**Assignment 10** (80 pts)

Union queries

1. Using the **SalesOrderExample** database, create a UNION query for the customer and vendor tables. Column in your result set should be as shown in this table. Notice the Column Title should be the alias given to the fields. (6 points)

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| Column Title | ID | FullName | Address | City | State | Zip |
| Customer Table | Customer ID | First and Last Name Concatenated in one column | Address | City | State | Zip |
| Vendor Table | Vendor ID | Name | Address | City | State | Zip |

Sorted by zipcode. You should have 38 rows in your result set.

a. Output your query results to an excel. File name is your last name and Mailing. Make sure that I can just click on your file and it opens in excel looking good. Include this file with your assignment upload. (3 points)

b. Paste your query here.

select customerID as 'ID', CustFirstName + ' ' + CustLastName as 'Full Name', CustStreetAddress, CustCity, CustState, CustZipCode

from Customers

Union

select VendorID, VendName, VendStreetAddress, VendCity, VendState, VendZipCode

from Vendors

order by CustZipCode

c. Change to a UNION ALL, does your result set change?

No

d. Why did your result set change or why did it not change? See page 347 for help in answering this question.

There was no duplicate rows for the query used.

2. Using your query from question 1, add the information from the Employees table with a UNION. Change the sort of the result set to be by ID. You should have 46 rows in your result set. (5 points)

a. Paste your query here

select customerID as 'ID', CustFirstName + ' ' + CustLastName as 'Full Name', CustStreetAddress, CustCity, CustState, CustZipCode

from Customers

Union

select VendorID, VendName, VendStreetAddress, VendCity, VendState, VendZipCode

from Vendors

union

select employeeID, EmpFirstName + ' ' + EmpLastName, EmpStreetAddress, EmpCity, EmpState, EmpZipCode

from Employees

order by ID

3. Using the **AdventureWorks2012** database, paste your query once at the end. (8 points)

a. create a query that shows vendors and the product they could sell us using INNER JOINS for purchasing.productvendor, purchasing.vendor and production.product. If you need help with the relationship of the Purchasing tables, remember we have a Purchasing Data Diagram in our ‘Reference’ course module.

b. UNION that query with one that shows customer and products they buy using the production.product, sales.salesorderheader and sales.salesorderdetail.

c. The columns in the select statements are businessentityid or Customerid with column tile AccountNumber, product.Productid, product.Name. You should get 79893 rows in your result set. Paste your query here.

d. Save your query (not the results set) as your lastnameProductquery and include this file with your assignment upload. In SQLServer2014, select File and then SaveSQLQuery.sql and then browse to find a location to save the file and upload with your other files in MyPHSC. (2 pts)

4. Using the Sales.SalesOrderHeader table, show the SalesOrderId, Orderdate and Total due for any orders before 2006. (8 points)

a. Using the PurchasingOrderHeader table, show the PurchaseOrderId, Orderdate and Total due for any others before 2006.

b. Create a UNION query with the two queries you just created.

c. Now add a column that will help us know the difference between the Sales Orders and the Purchase Orders. Using something you learned in chapter 5. If you’re unsure, ask me.

d. Paste your query here.

select soh.SalesOrderID as 'ID' , soh.OrderDate as 'Order Date' , soh.TotalDue as 'Sales Total Due', cast(TotalDue as integer) as 'Purchase Total Due'

from sales.SalesOrderHeader as soh

union

select poh.PurchaseOrderID, poh.OrderDate, soh.TotalDue - poh.TotalDue, poh.TotalDue

from Purchasing.PurchaseOrderHeader as poh

join Sales.SalesOrderHeader as soh

on poh.OrderDate = soh.OrderDate

where poh.OrderDate < 2006

order by [Order Date]

Outer Join

5. Using the Human Resource tables, identify the Job Candidates that did not become Employees, the database is small there are only 11 rows in your result set. (8 points)

* The people are in the JobCandidate table but not the Employee table since they were never hired. So point to the JobCandidate table.
* BusinessEntityID would be NULL since they weren’t hired, they only have a JobCandidateID
* Show the JobCandidateID and the BusinessEntityID
* Sort by JobCandidateID

Paste your query here.

select emp.BusinessEntityID as 'Entity ID'

from HumanResources.Employee as emp

where emp.BusinessEntityID is null

union all

select job.BusinessEntityID

from HumanResources.JobCandidate as job

where job.BusinessEntityID is null

6. Using the Production tables, identify any product model id with its name that are not assigned to a product. Use the Product and ProductModel. (8 points)

a. How many rows are in the product model table?

128

b. How many **unique** productmodel ids are in the Product table?

504

c. How many rows do you expect in your result for ProductModelID that are not assigned to any product?

128

d. Pointing to the table with more rows, write an outer join query to show the 9 productmodelid and their names that are not assigned to a product. Paste your query here.

select distinct pro.ProductID, pro.Name

from Production.Product as pro

union

select model.ProductModelID, model.Name

from Production.ProductModel as model

where model.ProductModelID is not null

Database questions (3 points each)

Using the **Purchasing** Data Diagram that is listed in our course modules or you can use the one you drew earlier in the course.

7. You run a query using the PurchaseOrderHeader and get 15 rows. Then you add the ShipMethod table. Will the number of rows in your result set increase or stay the same?

Stay the same

8. You run a query using the PurchaseOrderHeader and get 30 rows. Then you add the PurchaseOrderDetail table. Will the number of rows in your result set increase or stay the same?

increase

9. You run a query using the PurchaseOrderDetail and get 45 rows. Then you add the ProductVendor table. Will the number of rows in your result set increase or stay the same?

Stay the same

10. You run a query using the PurchaseOrderHeader and get 115 rows. Then you add the Vendor table. Will the number of rows in your result set increase or stay the same?

Stay the same

Using the **Human Resources** Data Diagram that is listed in our course modules or you can use the one you drew earlier in the course.

11. You run a query using the Employee and get 37 rows. Then you add the JobCandidate table. Will the number of rows in your result set increase or stay the same?

increase

12. You run a query using the EmployeeDepartmentHistory and get 27 rows. Then you add the Shift table. Will the number of rows in your result set increase or stay the same?

Stay the same

13. You run a query using the Shift and get 3 rows. Then you add the EmployeeDepartmentHistory table. Will the number of rows in your result set increase or stay the same?

increase

14. You run a query using the EmployeeDepartmentHistory and get 8 rows. Then you add the Department **and** Employee table. Will the number of rows in your result set increase or stay the same?

Stay the same

15. You run a query using the Employee table and get 88 rows. Then you add the EmployeeDepartmentHistory table. Will the number of rows in your result set increase or stay the same?

increase