Section: 03

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Challenge 1

Q1:

-- Retrieve totals for country/region and state/province

SELECT a.CountryRegion, a.StateProvince, SUM(soh.TotalDue) AS Revenue

FROM SalesLT.Address AS a

JOIN SalesLT.CustomerAddress AS ca

ON a.AddressID = ca.AddressID

JOIN SalesLT.Customer AS c

ON ca.CustomerID = c.CustomerID

JOIN SalesLT.SalesOrderHeader as soh

ON c.CustomerID = soh.CustomerID

GROUP BY ROLLUP(a.CountryRegion, a.StateProvince)

ORDER BY a.CountryRegion, a.StateProvince;

Q2:

-- Indicate grouping level in the results

SELECT a.CountryRegion, a.StateProvince,

IIF(GROUPING\_ID(a.CountryRegion) = 1 AND GROUPING\_ID(a.StateProvince) = 1, 'Total', IIF(GROUPING\_ID(a.StateProvince) = 1, a.CountryRegion + ' Subtotal', a.StateProvince + ' Subtotal')) AS Level,

SUM(soh.TotalDue) AS Revenue

FROM SalesLT.Address AS a

JOIN SalesLT.CustomerAddress AS ca

ON a.AddressID = ca.AddressID

JOIN SalesLT.Customer AS c

ON ca.CustomerID = c.CustomerID

JOIN SalesLT.SalesOrderHeader as soh

ON c.CustomerID = soh.CustomerID

GROUP BY ROLLUP(a.CountryRegion, a.StateProvince)

ORDER BY a.CountryRegion, a.StateProvince;

Q3:

-- Add grouping level for cities

SELECT a.CountryRegion, a.StateProvince, a.City,

CHOOSE (1 + GROUPING\_ID(a.CountryRegion) + GROUPING\_ID(a.StateProvince) + GROUPING\_ID(a.City), a.City + ' Subtotal', a.StateProvince + ' Subtotal', a.CountryRegion + ' Subtotal', 'Total') AS Level,

SUM(soh.TotalDue) AS Revenue

FROM SalesLT.Address AS a

JOIN SalesLT.CustomerAddress AS ca

ON a.AddressID = ca.AddressID

JOIN SalesLT.Customer AS c

ON ca.CustomerID = c.CustomerID

JOIN SalesLT.SalesOrderHeader as soh

ON c.CustomerID = soh.CustomerID

GROUP BY ROLLUP(a.CountryRegion, a.StateProvince, a.City)

ORDER BY a.CountryRegion, a.StateProvince, a.City;

Challenge 2

Q1:

-- Retrieve customer sales revenue for each parent category

SELECT \* FROM

(SELECT cust.CompanyName, c.ParentProductCategoryName, so.LineTotal

FROM SalesLT.SalesOrderDetail AS so

JOIN SalesLT.SalesOrderHeader AS soh ON so.SalesOrderID = soh.SalesOrderID

JOIN SalesLT.Customer AS cust ON soh.CustomerID = cust.CustomerID

JOIN SalesLT.Product AS prod ON so.ProductID = prod.ProductID

JOIN SalesLT.vGetAllCategories AS c ON prod.ProductcategoryID = c.ProductCategoryID) AS categorySales

PIVOT (SUM(LineTotal) FOR ParentProductCategoryName IN ([Accessories], [Bikes], [Clothing], [Components])) AS pivotedsales

ORDER BY CompanyName;