

# *SQL* Data Analysis Project



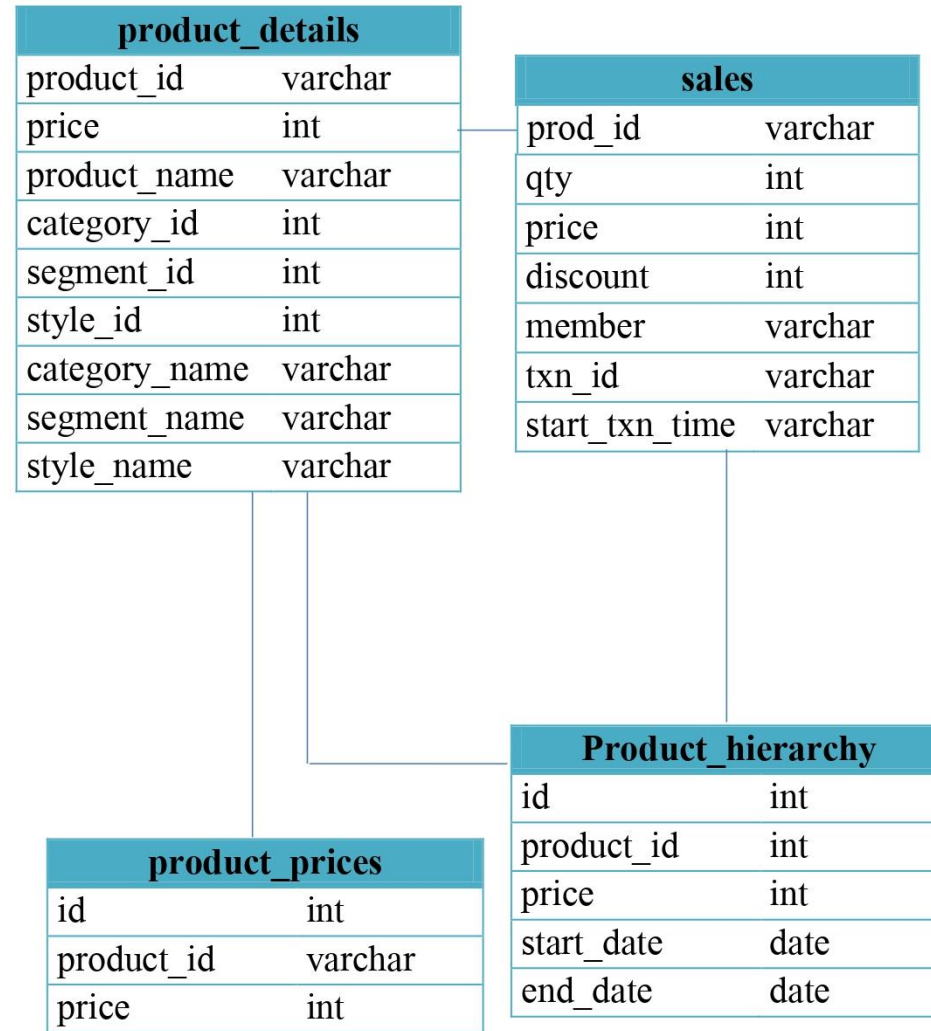
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# *Introduction*

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

The CEO of this trendy fashion company is asking the analyst to assist the team's merchandising teams analyze their sales performance and generating 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 are the average unique products purchased in each transaction?
4. What is the average discount value per transaction?
5. What is the average revenue for member transactions and non-member transactions?
6. What are the top 3 products by total revenue before discount?
7. What are each segment's total quantity, revenue, and discount?
8. What is the top-selling product for each segment?
9. What are each category's total quantity, revenue, and discount?
10. What is the top-selling product for each category?

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

```
• SELECT
    details.product_name,
    SUM(sales.qty) AS Sale_counts
FROM sales AS Sales
INNER JOIN product_details AS details
    on sales.prod_id = details.product_id
GROUP BY details.product_name
ORDER BY Sale_counts DESC;
```

product_name	Sale_counts
Grey Fashion Jacket - Womens	3876
Navy Oversized Jeans - Womens	3856
Blue Polo Shirt - Mens	3819
White Tee Shirt - Mens	3800
Navy Solid Socks - Mens	3792
Black Straight Jeans - Womens	3786
Pink Fluro Polkadot Socks - Mens	3770
Indigo Rain Jacket - Womens	3757
Khaki Suit Jacket - Womens	3752
Cream Relaxed Jeans - Womens	3707
White Striped Socks - Mens	3655
Teal Button Up Shirt - Mens	3646

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

```
SELECT
    ROUND(AVG(total_discount)) AS avg_unique_product
FROM cte_transaction_discounts;

##5
WITH cte_member_revenue AS (
    SELECT
        member, txn_id,
        SUM(price*qty) AS revenue
    FROM sales
    GROUP BY
```

nodis_revenue
1289453

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

```
WITH cte_transaction_products AS (  
    SELECT  
        txn_id,  
        COUNT(DISTINCT prod_id) product_count  
    FROM sales  
    GROUP BY txn_id  
)  
SELECT  
    ROUND(AVG(product_count)) AS avg_unique_products  
FROM cte_transaction_products;
```

```
avg_unique_products  
6
```

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

```
WITH cte_transaction_discounts AS (  
  SELECT  
    txn_id,  
    SUM(price*qty*discount)/100 AS total_discount  
  FROM sales  
  GROUP BY txn_id)  
  
SELECT  
  ROUND(AVG(total_discount)) AS avg_unique_product  
FROM cte_transaction_discounts;
```

avg_unique_product
62



*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  
    member,  
    txn_id  
)  
SELECT  
  member,  
  ROUND(AVG(revenue),2) AS avg_revenue  
FROM cte_member_revenue  
GROUP BY member;
```

memberavg_revenue	
true	516.27
false	515.04

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

```
##6
SELECT
  details.product_name,
  SUM(sales.qty*sales.price) AS nodis_revenue
FROM sales AS sales
INNER JOIN product_details AS details
  ON sales.prod_id = details.product_id
GROUP BY details.product_name
ORDER BY nodis_revenue DESC LIMIT 3;
```

product_name	nodis_revenue
Blue Polo	
Shirt - Mens	217683
Grey Fashion	
Jacket -	
Womens	209304
White Tee	
Shirt - Mens	152000

*What are each segment's total quantity, revenue, and discount?*

```
SELECT
    details.segment_id,
    details.segment_name,
    SUM(sales.qty) AS total_quantity,
    SUM(sales.qty * sales.price) AS total_revenue,
    SUM(sales.qty * sales.price * sales.discount)/100 AS total_discount
FROM sales AS sales
INNER JOIN product_details AS details
    ON sales.prod_id = details.product_id
GROUP BY
    details.segment_id,
    details.segment_name
ORDER BY total_revenue DESC;
```

segment_id	segment_name	total_quantity	total_revenue	total_discount
5	Shirt	11265	406143	49594.27
4	Jacket	11385	366983	44277.46
6	Socks	11217	307977	37013.44
3	Jeans	11349	208350	25343.97

## *What is the top-selling product for each segment?*

```
• SELECT
    details.segment_id,
    details.segment_name,
    details.product_id,
    details.product_name,
    SUM(sales.qty) AS product_quantity
FROM sales AS sales
INNER JOIN product_details AS details
    ON sales.prod_id = details.product_id
GROUP BY
    details.segment_id,
    details.segment_name,
    details.product_id,
    details.product_name
ORDER BY product_quantity DESC
LIMIT 5;
```

segment_id	segment_name	product_id	product_name	product_quantity
			Grey Fashion	
4	Jacket	9ec847	Jacket - Womens Navy Oversized	3876
3	Jeans	c4a632	Jeans - Womens Blue Polo	3856
5	Shirt	2a2353	Shirt - Mens White Tee	3819
5	Shirt	5d267b	Shirt - Mens Navy Solid	3800
6	Socks	f084eb	Socks - Mens	3792

*What are each category's total quantity, revenue, and discount?*

```
* SELECT
    details.category_id,
    details.category_name,
    SUM(sales.qty) AS total_quantity,
    SUM(sales.qty * sales.price) AS total_revenue,
    SUM(sales.qty * sales.price * sales.discount)/100 AS total_discount
FROM sales AS sales
INNER JOIN product_details AS details
    ON sales.prod_id = details.product_id
GROUP BY
    details.category_id,
    details.category_name
ORDER BY total_revenue DESC;
```

category_id	category_name	total_quantity	total_revenue	total_discount
2	Mens	22482	714120	86607.71
1	Womens	22734	575333	69621.43

## *What is the top-selling product for each category?*

```
##10
SELECT
  details.category_name,
  details.product_id,
  details.product_name,
  SUM(sales.qty) AS product_quantity
FROM sales AS sales
INNER JOIN product_details AS details
  ON sales.prod_id = details.product_id
GROUP BY
  details.category_name,
  details.product_id,
  details.product_name
ORDER BY product_quantity DESC
LIMIT 3;
```

category_name	product_id	product_name	product_quantity
Womens	9ec847	Grey Fashion Jacket - Womens	3876
Womens	c4a632	Navy Oversized Jeans - Womens	3856
Mens	2a2353	Blue Polo Shirt - Mens	3819