Fall 2022 Data Science Intern Challenge

Question 1:

a) The AOV is calculated in the question is just the mean of the column order_amount which is not the correct way to calculate AOV. The correct formula is Total revenue / Total number of orders.

b) I would use the ARPU(average revenue per unit) for each shop id to report the dataset since we can easily visualize the growth potential of each shop. ARPU = Total revenue / Total number of items ordered.

c) The mean ARPU of all the shops calculated is $ 150.22.

Question 2:

a) SELECT count(*) from Orders where ShipperID = 1;

b) SELECT LastName from Employees a,Orders b on a.EmployeeID = b.EmployeeID group by LastName order by Count(*) desc Limit 1;

c) SELECT ProductName from Products a, OrderDetails b, Orders c, Customers d where a.ProductID = b.ProductID and b.OrderID = c.OrderID and c.CustomerID = d.CustomerID and d.country = 'Germany' group by ProductName order by Count(*) desc Limit 1;