

Winter 2021 Data Science Intern Challenge - Part 2

(SQL)

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

To get the orders shipped by any shipper need to join two tables: Orders & Shippers
From the shippers table we can get the shipper ID and from the orders table we can get the number of orders.

```
SELECT COUNT(Shippers.ShipperName) AS "Number of Orders by Speedy Express"  
FROM Orders  
INNER JOIN Shippers ON Orders.ShipperID=Shippers.ShipperID  
WHERE Shippers.ShipperID = 1;
```

The **number of orders** shipped by **Speedy Express** were **54** in total.

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

To get the last name of the employee handling the most orders we need to join two tables: Employees & Orders. From the employee table we can get the last name of the employees and from the orders table we can get the number of ordered handled by each employee. The joint table needs to be ordered by the last name of the employees and ordered by the number of orders. (We use DESC to begin with the employee with the most orders and SELECT TOP 1 to limit the result to the employee with the most orders)

```
SELECT TOP 1  
COUNT(Orders.OrderID) AS "Number of ORDERS",  
Employees.LastName  
FROM Orders  
INNER JOIN Employees  
ON Orders.EmployeeID=Employees.EmployeeID  
GROUP BY Employees.LastName  
ORDER BY 1 DESC;
```

The last name of the employee with the most orders is "**Peacock**" and the number of orders is **40**.

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

To get this information we need to join four tables: Customers, Orders, OrdersDetails & Products. From the customers detail table we can get the country of the customers, the orders table links the customers table to the order details table, which gives us the information on product quantity, and the products table links to the order details table and gives us the information on the name of the product. We use the **WHERE** C.Country = 'Germany'

Winter 2021 Data Science Intern Challenge - Part 2

(SQL)

stipulation to only get the orders from Germany and “GROUP BY” the product name and “ORDER BY” the order quantity.

```
SELECT TOP 1 SUM(OD.Quantity) AS "Sum of Products ordered in Germany", P.ProductName
FROM ((( Customers AS C
INNER JOIN Orders AS O ON C.CustomerID = O.CustomerID)
INNER JOIN OrderDetails AS OD ON O.OrderID = OD.OrderID)
INNER JOIN Products AS P ON OD.ProductID = P.ProductID)
WHERE C.Country = 'Germany'
GROUP BY P.ProductName
ORDER BY SUM(OD.Quantity) DESC;
```

The product which was ordered the most (highest quantity) was “**Boston Crab Meat**” and was ordered **160** times.