Lab 6 – Querying, Inserting, Updating, and Deleting Data

Deliverable

Word or PDF File containing your work

Set up

In this lab, you will apply the concepts learned in this week's lectures and readings. You'll need access to a SQL Server instance to perform these tasks. You can use either the iSchool resource or install SQL Server Developer or Express edition on your own computer.

It may also be helpful to review the W3 Schools chapters on selecting, inserting, deleting, and updating data:
http://www.w3schools.com/sql/sql_select.asp

http://www.w3schools.com/sql/sql_insert.asp

http://www.w3schools.com/sql/sql_delete.asp

http://www.w3schools.com/sql/sql_update.asp

Steps

Create a blank document to record your answers to the questions called out below. Ensure your name is at the top of the document! Any diagrams should be done using Visio 2010 and paste the diagram into your Word Document.

1. We need to add some data into our table we created in Lab 5. If you have not yet completed Lab 5, you'll want to do that first before proceeding. As a review, here is our table:

Product		
PK	**ProductID**	**int identity**
	ProductName ProductDescription **QtyOnHand**	**char(30)** varchar(255) **int**

a. Execute the following lines of SQL against your database only run each statement once!):

```
-- Statement 1
INSERT INTO Product (ProductName, ProductDescription)
VALUES ('Red Shoes', 'These are some Red shoes. They rock.')

-- Statement 2
INSERT INTO Product (ProductName, ProductDescription)
VALUES ('Blue Shoes', 'These are some Blue shoes. They are awesome.')

-- Statement 3
INSERT INTO Product (ProductID, ProductName, ProductDescription)
VALUES ('Green Shoes', 'These are some Green shoes. They are just ok.')
```

b. Statement 3 gave an error message. Why? (Don't just copy the error message. Write your interpretation of it)

c. Fix Statement 3 so that it runs successfully and run it. Copy and paste your code to your lab document.

d. Code and execute the INSERT statements to add the following products to the database:

ProductName	ProductDescription
Blue shorts	Short and blue, they are
Tan shirt	Really? A tan shirt?
Green hat	Bring it with you!

   i. Copy and paste your SQL code to the lab document.

e. A big order just came in, so we need to update the products' quantities on hand. Execute the following SQL against your database:

```
UPDATE Product SET QtyOnHand = 5 WHERE ProductName = 'Red Shoes'
```

f. Code and execute the UPDATE statements to change the quantity on hand for products based on this table:

ProductName	New Quantity on Hand
Blue shorts	4
Green hat	6
Blue shoes	1
Green shoes	6

g. Good news! We just sold 4 Green hats. Code and execute the UPDATE statement to chenge Green hat's quantity on hand to reflect this (don't just set it to 2. Use the math!). Copy and paste your code to your lab document.

h. We've decided to not sell tan shirts anymore. Code and execute the SQL statement to DELETE the Tan shirt product (make sure you use your WHERE clause).

i. Execute the following statement against your database:

```
SELECT
      ProductID
      , ProductName
      , QtyOnHand
FROM Product
```

j. Rewrite the statement from i to also include the product description (between name and quantity). Copy and paste your code to your lab document.

k. We have a business rule that says “Reorder any item when its on hand quantity is less than 5.” Rewrite the statement in j to only show items with quantities less than 5. Copy and paste your code into your lab document.

l. Code and execute the statement in k. Using the snipping tool or a by a similar method, take a screenshot of the results and paste this into your lab document.