Data Science Intern (Remote) - Winter 2022

Shopify Technical Challenge Submission

(https://github.com/Ashwin3110/Shopify-Winter-2022-Intern-Challenge-)

Question 1: Given some sample data, write a program to answer the following: click here to access the required data set

On Shopify, we have exactly 100 sneaker shops, and each of these shops sells only one model of shoe. We want to do some analysis of the average order value (AOV). When we look at orders data over a 30 day window, we naively calculate an AOV of $3145.13. Given that we know these shops are selling sneakers, a relatively affordable item, something seems wrong with our analysis.

a. Think about what could be going wrong with our calculation. Think about a better way to evaluate this data.
b. What metric would you report for this dataset?
c. What is its value?

Solution(Please look at my github link for my analysis of the dataset)

a) Proper analysis has not been done with the data. We could see that shop with id=78 Which sells the price of shoe with $25725 Which is much higher than other shoes in other shop and it is not relatively affordable.
I guess there would be some error while entering the price of the shoe for the shop 78
b) Same metric is used here (i.e) total order amount divided by total no of order '
But I have excluded the shoes sold by shop 78
c) The value I got is :- 2717.37

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(*) AS NumberOfOrders
FROM [Orders]
JOIN [Shippers]
   ON [Shippers].ShipperID = [Orders].ShipperID
WHERE [Shippers].ShipperName = 'Speedy Express'
```

ANSWER : 54

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

```
SELECT [Employees].LastName
FROM [Orders]
JOIN [Employees]
ON [Orders].EmployeeID = [Employees].EmployeeID
GROUP BY [Employees].LastName
ORDER BY NumberOfOrders DESC
LIMIT 1
```

ANSWER : Peacock

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

```
 SELECT [Products].ProductName,
   SUM([OrderDetails].Quantity) AS "TotalOrdered"
FROM [Orders]
JOIN [Customers]
   ON [Customers].CustomerID = [Orders].CustomerID
JOIN [OrderDetails]
   ON [OrderDetails].OrderID = [Orders].OrderID
JOIN [Products]
   ON [Products].ProductID = [OrderDetails].ProductID
WHERE [Customers].Country = 'Germany'
GROUP BY [OrderDetails].ProductID
ORDER BY TotalOrdered DESC
LIMIT 1
```

ANSWER : Boston Crab Meat , 160

APPLICATION QUESTION

- **If you were to open a Shopify store, what would you sell and why (or tell us about your store if you have one!) (200 word limit)**

If I were to open a Shopify store, I would open a sports Equipment store. Cricket is something I love to play and interested in. I have been playing cricket from my grade-7 and I have represented my school in different tournaments. I am still part of my university cricket team. Unfortunately, I haven't debuted for my university due to covid. Apart from cricket I have great interest in Volley Ball and Swimming. I was part of volley Ball team in school.

As I am very active in co-curricular activities. I have good knowledge on different equipment and their quality of the used in their respective sports. Not only in cricket and volleyball I have used and know the details of other sports equipment. I will make sure all the items in my ecommerce website are of good quality and will be loyal to all my customer. When I am around all equipment I feel like I am surrounded by tons and tons of good. That's the reason I would like to have sports equipment store.

Any last thoughts? (ie. proud accomplishments, cool ideas, a joke, etc.) (200 word limit)

Basically, I am very friendly person and used to get patched with other very easily. As I completed my Grade 10, I had to leave my home and I moved to other city which was the first time ever in my life living away from my parent. The first one month of my hostel life was the toughest period of my life. Every time I used to get call from my parent, I get emotional and used to cry a lot. Those times were unforgettable. One thing I felt lucky at the time was, my parents were very supportive and caring. I found very hard in making friends and was always felt lonely. But as the time passed people there helped me, supported me and motivated me a lot. After 2 – 3 months I started to have a normal life, got new friends and for the next 2 years I enjoyed the life to the fullest. When I look back at those first 2 months, I feel lucky that I dint quit and somehow lived the toughest phase of my life