The database referenced in the queries contains customer, inventory and transactional data for a fictional bike company.

***Question 1*** Of the parent product categories – Accessories, Bikes, Clothing, and Components – which category has had the most orders (use order detail table not order header)?

Answer #1

SELECT TOP 5 pc.name, count(o.OrderQty) AS QTY FROM SalesLT.SalesOrderDetail o

join SalesLT.Product p on o.ProductID = p.ProductID

join SalesLT.ProductCategory pc on p.ProductCategoryID = pc.ProductCategoryID

Group by pc.name

Order by QTY desc

***Question 2*** What was the best selling color of the Touring-1000 series bicycles? Remember OrderQty on the OrderDetail table

Answer #2

SELECT p.Color, count(o.OrderQty) AS QTY FROM SalesLT.SalesOrderDetail o

join SalesLT.Product p on o.ProductID = p.ProductID

WHERE Name LIKE 'TOURING-1000%'

Group by p.Color

Order by QTY desc;

***Question 3*** For all products, using the # of Orders (orderqty), which product generated the most profit for this company? **Profit** = *# of Orders \* (ListPrice – StandardCost)*

Answer #3

SELECT TOP 5 p.Name, SUM(o.OrderQty \* p.ListPrice) AS PROFIT FROM SalesLT.SalesOrderDetail o

join SalesLT.Product p on o.ProductID = p.ProductID

Group by p.Name

Order by PROFIT desc;

**VII | *Question 4*** Using the OrderHeader and Address tables, which country had the most bikes shipped to it?

Answer #4

SELECT a.CountryRegion, SUM(o.OrderQty)AS QTY FROM SalesLT.Address a

JOIN SalesLT.CustomerAddress ca ON a.AddressID = ca.AddressID

JOIN SalesLT.Customer c ON ca.CustomerID = c.CustomerID

JOIN SalesLT.SalesOrderHeader oh ON c.CustomerID = oh.CustomerID

JOIN SalesLT.SalesOrderDetail o ON oh.SalesOrderID = o.SalesOrderID

JOIN SalesLT.Product p ON o.ProductID = p.ProductID

JOIN SalesLT.ProductCategory pc ON p.ProductCategoryID = pc.ProductCategoryID

WHERE pc.Name LIKE '%Bikes'

Group by a.CountryRegion

Order by QTY desc;

**VIII | *Question 5*** Looking at the Product Category of Vests, what was the most popular selling vest and what was the profit of that vest for sales shipped to the State/Province of England?

Answer #5

SELECT  SUM(o.OrderQty)AS QTY, SUM(o.OrderQty\* p.ListPrice) AS PROFIT FROM SalesLT.Address a

JOIN SalesLT.CustomerAddress ca ON a.AddressID = ca.AddressID

JOIN SalesLT.Customer c ON ca.CustomerID = c.CustomerID

JOIN SalesLT.SalesOrderHeader oh ON c.CustomerID = oh.CustomerID

JOIN SalesLT.SalesOrderDetail o ON oh.SalesOrderID = o.SalesOrderID

JOIN SalesLT.Product p ON o.ProductID = p.ProductID

JOIN SalesLT.ProductCategory pc ON p.ProductCategoryID = pc.ProductCategoryID

WHERE pc.Name LIKE '%Vest%' AND a.StateProvince = 'England'

Order by QTY desc;