**SQL Case Study: Texture Tales**

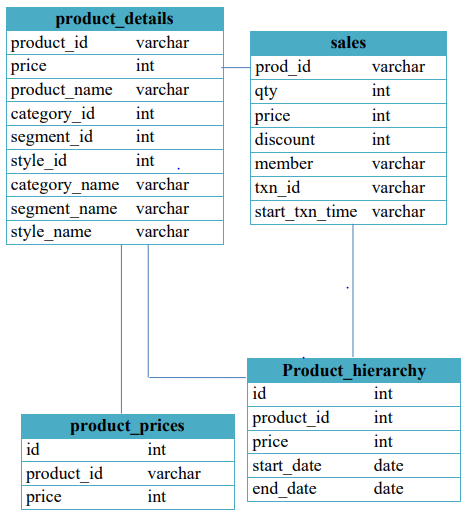


**INTRODUCTION:**

Texture Tales Clothing Company prides themselves on providing an optimized range of clothing and lifestyle wear for the modern adventurer!

I, the CEO of this trendy fashion company is asking you to assist the team’s merchandising teams analyze their sales performance and generate a basic financial report to share with the wider business

**SCHEMA USED**



# CASE STUDY QUESTIONS

1. What was the total quantity sold for all products?
2. What is the total generated revenue for all products before discounts?
3. What was the total discount amount for all products?
4. How many unique transactions were there?
5. What are the average unique products purchased in each transaction?
6. What is the average discount value per transaction?
7. What is the average revenue for member transactions and non- member transactions?
8. What are the top 3 products by total revenue before discount?
9. What are the total quantity, revenue and discount for each segment?
10. What is the top selling product for each segment?
11. What are the total quantity, revenue and discount for each category?
12. What is the top selling product for each category?

First we have to create a Database :

Syntax: Create Database Database Name

Then we use this Databaes:

Syntax: Use Database Name

* create database Texture\_Tales;
* use Texture\_Tales;

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**1.What was the total quantity sold for all products?**

Solution:

SELECT b.product\_name, SUM(a.qty) AS sale\_counts

FROM sales AS a

INNER JOIN product\_details AS b

ON a.prod\_id = b.product\_id

GROUP BY 1

ORDER BY 2 DESC;

Output:



**2. What is the total generated revenue for all products before discounts?**

Solution:

Total Revenue = The amount of Product that are Sold and Price of Each Product

select sum(price \* qty) as Revenue

from sales;

Output:



**3. What was the total discount amount for all products?**

Solution:

select sum(price \* qty \* discount)/100 as Total\_Discount

from sales;

Output



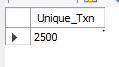
**4. How many unique transactions were there?**

Solution:

select count(distinct txn\_id) as Unique\_Txn

from sales;

Output:



**5. What are the average unique products purchased in each transaction?**

Solution:

with cte\_transaction\_ptoduct as (

select txn\_id,count(distinct prod\_id) as Product\_Cout

from sales

group by 1)

select avg(Product\_Cout) as Avg\_Uni\_Pro

from cte\_transaction\_ptoduct;

(OR)

select avg(Product\_Cout)

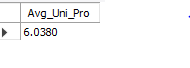
from

(select txn\_id,count(distinct prod\_id) as Product\_Cout

from sales

group by 1) a

Output:



**6. What is the average discount value per transaction?**

Solution:

with cte\_transaction\_dicount as(

select txn\_id, sum(price \* qty \* discount)/100 as Total\_Discount

from sales

group by 1)

select avg(Total\_Discount) as Avg\_Discount

from cte\_transaction\_dicount;

-- ..................Same Code Without CTE...........

select avg(Total\_Discount) as Avg\_Disc

from

(select txn\_id,sum(price \* qty \* discount) /100 as Total\_Discount

from sales

group by 1) a

Output:



**7. What is the average revenue for member transactions and non - member transactions?**

with cte\_member\_revenue as(

select member,txn\_id,sum(price \* qty) as revenue

from sales

group by 1,2)

select member,avg(revenue) as avg\_revenue

from cte\_member\_revenue

group by 1;

-- ..................Same Code Without CTE...........

select member,avg(revenue) avg\_revenue

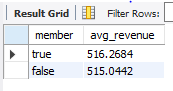
from

(select member,txn\_id,sum(price \* qty) as revenue

from sales

group by 1,2) a

group by 1



**8. What are the top 3 products by total revenue before discount ?**

Solution:

select b.product\_name,sum(a.qty \* a.price) as no\_discount\_revenue

from sales as a

inner join product\_details as b

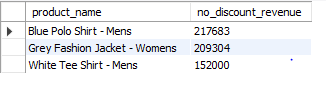
on a.prod\_id = b.product\_id

group by 1

order by 2 desc

limit 3;

Output:



**9. What are the total quantity, revenue and discount for each segment?**

Solution:

select b.segment\_id, b.segment\_name, sum(a.qty) as Total\_Quantity,

sum(a.qty \* a.price) as Revenue,

sum(a.price \* a.qty \* a.discount)/100 as Total\_Discount

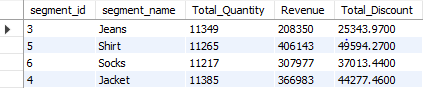
from sales as a

inner join product\_details b

on a.prod\_id = b.product\_id

group by b.segment\_id,b.segment\_name;

Output:



**10. What is the top selling product for each segment?**

Solution:

select b.segment\_id,b.segment\_name,b.product\_id,b.product\_name,sum(a.qty) as Product\_Qty

from sales as a

inner join product\_details as b

on a.prod\_id = b.product\_id

group by b.segment\_id,b.segment\_name,b.product\_id,b.product\_name

ORDER BY Product\_Qty DESC

limit 5;

Output:



**11. What are the total quantity, revenue and discount for each category**

Solution:

select b.category\_id,b.category\_name, sum(a.qty) as Total\_Quantity,

sum(a.qty \* a.price) as Revenue,

sum(a.price \* a.qty \* a.discount)/100 as Total\_Discount

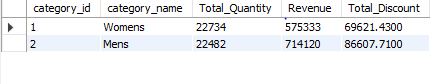
from sales as a

inner join product\_details as b

on a.prod\_id = b.product\_id

group by b.category\_id,b.category\_name

Output:



**12. What is the top selling product for each category?**

Solution:

select b.category\_id,b.category\_name,b.product\_id,b.product\_name,sum(a.qty) as Product\_Qty

from sales as a

inner join product\_details as b

on a.prod\_id = b.product\_id

group by b.category\_id,b.category\_name,b.product\_id,b.product\_name

ORDER BY Product\_Qty DESC

limit 5;

Output:

