Q2.

a. **Answer - 54**

The task here is to identify the number of orders shipped by the company Speedy Express. My first instinct here is to perform a JOIN statement on the Orders and Shippers table on ShipperID and then filter the ones with ShipperName = 'Speedy Express' using a WHERE clause.

But, upon giving it further thought - I realized that this can be optimized. We do not have the need for filtering on the results of the JOIN. The nature of the question is such that we can only filter one table (Shippers) and then perform a JOIN on the filtered, smaller table. So the optimized query would be -

```
SELECT count(Orders.OrderID)
FROM Orders
INNER JOIN Shippers on Orders.ShipperID = Shippers.ShipperID
AND Shippers.ShipperName = 'Speedy Express'
```

b. **Answer - Peacock**

Here, I first get the maximum orders that belong to a single employee using a subquery. Then, from the EmployeeID I get the name of the employee.

```
SELECT LastName FROM Employees WHERE EmployeeID in
(
 SELECT Orders.EmployeeID
 FROM OrderDetails
 INNER JOIN Orders ON OrderDetails.OrderID = Orders.OrderID
 GROUP BY Orders.EmployeeID
 ORDER BY SUM(OrderDetails.Quantity) DESC
 LIMIT 1
)
```

c. **Answer - Deli Crab Meat**

I have again used nested queries for this problem. The innermost query get us the OrderIDs of all the orders made from Germany. Then, I find the ID of the product that has been ordered the most from among this subset. From the product ID, I get the name of the product.

```
SELECT ProductName FROM Products WHERE ProductID in
(
        SELECT ProductID FROM OrderDetails WHERE OrderID IN
        (
                SELECT Orders.OrderID
                FROM Orders
```

```
            INNER JOIN Customers ON
            Orders.CustomerID = Customers.CustomerID
            AND Customers.Country = 'Germany'
        )
        GROUP BY ProductID
        ORDER BY SUM(Quantity) DESC
        LIMIT 1
)
```