**Understanding the data:**

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* The file defines the transactional data of 5 products(laptop,notebook,t-shirt,sofa,apple) across different cities.

* It also describes about the customer id, quantity purchased, discount provided, total sales and other data.
* To conduct a profitable business proper inventory, stock requirement and customers preference should be properly analysed to invest at the right place in a right amount.

* SQL queries has been executed for the same to infer the product with highest purchases, unique items bought by the customers, type of transaction preferred, whether online or offline store

* Ranked the cities with highest revenue based on total revenue and no of transactions.
* Checked the customers who spent more than average amount,expediture based on the age group.
* Analysed whether the promotional offers and discounts are affecting the sales. if so, which customers got the highest discount and how is discount varied based on loyalty points
* which products has been returned the highest and from which city.

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**Results:**

* Total no of transactions is 500000
* Bangalore has the highest transaction count
* Debit card transactions are highly preferred following cash UPI credit card
* 10202662960.19042 is the total revenue generated
* Customer id 34341 has the highest average purchase of 99687
* Notebook has highest transactions and sofa being the least, but considering the cost laptop earns the most.
* Even though laptop has fewer sales but has higher revenue inferring it has a higher price point

* Kolkata has highest revenue and Hyderabad being the least

* when 50% discount is provided, Kolkata earned a good revenue and has the highest average sales

* People with age 20-30 are the targeted customers and sale need to be improved for age below 20. people around 31-40 and 41-50 age has the similar count of customers

* North and west has the similar average delivery time while most data are empty
* Customer id 43770, belongs to age group 41-50 has higher loyalty points and 5 people are above 50 and rest goes with other age group in the top 10
* Customer id 43135 has made the highest returns and most of the returns are unorganised in terms of data
* Even though a product is not promotional, has higher number of transaction and total transaction cost
* Notebook has the highest returns and total amount refunded is 12 million approximately.

* Since laptop and sofa are at high prices, they have less returns have the higher refund amount

* Delhi has highest count of returns

* Laptop has the highest revenue, this can also be added to stored procedure
* Ahmedabad ranks the TOP city based on total spent amount

* The purchases recorded that most customers have bought all the 5 products

* Customers are preferring offline a little more compared to online considering the number of transactions and transactions value, but considering the total quantity online is leading
* Customers preferring both modes of stores, considering most of customers purchased both in online and offline mode

* Many customers repurchased the same item multiple times .39540 and 39732 has repurchased sofa and laptop respectively multiple time
* Debit card is most used payment method by high-spending customers

* 32460 has spent more than the average transaction amount

* A person with highest loyalty points of 9999 gets a discount of 21% but there is higher discount provided to other customers since they have more transactions

* 32460 and 39732 are top spending customers and rest are ordered
* Average feedback scores around 2.9-3.0 irrespective of the delivery time

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* The targeted customers belong to age group of 21-30 and cost can be reduced for promotions.
* Loyalty points can be maintained in the way it is. Focus is needed for Delhi market as we see more product returns,
* Inventory should be carefully maintained at Kolkata since we see higher sales.
* Laptop should also be properly warehoused for all the locations since we have a higher profit margin.
* The repeated customers ranked can be analysed more to analyse the focus markets like Kolkata.

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