

**CHUKWUBUIKEM OHIA**

**Microsoft SQL Server Assignment**

1. How many people in the DB do not have a middle name? Show the query.

SELECT COUNT(\*) AS TOTAL\_PERSON FROM PERSON.Person

WHERE MiddleName IS NULL;

1. How many email addresses do not end in adventure-works.com? Show the query.

SELECT COUNT(EMAILADDRESS) AS TOTAL\_EMAIL FROM Person.EmailAddress

WHERE EmailAddress NOT LIKE '%Adventure-works.com';

1. A customer has concerns with market penetration and would like a report on what states have the most sales between 2010-2011. Provide the data that the customer would find most relevant and add any additional information if required.

SELECT TOP 10 YEAR(a.orderdate) AS SALES\_YEAR, SUM(a.totaldue) AS TOTAL\_SALES,

B.NAME AS STATE, d.NAME AS REGION FROM sales.salesorderheader A,

person.stateprovince B, person.address C, sales.salesterritory D

WHERE A.customerID = C.addressId

AND B.stateprovinceid = C.stateprovinceid

AND A.territoryid = D.territoryid

AND YEAR(A.orderdate) BETWEEN 2010 AND 2011

GROUP BY B.NAME, D.NAME, YEAR(A.orderdate)

ORDER BY SALES\_YEAR, TOTAL\_SALES desc;

1. A ticket is escalated and asks what customers got the email promotion. Please provide the information.

SELECT FirstName, MiddleName, LastName FROM person.person

WHERE EmailPromotion != 0;

SELECT A.LastName, A.FirstName, A.MiddleName, A.EmailPromotion, A.BusinessEntityID,

A.PersonType, B.CustomerID, B.StoreID, D.Name AS STATE, C.Name AS TERRITORY, E.Name AS COUNTRY

FROM person.Person A, sales.customer B, sales.SalesTerritory C,

Person.StateProvince D, Person.CountryRegion E, person.Address F

WHERE A.EmailPromotion != 0

AND A.BusinessEntityID = B.PersonID

AND B.TerritoryID = C.TerritoryID

AND B.TerritoryID= C.TerritoryID

AND A.BusinessEntityID = F.AddressID

AND F.StateProvinceID = D.StateProvinceID

AND C.CountryRegionCode = E.CountryRegionCode

ORDER BY LastName ;

1. Retrieve a list of the different types of contacts and how many of them exist in the database. We are only interested in ContactTypes that have 100 contacts or more.

SELECT ContactTypeID, Name

FROM person.ContactType;

SELECT A.ContactTypeID, B.Name, COUNT(A.ContactTypeID) AS TOTAL\_COUNT

FROM person.BusinessEntityContact A, Person.ContactType B

WHERE A.ContactTypeID = B.ContactTypeID

GROUP BY A.ContactTypeID, B.Name

HAVING COUNT(A.ContactTypeID) >= 100;

1. Retrieve a list of all contacts which are 'Purchasing Manager' and their names

SELECT SALESORDERID, UNITPRICE, SUM(ORDERQTY) AS NUMBEROFORDERITEMS

FROM Sales.SalesOrderDetail

GROUP BY SalesOrderID, UnitPrice

HAVING SUM(OrderQty) = 1;

1. Show OrdeQty, the Name and the ListPrice of the order made by CustomerID 635

SELECT A.CUSTOMERID, C.NAME AS PRODUCTNAME, C.LISTPRICE, B.ORDERQTY FROM Sales.SalesOrderHeader A

JOIN Sales.SalesOrderDetail B ON A.SalesOrderID = B.SalesOrderID

JOIN Production.Product C ON B.ProductID = C.ProductID

WHERE CustomerID = 635;

1. A "Single Item Order" is a customer order where only one item is ordered. Show the SalesOrderID and the UnitPrice for every Single Item Order.

SELECT SALESORDERID, UNITPRICE, SUM(ORDERQTY) AS NUMBEROFORDERITEMS

FROM Sales.SalesOrderDetail

GROUP BY SalesOrderID, UnitPrice

HAVING SUM(OrderQty) = 1;

1. Where did the racing socks go? List the product name and the CompanyName for all Customers who ordered ProductModel 'Racing Socks'.

SELECT F.Name AS PRODUCTNAME, A.CustomerID, E.Name AS COMPANYNAME, E.BusinessEntityID, SUM(B.OrderQty) AS ORDERQTY

FROM Sales.SalesOrderHeader A

JOIN sales.SalesOrderDetail B ON A.SalesOrderID = B.SalesOrderID

JOIN Production.Product C ON B.ProductID = C.ProductID

JOIN Production.ProductModel F ON C.ProductModelID = F.ProductModelID

JOIN Sales.Customer D ON A.CustomerID = D.CustomerID

JOIN Sales.Store E ON D.StoreID = E.BusinessEntityID

WHERE F.Name = 'Racing Socks'

GROUP BY F.Name, E.Name, A.CustomerID, E.BusinessEntityID

ORDER BY COMPANYNAME ASC;

1. How many products in ProductCategory 'Cranksets' have been sold to an address in 'London'?

SELECT D.NAME AS PRODUCTCATEGORYNAME, F.CITY, C.NAME AS COUNTRY, SUM(A.ORDERQTY) AS TOTALORDERQTY

FROM Sales.SalesOrderDetail A, Sales.SalesOrderHeader B, Person.StateProvince C, Production.ProductSubcategory D,

Production.Product E , Person.Address F

WHERE A.ProductID IN (SELECT PRODUCT.PRODUCTID FROM Production.Product WHERE Product.ProductSubcategoryID = 8)

AND A.SalesOrderID = B.SalesOrderID

AND B.TerritoryID = C.TerritoryID

AND A.ProductID = E.PRODUCTID

AND E.ProductSubcategoryID = D.ProductSubcategoryID

AND B.BillToAddressID = F.AddressID

AND F.City = 'London'

GROUP BY D.Name, F.City, C.Name;

1. Show the best-selling item by value.

SELECT TOP 1 A.productID, C.Name AS PRODUCTNAME,

SUM(B.totalDue) AS TOTALAMOUNTDUE

FROM sales.SalesOrderDetail A, Sales.SalesOrderHeader B,Production.Product C

WHERE A.SalesOrderID = B.SalesOrderID

AND A.ProductID = C.ProductID

GROUP BY A.productID, C.Name

ORDER BY TOTALAMOUNTDUE DESC;

Goodluck.

**Quantum Analytics**