Question 1:

Please see the github link for data analysis. https://github.com/berkaytacar/shopify_challenge

a)

If we analyze the data, we can see that there are some 17 transactions with order amount 704,000 dollars and a sneaker shop selling sneakers from $25,725, and therefore, the mean order amount in this data set is $3145 which is highly skewed by these orders. That's why, average order value (AOV) is not the best way to use as metric in this data set.

b)

Because there are orders purchased in bulk or maybe higher end or rare sneakers sold by some shops, we get the average order value (AOV) to be skewed by these transactions. Therefore, a good way for us to evaluate this data is to use the **median or the mean of the order value per item**.

The metric should be **median order value per item**.

c)

We can conclude that the best way to evaluate this data to is to look at the median of average order value per item. This gives us a lot better idea about the prices of sneakers sold on Shopify, because median isn't much affected by the extreme cases within our data such as the 17 orders of 2000 sneakers or the sneakers sold by shop id 78.

The **median order value per item** is **$153.**

Question 2:

a) Answer is **54**

```
SELECT COUNT(ShipperName) FROM ORDERS

INNER JOIN SHIPPERS ON SHIPPERS.ShipperID = ORDERS.ShipperID

WHERE ShipperName='Speedy Express';
```

Result:

Number of Records: 1

COUNT(ShipperName)
54

b) Answer is **Peacock = 40**

```
SELECT EMPLOYEES.LastName, COUNT(*) FROM ORDERS

INNER JOIN EMPLOYEES ON EMPLOYEES.EmployeeID = ORDERS.EmployeeID

GROUP BY EMPLOYEES.LastName
```

```
ORDER BY COUNT(*) DESC
LIMIT 1;
```

LastName	COUNT(*)
Peacock	40

c)

```
SELECT PRODUCTS.ProductName, COUNT(*) FROM CUSTOMERS
JOIN ORDERS ON ORDERS.CustomerID = CUSTOMERS.CustomerID
JOIN ORDERDETAILS ON ORDERS.OrderID = ORDERDETAILS.OrderID
JOIN PRODUCTS ON PRODUCTS.ProductID = ORDERDETAILS.ProductID
WHERE Country = "Germany"
GROUP BY PRODUCTS.ProductID
ORDER BY COUNT(*) DESC
LIMIT 1;
```

Result:

Number of Records: 1

ProductName	COUNT(*)
Gorgonzola Telino	5