# Answers of Winter 2021 Data Science Intern Challenge

**Answers of question 1 :**

1. It’s really strange that the average order value (AOV) is equal to $3145.13, while the price of sneakers is relatively affordable. It might be because of repeating orders in data or incorrect value of prices or inappropriate behaviour of some customers and etc. So, first you should analyze data for outliers(work with them) and after that calculate AOV.
2. I noticed that 2 of 100 shops have abnormal huge sum of order amounts:

shop with shop\_id = 42 has about $11.99 M;

shop with shop\_id = 78 has about $2.26 M.

In shop with shop\_id = 42, user with user\_id = 607 bought 2000 sneakers

17 times(order creating time duplicated 5 times, so 12 unique orders). Additionally creating time is identically repeated and payment method with credit card, so I suppose that this users’ credit card might be stolen or someone else got access.

In shop with shop\_id = 78, one pair of sneakers costs $25,725 and this price is not the price of “relatively affordable item”.

In all, the metric is average value of orders, which are not from shop with shop\_id = 78 and where user is not with user\_id = 42

1. AOV = $302.58

**Answers of question 2:**

1. 54

select count(OrderID) from Orders where ShipperID = (select ShipperID from Shippers where ShipperName='Speedy Express')

1. Peacock

select LastName from Employees a where a.EmployeeID = (select EmployeeID from Orders group by EmployeeID order by count(EmployeeID) desc limit 1)

1. Gorgonzola Telino

select ProductName from Products where ProductID = (select ProductID from OrderDetails where OrderID in (select OrderID from Orders where CustomerID in (select CustomerID from Customers where Country = 'Germany')) group by ProductID order by count(ProductID) desc limit 1)