Assignment 15 Name Oliver Conover

Use the AdventureWorks2012 database for all questions. You will be making changes to the data in your tables, but for the purpose of this class, you will not need to use these particular tables in future assignments, so it’s okay. (60 points)

1. Using the Person.Address table, you will change any address that has the city of Miami to Hudson using each of the following steps. I know this doesn’t make any sense to change a city name but it helps us walk through the UPDATE query and see what the commands BEGIN TRANSACTION, ROLLBACK AND COMMIT can do. (13 pts)

a. Write a query to show how many addresses are in the city of Miami? Paste your query here.

select count(pa.City) Miamians

from Person.Address pa

where pa.City = 'Miami'

b. What is the number of addresses in Miami?

10

c. Change your query to show how many addresses are in the city of Hudson? There will be none in Hudson. Paste your query here.

select count(pa.City) Hudsonites

from Person.Address pa

where pa.City = 'Hudson'

d. Write a query to change any address with a city of Miami to now be a city of Hudson. Be sure to use the **BEGIN TRANSACTION** statement as the first line of your query. By using the BEGIN TRANSACTION command, it allows you to Rollback or reverse your update. It will look similar to this query, changing the table and fieldname:

BEGIN TRANSACTION

update Table name

set Fieldname = 'Hudson'

where Fieldname = 'Miami'

Paste your query here.

BEGIN TRANSACTION

update Person.Address

set City = 'Hudson'

where City = 'Miami'

e. Notice at the bottom of the screen, it says (10 row(s) affected). So your query worked. But now you don’t want to commit the change, so clear the query from the screen and type **ROLLBACK**. This will reverse the updates that your query made. What message do you see on the screen?

Commands completed successfully.

Completion time: 2019-11-24T19:06:03.9959912-05:00

f. Run your query from step 1 a. to see if there are any rows for Miami. Are they there?

yes

g. Run your query from 1 d. again to update the table. Notice at the bottom of the screen, it says (10 row(s) affected). Remove the query and type the word **COMMIT.** What message do you see on the screen?

Commands completed successfully.

Completion time: 2019-11-24T19:07:02.3852528-05:00

h. Remove the COMMIT word and type ROLLBACK. You should get an error message. This is because once you COMMIT, the updates are permanent and cannot be rollback. You have completed this question.

2. With this update query, you will be updating two fields on the same record. We want to write a query using the HumanResources.Employee table to update the Marital Status of business entity id 77 to S for Single. Currently it is M for Married. Also to change the VacationHours to 50. See Example 2 in our Chapter 15 Key Points to Review document. (6 points)

a. Write a query to look at all fields for businessentityid 77? Paste your query here.

select \*

from HumanResources.Employee hre

where hre.BusinessEntityID = 77

b. Write a query to change the Marital Status from M to S for business entity 77 and in the same update query, change the VacationHours to 50. Do not use BEGIN TRANSACTION. Paste your query here

update HumanResources.Employee

set MaritalStatus = 'S'

where BusinessEntityID = 77

update HumanResources.Employee

set VacationHours = 50

where BusinessEntityID = 77

c. Clear the query from the screen and type **ROLLBACK**. The Rollback command does not work because you didn’t start your query with the BEGIN TRANSACTION command. Run your query from step 2a to see the Marital Status. What is the value?

‘S’

d. Run your query from step 2a. to verify the two fields were updated.

3. Let’s say we have new manufacturing equipment and now those products that used to take 4 days to manufacture, now only take 2 days to manufacture. You will use the Production.Product table and will use the same field in your SET and WHERE statements. (5 points)

a. Write a query to identify how many products are currently manufactured in 4 days and will be effected by this update. Should be 97 products. Paste your query here.

select ProductID, count(DaysToManufacture) ProductionExceeding4Days

from Production.Product pp

where DaysToManufacture = 4

group by ProductID

b. Write a query to update the records using the BEGIN TRANSACTION. Paste your query here.

BEGIN TRANSACTION

update Production.Product

set DaysToManufacture = 2

where DaysToManufacture = 4

c. Make sure your count is 97. If it is, then give the command to complete the update transaction. What command did you use?

COMMIT

4. In these steps, you are going to change the tax rate from 8% to 6% on 5 purchase orders. Using only the PurchaseOrderHeader table. (16 points)

a. Write a query to see the taxamt, freight, subtotal and totaldue for all purchase orders with a purchaseorderid of 20,21,22,23,24. You should have 5 rows in your result set. Paste your query here. (2 pts)

select TaxAmt, Freight, SubTotal, TotalDue

from Purchasing.PurchaseOrderHeader poh

where poh.PurchaseOrderID in (20, 21, 22, 23, 24)

b. From your query in the previous step, output your result set to an excel file. Clean up the file and in excel **add totals** for each column.File name is “Before” followed by your last name. Include this file with your assignment uploads. (4 pts)

*Notice that the TotalDue is calculated by adding the taxamt, freight and subtotal. TaxAmt is calculated by multiplying the Subtotal times the tax rate.*

c. Now we are going to update the TaxAmt, currently the tax rate is 8%. We are going to update these 5 purchase orders with a 6 % tax rate. This is calculated by multiplying the SubTotal times 6% (.06) and it is stored in the TaxAmt field. Paste your update query here. (4 pts)

BEGIN TRANSACTION

update Purchasing.PurchaseOrderHeader

set TaxAmt = SubTotal \* .06

where PurchaseOrderID in (20, 21, 22, 23, 24)

d. Run your query from step 4 a. and output your result set to an excel file. Clean up the file and **add totals.** File name is “After” followed by your last name. Include this file with your assignment uploads. (4 pts)

e. Notice a couple things in your second excel file with this change to the Tax Rate. Looking at the TotalDue in your excel file. We do not need to recalculate the TotalDue since we changed the TaxAmt. The TotalDue amount updated automatically to add the new Taxamt, unchanged freight amount and unchanged subtotal amount.

The reason the TotalDue updated automatically is because of the way the field is defined in the AdventureWorks database. How is the TotalDue field defined by looking at the column in the Purchasing.PurchaseOrderHeader table. What does it say in the parenthesis next to the TotalDue field? (2 pts)

(Computer, money, not null)

5. We did an inventory count of Productid 316 in Locationid of 5 and found that there are only 512 items in that location. Use the Production.ProductInventory table for this query. (4 points)

a. Write a query to show the quantity currently in the Production.ProductInventory table for Productid 316 and locationid 5. Paste your query here.

select proi.Quantity

from Production.ProductInventory proi

where proi.ProductID = 316

and proi.LocationID = 5

b. Write a query to update the quantity to 512 for ProductID = 316 and locationid = 5. Paste query here.

BEGIN TRANSACTION

update Production.ProductInventory

set Quantity = 512

where ProductID = 316

and LocationID = 5

c. Run the query from 5a, to make sure the quantity was updated. Is it currently 512?

6. Using the Production.WorkOrder table, we did any inventory count and need to correct the following items. For workorderId 861 and1271 update the ScrappedQty to 14. Paste two queries one to show the number of rows you expect to update and one to show the update query. (4 pts)

SELECT:

Select pw.WorkOrderID, pw.ScrappedQty

from Production.WorkOrder pw

where pw.WorkOrderID in (861, 1271)

UPDATE:

update Production.WorkOrder

set ScrappedQty = 14

where WorkOrderID in (861, 1271)

7. Using the Purchasing.ShipMethod table, we are changing our Overnight service from J-Fast to FedEx. Update the correct Shipping Method to reflect FedEx. Paste two queries one to show the number of rows you expect to update and one to show the update query. (4 pts)

SELECT:

select psm.Name, psm.ShipMethodID

from Purchasing.ShipMethod psm

UPDATE:

update Purchasing.ShipMethod

set Name = 'OVERNIGHT FEDEX'

where ShipMethodID = 4

8. Using the HumanResources.Department table, we are changing the Production department to be in the GroupName Inventory Management. Use **BEGIN TRANSACTION**. Paste three, one to show the number of rows you expect to update and one to show the update query and one to show the data did not change because you used the command that removed your updates. (4 pts)

SELECT:

select DepartmentID, Name, GroupName

from HumanResources.Department

where DepartmentID = 7

UPDATE:

BEGIN TRANSACTION

update HumanResources.Department

set GroupName = (select GroupName from HumanResources.Department where DepartmentID = 15)

where DepartmentID = 7  
(I know there was a better way to do this I was just curious if it would work)

CANCELUPDATE:

ROLLBACK

9. Using the Sales.Currency table, we are changing BDT currency code from Taka to Katdino. Paste two queries one to show the number of rows you expect to update and one to show the update query. (4 pts)

SELECT:

Select sc.Name, sc.CurrencyCode

from Sales.Currency sc

where sc.CurrencyCode = 'BDT'

UPDATE:

update Sales.Currency

set Name = 'KatDino'

where CurrencyCode = 'BDT'

10. Using the Person.person table, Ms. Jill A. Williams just married and is now Mrs. Jill A. Bivona. Update both her title and her last name with one update query. Paste two queries one to show the number of rows you expect to update and one to show the update query. (4 pts)

SELECT:

select pp.Title,pp.FirstName, pp.LastName, pp.MiddleName, pp.BusinessEntityID

from Person.Person pp

where pp.FirstName = 'Jill' and pp.LastName = 'Williams' and pp.MiddleName is NOT NULL  
UPDATE:

update Person.Person

set Title = 'Mrs.', LastName = 'Bivona'

where BusinessEntityID = 24