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Shopify Data Science Internship Challenge

Question 2

a. How many orders were shipped by Speedy Express in total?

```
SELECT s.ShipperName,
       count(*) as TotalOrdersShipped
FROM Shippers as s,
     Orders as o
WHERE s.ShipperName = "Speedy Express" AND
       o.ShipperID = s.ShipperID
GROUP BY s.ShipperName;
```

Result: Speedy Express shipped **54** orders in total

b. What is the last name of the employee with the most orders?

```
SELECT TOP 1 e.LastName,
       count(*) as OrderCount
FROM Employees as e,
     Orders as o
WHERE e.EmployeeID = o.EmployeeID
GROUP BY e.LastName
ORDER BY count(*) DESC;
```

Result: **Peacock** was the last name of the employee with the most orders, who had 40 orders.

c. What product was ordered the most by customers in Germany?

Assumption: We are looking for the product with the most QUANTITY purchased, not the item with the greatest number of orders. This is an important distinction, as a single order can contain more than one quantity of a product.

```
SELECT TOP 1
       p.ProductName,
       c.Country,
       sum(ord.Quantity) as Quantity
FROM Customers as c,
     Orders as o,
     OrderDetails as ord,
     Products as p
WHERE c.Country = "Germany" AND
       c.CustomerID = o.CustomerID AND
       o.OrderID = ord.OrderID AND
       ord.ProductID = p.ProductID
GROUP BY p.ProductName,
         c.Country
ORDER BY sum(ord.Quantity) DESC
```

Result: The most ordered item in Germany is **Boston Crab Meat** with 160 orders