Assignment 9

Due Wednesday by 11:59pm   **Points** 40   **Submitting** a text entry box or a file upload

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PART 1 - DISTRIBUTED QUERIES (SUBMIT A SEPARATE TXT FILE FOR EACH PART)

FARMS, Inc is merging with another hotel chain in Thailand, which owns 3 Properties. Their database is called Thai_HOBS (Hotel On-Line Booking System), and their tables/relationships are a little different than our FARMS system.

Since you don't have time to convert/merge their existing data into your FARMS database, you will use a linked server and distributed ad-hoc queries against their remote data source.

Your assignment is to create a script (**which MUST BE ran from a LOCAL instance (not Titan) of SQL Server**).

1. Start your script so you create YourLastName_FARMS on a **LOCAL** instance of SQL server (do not bother with paths and log files - just issue the standard single line command CREATE DATABASE (without parameters), as I'll be running this on MY local copy of SQL Server), and using my MODEL to establish the size and location of the database and where it is physically stored.

2. Remember to populate your local database with the sample data files. I suggest putting the sample data files in a folder called c:\stage on your machine (actually, you can put them anywhere on your machine, but when I run your script on my local machine, I will have mine in the c:\stage directory).

3. In your script, USE MASTER, then add a linkedserver called 'TITAN_YOURLASTNAME' (make sure it's underscored, not hyphened) that points to the the Titan Server. It's important you name this correctly, as I run this on MY local machine, and will need to create a linked server for all students, so I do not want duplication for linked server names as I grade each students' assignment.

4. Add a linked server login, and map MY* local login id '**Rich\Rich-Fry**' to the remote login: Thai_User (with password: Thai_Test) already created for you in the Thai_HOBS database on Titan.

*When you test this login on YOUR machine, you will of course use YOUR OWN local login...BUT <u>just before submitting,</u> change YOUR local login to MY local (Rich\Rich-Fry).

5. Using the Linked Server, perform the following queries on the Thai_HOBS database, to determine the layout and contents of these tables on titan.

SELECT * FROM Hotels
SELECT * FROM Bookings
SELECT * FROM Guests
SELECT * FROM Rooms
SELECT * FROM TaxRates

6A. Continue your script by USING YOUR DATABASE (not Master) and creating a modified version of the stored procedure (sp_InsertGuest) you created in HW 6. YOU MUST RENAME this modified stored procedure to sp_InsertGuest_YOURLASTNAME (because I will be adding several student stored procedures on MY computer and they cannot all have the same name). This modified stored procedure should INSERT INTO the Thai_HOBS database, guest table (using Linked Server), instead of your own FARMS database .

6B. Demonstrate this stored procedure by executing it, and adding yourself as a guest to the Thai_HOBS database. Note: You may need to set RPC IN/OUT on your linked server (I've already done it on Thai_HOBS).

7. Using OpenQuery, Write a statement that SELECTS information containing the Property (or Hotel) Name, Room (or Unit) Type, and the formatted and converted ($*) rate for all the rooms from each hotel in BOTH databases (Hint: Simple UNION to group two

separate query results together and sort by Property / Hotel Name). Since Thai_HOBS doesn't use dates for their rates, do not include them when you do the FARMS Rates (or else union will not work, because the number of columns will be off). Rather, just filter on the rates using an arbitrary date like '1 July 2017'.

8. Using OpenRowSet, Write a query that SELECTS the ReservationID (called BookingID in the Thai Database), Guest Last Name, Formatted Quoted Rate*, and Check-in Date from both databases, and presents all the details together, sorted by Guest Last Name.

*Note the Exchange Rate (1 dollar = 35.69 Thai baht). So, display the quoted rate (from Thai_HOBS) in US Dollars based on exchange rate. Hint: DIVIDE Baht prices by 35.69, not multiply. For example, a 1000 Baht room would be $28.02 (make sure you ROUND to 2 decimal places).

PART II - XML

1. Apply OPENXML to this XML document, using Element-Centric mapping. Show guestid, guestfirst, guestlast, and Check-in ONLY for each guest.

```
<GUEST>

<GuestID>4431</GuestID>
<GuestFirst>Lacey</GuestFirst>
<GuestLast>Byington</GuestLast>
<RESERVATIONDETAIL>
<CheckInDate>2017-08-02</CheckInDate>
<Nights>2</Nights>
</RESERVATIONDETAIL>

</GUEST>

<GUEST>

<GuestID>5563</GuestID>
<GuestFirst>Jonathan</GuestFirst>
<GuestLast>Langford</GuestLast>

<RESERVATIONDETAIL>
<CheckInDate>2017-08-05</CheckInDate>
<Nights>2</Nights>
</RESERVATIONDETAIL>

</GUEST>

<GUEST>

<GuestID>6680</GuestID>
<GuestFirst>Tanner</GuestFirst>
<GuestLast>Olson</GuestLast>

<RESERVATIONDETAIL>
<CheckInDate>2017-09-11</CheckInDate>
<Nights>3</Nights>
</RESERVATIONDETAIL>

 </GUEST>
```

2. Using the same raw XML above, use OPENXML to Insert the XML's GuestId, GuestFirst, and GuestLast (Plus remaining fake data values for these required fields (Address, City, Postal Code, Country, Phone, E-mail) into your FARMS Person Table.

Note: You will also need to **SET IDENTITY_INSERT ON**   **(https://msdn.microsoft.com/en-us/library/ms188059.aspx)** GuestID, to override the auto IDENTITY so you can manually insert the GuestID.

2A. Write a SELECT * FROM Guest to prove the inserts took place.

3. Finally, USE MASTER AND write a statement to DROP YOUR DATABASE and DROP THE LINKED SERVER WITH LOGINS (just replace student name ----- sp_dropserver 'TITAN_Student Name', 'droplogins'). I no longer need your database (or linked server) on my machine.

REMINDER BEFORE SUBMITTING: ***When you test this login on YOUR machine, you will of course use YOUR OWN local login...BUT just before submitting, change YOUR local login to MY local (Rich\Rich-Fry).**