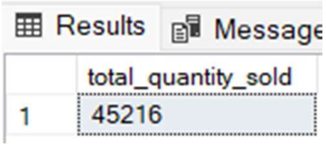
1. What was the total quantity sold for all products?

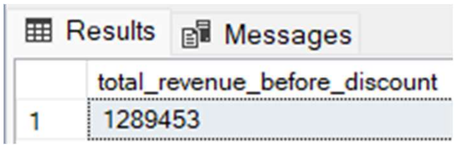
```
SELECT SUM(qty) AS total_quantity_sold
FROM sales;
```



	total_quantity_sold
1	45216

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

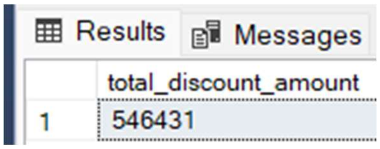
```
SELECT SUM(qty * price) AS total_revenue_before_discount
FROM sales;
```



	total_revenue_before_discount
1	1289453

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

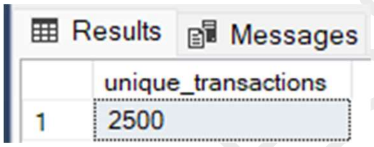
```
SELECT SUM(qty * discount) AS total_discount_amount
FROM sales;
```



	total_discount_amount
1	546431

4. How many unique transactions were there?

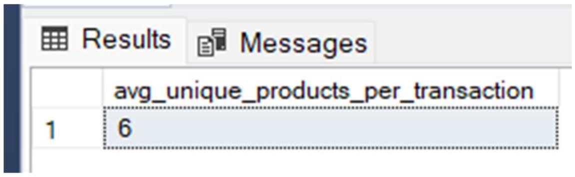
```
SELECT COUNT(DISTINCT txn_id) AS unique_transactions
FROM sales;
```



	unique_transactions
1	2500

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

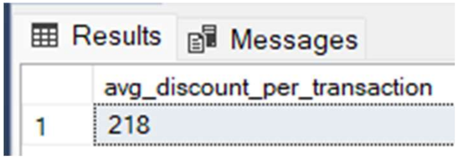
```
SELECT AVG(t.unique_products) AS avg_unique_products_per_transaction
FROM (
    SELECT txn_id, COUNT(DISTINCT prod_id) AS unique_products
    FROM sales
    GROUP BY txn_id

) t;
```



	avg_unique_products_per_transaction
1	6

6. What is the average discount value per transaction?

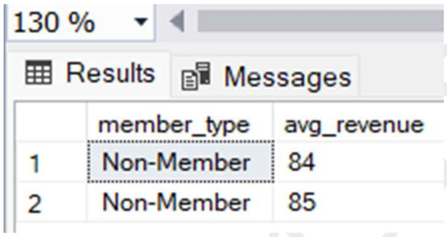
```
SELECT AVG(t.total_discount) AS avg_discount_per_transaction
FROM (
    SELECT txn_id, SUM(qty * discount) AS total_discount
    FROM sales
    GROUP BY txn_id
) t;
```



	avg_discount_per_transaction
1	218

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

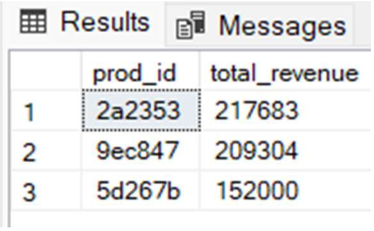
```
SELECT
    CASE WHEN member = 'M' THEN 'Member' ELSE 'Non-Member' END AS member_type,
    AVG(qty * price) AS avg_revenue
FROM sales
GROUP BY member;
```



	member_type	avg_revenue
1	Non-Member	84
2	Non-Member	85

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

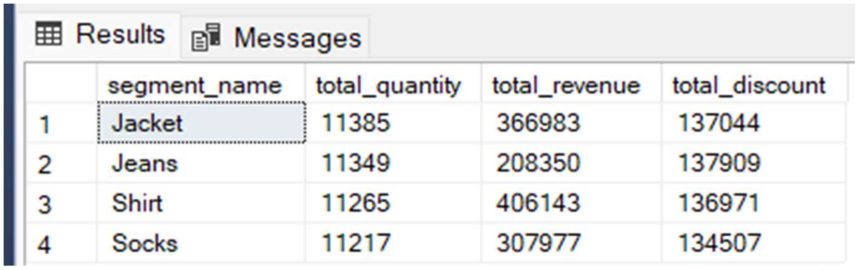
```
SELECT TOP 3 prod_id, SUM(qty * price) AS total_revenue
FROM sales
GROUP BY prod_id
ORDER BY total_revenue DESC;
```



	prod_id	total_revenue
1	2a2353	217683
2	9ec847	209304
3	5d267b	152000

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

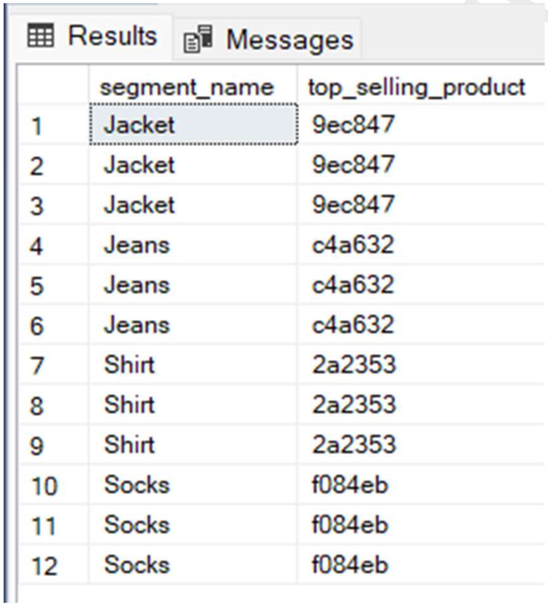
```
SELECT
    pd.segment_name,
    SUM(s.qty) AS total_quantity,
    SUM(s.qty * s.price) AS total_revenue,
    SUM(s.qty * s.discount) AS total_discount
FROM sales s
JOIN product_details pd ON s.prod_id = pd.product_id
GROUP BY pd.segment_name;
```



	segment_name	total_quantity	total_revenue	total_discount
1	Jacket	11385	366983	137044
2	Jeans	11349	208350	137909
3	Shirt	11265	406143	136971
4	Socks	11217	307977	134507

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

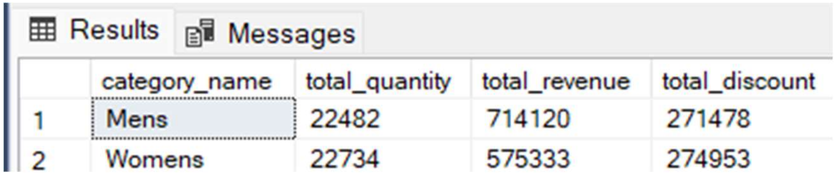
```
SELECT
    pd.segment_name,
    FIRST_VALUE(s.prod_id) OVER (PARTITION BY pd.segment_name ORDER BY
SUM(s.qty) DESC) AS top_selling_product
FROM sales s
JOIN product_details pd ON s.prod_id = pd.product_id
GROUP BY pd.segment_name, s.prod_id;
```



	segment_name	top_selling_product
1	Jacket	9ec847
2	Jacket	9ec847
3	Jacket	9ec847
4	Jeans	c4a632
5	Jeans	c4a632
6	Jeans	c4a632
7	Shirt	2a2353
8	Shirt	2a2353
9	Shirt	2a2353
10	Socks	f084eb
11	Socks	f084eb
12	Socks	f084eb

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

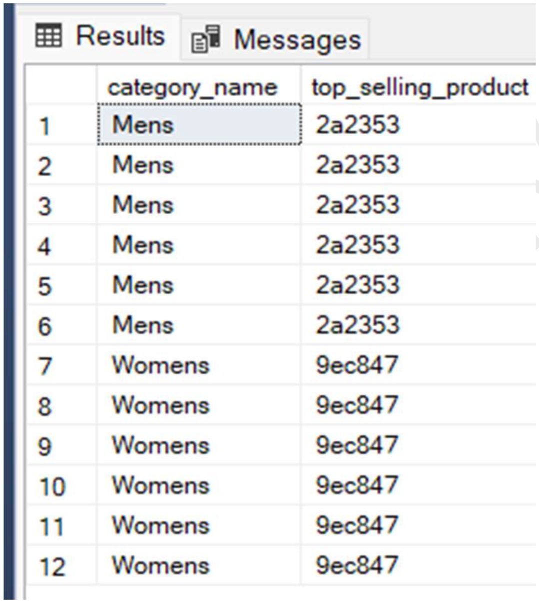
```
SELECT
    pd.category_name,
    SUM(s.qty) AS total_quantity,
    SUM(s.qty * s.price) AS total_revenue,
    SUM(s.qty * s.discount) AS total_discount
FROM sales s
JOIN product_details pd ON s.prod_id = pd.product_id
GROUP BY pd.category_name;
```



	category_name	total_quantity	total_revenue	total_discount
1	Mens	22482	714120	271478
2	Womens	22734	575333	274953

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

```
SELECT
    pd.category_name,
    FIRST_VALUE(s.prod_id) OVER (PARTITION BY pd.category_name ORDER BY
SUM(s.qty) DESC) AS top_selling_product
FROM sales s
JOIN product_details pd ON s.prod_id = pd.product_id
GROUP BY pd.category_name, s.prod_id;
```



	category_name	top_selling_product
1	Mens	2a2353
2	Mens	2a2353
3	Mens	2a2353
4	Mens	2a2353
5	Mens	2a2353
6	Mens	2a2353
7	Womens	9ec847
8	Womens	9ec847
9	Womens	9ec847
10	Womens	9ec847
11	Womens	9ec847
12	Womens	9ec847