

Winter 2022 Data Science Intern Challenge

Please complete the following questions, and provide your thought process/work. You can attach your work in a text file, link, etc. on the application page. Please ensure answers are easily visible for reviewers!

Question 2: For this question you'll need to use SQL. [Follow this link](#) to access the data set required for the challenge. Please use queries to answer the following questions. Paste your queries along with your final numerical answers below.

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

```
SELECT COUNT(Orders.OrderID)
FROM [Orders]
INNER JOIN [Shippers] on Orders.ShipperID = Shippers.ShipperID
WHERE Shippers.ShipperName = "Speedy Express"
```

Answer: 54

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

```
SELECT Employees.LastName, Employees.EmployeeID
FROM [Employees]
INNER JOIN (SELECT MAX(OrderDetails.Quantity), Orders.EmployeeID
            FROM [OrderDetails]
            INNER JOIN [Orders]
            ON OrderDetails.OrderID = Orders.OrderID) t1
ON t1.EmployeeID = Employees.EmployeeID
```

Answer: Fuller

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

```
SELECT t2.Country, MAX(t2.Quantity) AS Most_Ordered, Products.ProductName
FROM [Products]
INNER JOIN (SELECT Customers.Country, t1.ProductID, SUM(t1.Quantity) AS Quantity
            FROM [Customers]
            INNER JOIN (SELECT OrderDetails.OrderID, OrderDetails.ProductID,
                                OrderDetails.Quantity, Orders.CustomerID
                        FROM [OrderDetails])
```

```
INNER JOIN [Orders]
ON OrderDetails.OrderID = Orders.OrderID) t1
ON Customers.CustomerID = t1.CustomerID
WHERE Customers.Country = "Germany"
GROUP BY t1.ProductID
ORDER BY Quantity) t2
ON t2.ProductID = Products.ProductID
```

Answer: Boston Crab Meat