail to follow the submission instructions.

1. Write a query using the Production.Product table displaying a description with the ProductID: Name format. Hint: You will need to use a function to write this query.



	IDName
1	1: Adjustable Race
2	879: All-Purpose Bike Stand
3	712: AWC Logo Cap
4	3: BB Ball Bearing
5	2: Bearing Ball
6	877: Bike Wash - Dissolver
7	316: Blade
8	843: Cable Lock
9	952: Chain
10	324: Chain Stays
11	322: Chainring
12	320: Chainring Bolts
13	321: Chainring Nut

2. Write a query that adds six months to each order date in the Sales.SalesOrderHeader table. Include the SalesOrderID and OrderDate columns.

	SalesOrderID	OrderDate	Plus6Months
1	43659	2005-07-01 00:00:00.000	2006-01-01 00:00:00.000
2	43660	2005-07-01 00:00:00.000	2006-01-01 00:00:00.000
3	43661	2005-07-01 00:00:00.000	2006-01-01 00:00:00.000
4	43662	2005-07-01 00:00:00.000	2006-01-01 00:00:00.000
5	43663	2005-07-01 00:00:00.000	2006-01-01 00:00:00.000
6	43664	2005-07-01 00:00:00.000	2006-01-01 00:00:00.000
7	43665	2005-07-01 00:00:00.000	2006-01-01 00:00:00.000
8	43666	2005-07-01 00:00:00.000	2006-01-01 00:00:00.000
9	43667	2005-07-01 00:00:00.000	2006-01-01 00:00:00.000
10	43668	2005-07-01 00:00:00.000	2006-01-01 00:00:00.000
11	43669	2005-07-01 00:00:00.000	2006-01-01 00:00:00.000
12	43670	2005-07-01 00:00:00.000	2006-01-01 00:00:00.000
13	43671	2005-07-01 00:00:00.000	2006-01-01 00:00:00.000

3. Write a query that displays the year of each order date and the numeric month of each order date in separate columns in the results. Include the SalesOrderID and OrderDate columns.

	SalesOrderID	OrderDate	OrderYear	OrderMonth
1	43659	2005-07-01 00:00:00.000	2005	7
2	43660	2005-07-01 00:00:00.000	2005	7
3	43661	2005-07-01 00:00:00.000	2005	7
4	43662	2005-07-01 00:00:00.000	2005	7
5	43663	2005-07-01 00:00:00.000	2005	7
6	43664	2005-07-01 00:00:00.000	2005	7
7	43665	2005-07-01 00:00:00.000	2005	7
8	43666	2005-07-01 00:00:00.000	2005	7
9	43667	2005-07-01 00:00:00.000	2005	7
10	43668	2005-07-01 00:00:00.000	2005	7
11	43669	2005-07-01 00:00:00.000	2005	7
12	43670	2005-07-01 00:00:00.000	2005	7
13	43671	2005-07-01 00:00:00.000	2005	7

4. Write a query using the Sales.SalesOrderHeader table listing the sales in order of the month the order was placed and then the year the order was placed. Include the SalesOrderID and OrderDate columns in the results.

	SalesOrderID	OrderDate
1	45038	2006-01-01 00:00:00.000
2	45039	2006-01-01 00:00:00.000
3	45040	2006-01-01 00:00:00.000
4	45041	2006-01-01 00:00:00.000
5	45042	2006-01-01 00:00:00.000
6	45043	2006-01-01 00:00:00.000
7	45044	2006-01-01 00:00:00.000
8	45045	2006-01-01 00:00:00.000
9	45046	2006-01-01 00:00:00.000
10	45047	2006-01-01 00:00:00.000

5. Write a query that displays all the products along with the SalesOrderID even if an order has never been placed for that product. Join to the Sales.SalesOrderDetail table using the ProductID column.

	SalesOrderID	ProductID	Name
1	NULL	1	Adjustable Race
2	NULL	2	Bearing Ball
3	NULL	3	BB Ball Bearing
4	NULL	4	Headset Ball Bearings
5	NULL	316	Blade
6	NULL	317	LL Crankarm
7	NULL	318	ML Crankarm
8	NULL	319	HL Crankarm
9	NULL	320	Chainring Bolts
10	NULL	321	Chainring Nut
11	NULL	322	Chainring

6. The Sales.SalesOrderHeader table contains foreign keys to the Sales.CurrencyRate and Purchasing.ShipMethod tables. Write a query joining all three tables, and make sure it contains all rows from Sales.SalesOrderHeader. Include the CurrencyRateID, AverageRate, SalesOrderID, and ShipBase columns.

	CurrencyRateID	AverageRate	ShipBase	SalesOrderID
1	NULL	NULL	8.99	43659
2	NULL	NULL	8.99	43660
3	4	1.4641	8.99	43661
4	4	1.4641	8.99	43662
5	NULL	NULL	8.99	43663
6	NULL	NULL	8.99	43664
7	NULL	NULL	8.99	43665
8	NULL	NULL	8.99	43666
9	NULL	NULL	8.99	43667
10	4	1.4641	8.99	43668
11	NULL	NULL	8.99	43669

7. Write a query that displays the names of the customers along with the product names that they have purchased. Hint: Five tables will be required to write this query! (HINT: Use Sales.Customer, Person.Person, Sales.SalesOrderHeader, Sales.SalesOrderDetail, and Production.Product)

	FirstName	MiddleName	LastName	Name
1	Richard	NULL	Bready	Sport-100 Helmet, Red
2	Ryan	NULL	Calafato	Sport-100 Helmet, Red
3	Nancy	E.	Hirota	Sport-100 Helmet, Red
4	Brenda	F.	Heaney	Sport-100 Helmet, Red
5	Jean	NULL	Jordan	Sport-100 Helmet, Red
6	Frances	B.	Adams	Sport-100 Helmet, Red
7	Charles	M.	Christensen	Sport-100 Helmet, Red
8	François	NULL	Ferrier	Sport-100 Helmet, Red
9	Sandra	B.	Maynard	Sport-100 Helmet, Red
10	Carla	J.	Adams	Sport-100 Helmet, Red
11	Shane	J.	Belli	Sport-100 Helmet, Red

8. Write a query that groups the products by ProductModelID along with a count. Display the rows that have a count that equals 1.

	ProductModelID	CountOfProducts
1	2	1
2	42	1
3	43	1
4	44	1
5	45	1
6	46	1
7	47	1
8	48	1
9	49	1
10	50	1
11	51	1
12	52	1

9. Write a query using the Sales.SalesOrderHeader table that returns the count of unique TerritoryID values per customer.

	CountOfTerritoryID	CustomerID
1	1	19897
2	1	14324
3	1	22814
4	1	11407
5	1	28387
6	1	18546
7	1	24165
8	1	27036
9	1	15675
10	1	17195
11	1	11453
12	1	28422

10. Write a query joining the Person.Person, Sales.Customer, and Sales.SalesOrderHeader tables to return a list of the customer names along with a count of the orders placed.

	CountOfOrders	FirstName	MiddleName	LastName
1	3	A.	Francesca	Leonetti
2	1	Aaron	NULL	Alexander
3	2	Aaron	NULL	Bryant
4	1	Aaron	NULL	Butler
5	1	Aaron	NULL	Chen
6	1	Aaron	NULL	Coleman
7	12	Aaron	NULL	Con
8	1	Aaron	NULL	Edwards
9	2	Aaron	NULL	Flores
10	2	Aaron	NULL	Foster
11	1	Aaron	NULL	Gonzales
12	1	Aaron	NULL	Griffin

****