```
-- ACTIVATING THE DATABASE
USE DATABASE AD_ASSIGNMENT;

-- CREATING A NEW TABLE STRUCTURE
CREATE OR REPLACE TABLE AD_sales
(
order_id INT PRIMARY KEY,
customer_id INT,
product_id INT,
product_name VARCHAR(50),
quantity INT,
unit_price DECIMAL(10, 2),
order_date DATE
);

-- INSERTING VALUES INTO THE TABLE
INSERT INTO AD_sales (order_id, customer_id, product_id, product_name, quantity, unit_price, order_date)
VALUES
(1, 101, 1, 'Widget A', 5, 10.00, '2023-01-15'),
(2, 102, 2, 'Widget B', 2, 12.50, '2023-01-16'),
(3, 103, 1, 'Widget A', 3, 10.00, '2023-01-16'),
(4, 104, 3, 'Widget C', 1, 15.75, '2023-01-17'),
(5, 105, 2, 'Widget B', 4, 12.50, '2023-01-17'),
(6, 106, 1, 'Widget A', 2, 10.00, '2023-01-18'),
(7, 107, 4, 'Widget D', 3, 20.00, '2023-01-18'),
(8, 108, 2, 'Widget B', 5, 12.50, '2023-01-19'),
(9, 109, 1, 'Widget A', 1, 10.00, '2023-01-19'),
(10, 101, 3, 'Widget C', 2, 15.75, '2023-01-20');

-- CHECKING THE INSERTED DATA
```

SELECT * FROM AD_SALES;

-- FIND NO OF ROW

SELECT COUNT(*) FROM AD_SALES; -- 10 ROWS

-- START OF QUESTION AND ANSWERS

-- 1. Retrieve the total sales quantity and revenue for each product.

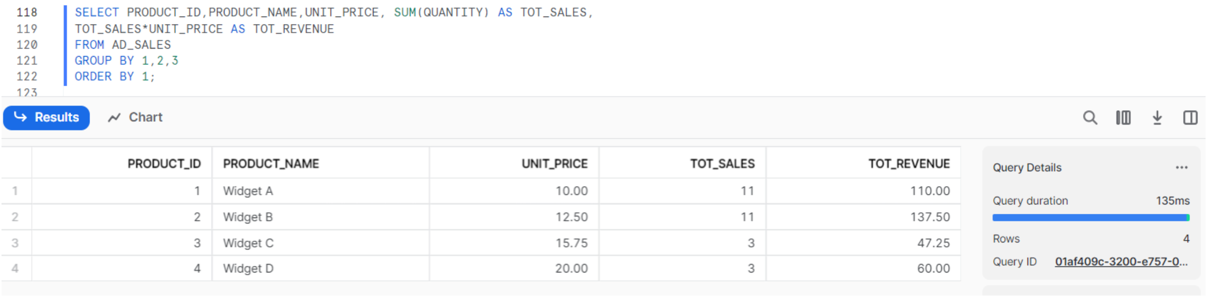
SELECT PRODUCT_ID,PRODUCT_NAME,UNIT_PRICE, SUM(QUANTITY) AS TOT_SALES,

TOT_SALES*UNIT_PRICE AS TOT_REVENUE

FROM AD_SALES

GROUP BY 1,2,3

ORDER BY 1;



```
SELECT PRODUCT_ID,PRODUCT_NAME,UNIT_PRICE, SUM(QUANTITY) AS TOT_SALES,
TOT_SALES*UNIT_PRICE AS TOT_REVENUE
FROM AD_SALES
GROUP BY 1,2,3
ORDER BY 1;
```

	PRODUCT_ID	PRODUCT_NAME	UNIT_PRICE	TOT_SALES	TOT_REVENUE
1	1	Widget A	10.00	11	110.00
2	2	Widget B	12.50	11	137.50
3	3	Widget C	15.75	3	47.25
4	4	Widget D	20.00	3	60.00

Query Details

Query duration 135ms

Rows 4

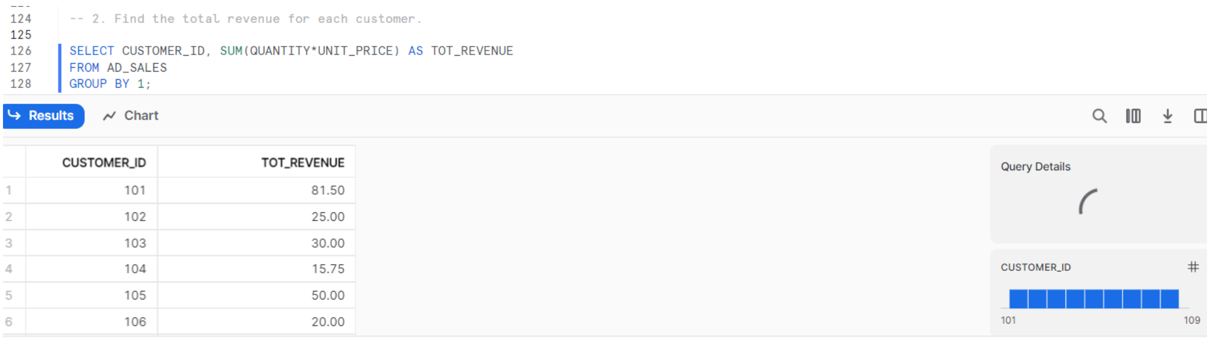
Query ID 01af409c-3200-e757-0...

-- 2. Find the total revenue for each customer.

SELECT CUSTOMER_ID, SUM(QUANTITY*UNIT_PRICE) AS TOT_REVENUE

FROM AD_SALES

GROUP BY 1;



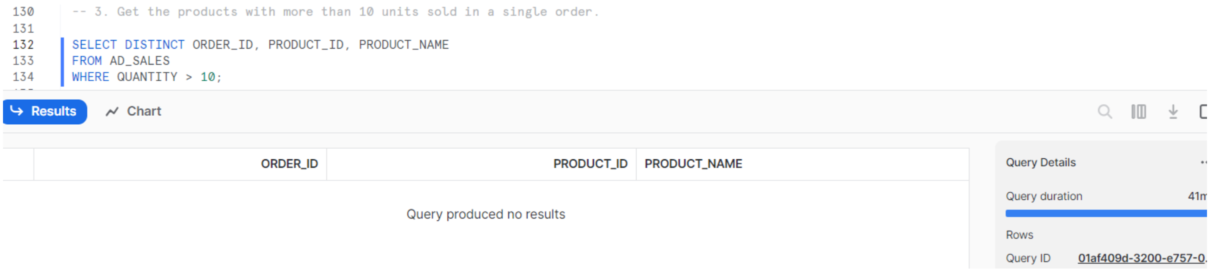
```
-- 2. Find the total revenue for each customer.

SELECT CUSTOMER_ID, SUM(QUANTITY*UNIT_PRICE) AS TOT_REVENUE
FROM AD_SALES
GROUP BY 1;
```

	CUSTOMER_ID	TOT_REVENUE
1	101	81.50
2	102	25.00
3	103	30.00
4	104	15.75
5	105	50.00
6	106	20.00

Query Details

-- 3. Get the products with more than 10 units sold in a single order.

```
SELECT DISTINCT ORDER_ID, PRODUCT_ID, PRODUCT_NAME
FROM AD_SALES
WHERE QUANTITY > 10;
```



```
-- 3. Get the products with more than 10 units sold in a single order.

SELECT DISTINCT ORDER_ID, PRODUCT_ID, PRODUCT_NAME
FROM AD_SALES
WHERE QUANTITY > 10;
```

ORDER_ID PRODUCT_ID PRODUCT_NAME

Query produced no results

Query Details

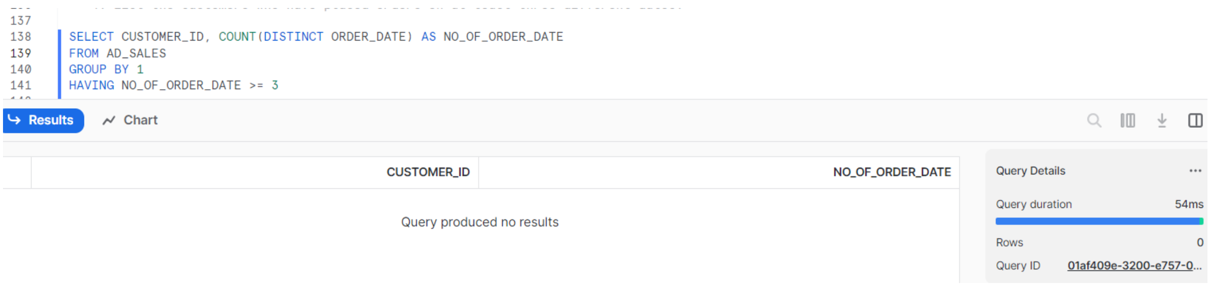
Query duration 41m

Rows

Query ID 01af409d-3200-e757-0

-- 4. List the customers who have placed orders on at least three different dates.

```
SELECT CUSTOMER_ID, COUNT(DISTINCT ORDER_DATE) AS NO_OF_ORDER_DATE
FROM AD_SALES
GROUP BY 1
HAVING NO_OF_ORDER_DATE >= 3
;
```



```
SELECT CUSTOMER_ID, COUNT(DISTINCT ORDER_DATE) AS NO_OF_ORDER_DATE
FROM AD_SALES
GROUP BY 1
HAVING NO_OF_ORDER_DATE >= 3
```

CUSTOMER_ID NO_OF_ORDER_DATE

Query produced no results

Query Details

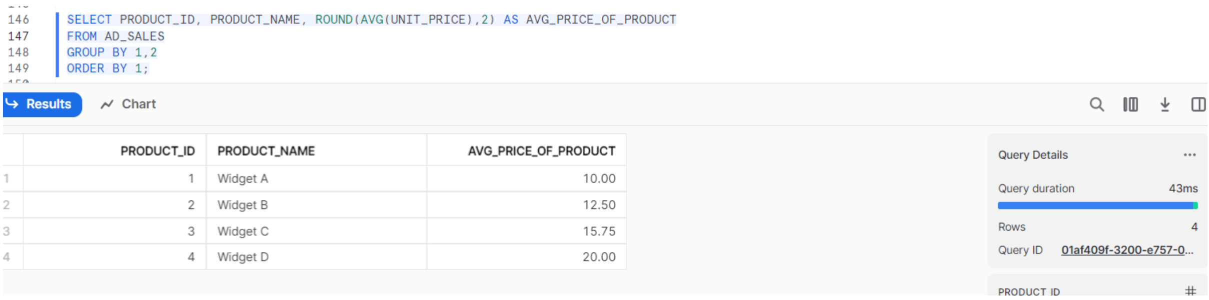
Query duration 54ms

Rows 0

Query ID 01af409e-3200-e757-0...

-- 5. Calculate the average unit price of products.

```
SELECT PRODUCT_ID, PRODUCT_NAME, ROUND(AVG(UNIT_PRICE),2) AS AVG_PRICE_OF_PRODUCT
FROM AD_SALES
GROUP BY 1,2
ORDER BY 1;
```



```
SELECT PRODUCT_ID, PRODUCT_NAME, ROUND(AVG(UNIT_PRICE),2) AS AVG_PRICE_OF_PRODUCT
FROM AD_SALES
GROUP BY 1,2
ORDER BY 1;
```

	PRODUCT_ID	PRODUCT_NAME	AVG_PRICE_OF_PRODUCT
1	1	Widget A	10.00
2	2	Widget B	12.50
3	3	Widget C	15.75
4	4	Widget D	20.00

Query Details

Query duration	43ms
Rows	4
Query ID	01af409f-3200-e757-0...

PRODUCT_ID

-- 6. Find the products with an average unit price greater than $12.00.

SELECT PRODUCT_ID, PRODUCT_NAME, ROUND(AVG(UNIT_PRICE),2) AS AVG_PRICE_OF_PRODUCT

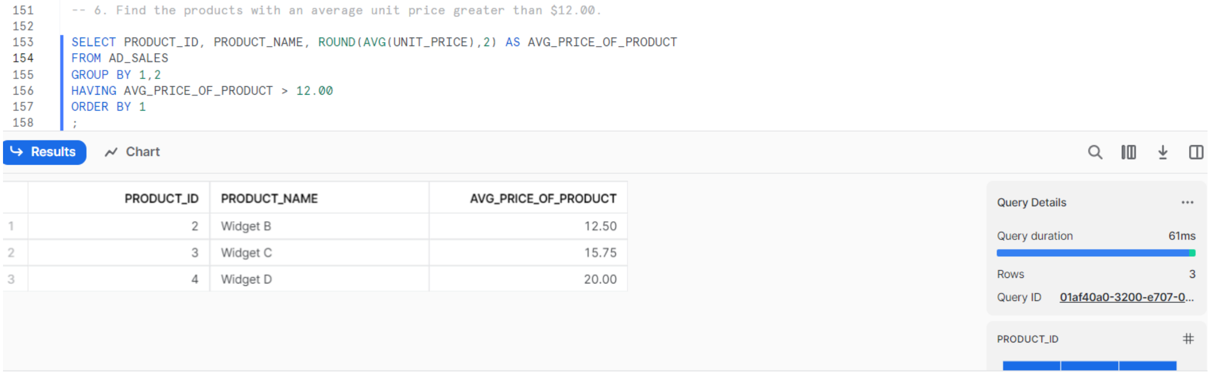
FROM AD_SALES

GROUP BY 1,2

HAVING AVG_PRICE_OF_PRODUCT > 12.00

ORDER BY 1

;



```
-- 6. Find the products with an average unit price greater than $12.00.

SELECT PRODUCT_ID, PRODUCT_NAME, ROUND(AVG(UNIT_PRICE),2) AS AVG_PRICE_OF_PRODUCT
FROM AD_SALES
GROUP BY 1,2
HAVING AVG_PRICE_OF_PRODUCT > 12.00
ORDER BY 1
;
```

	PRODUCT_ID	PRODUCT_NAME	AVG_PRICE_OF_PRODUCT
1	2	Widget B	12.50
2	3	Widget C	15.75
3	4	Widget D	20.00

Query Details

Query duration	61ms
Rows	3
Query ID	01af40a0-3200-e707-0...

PRODUCT_ID

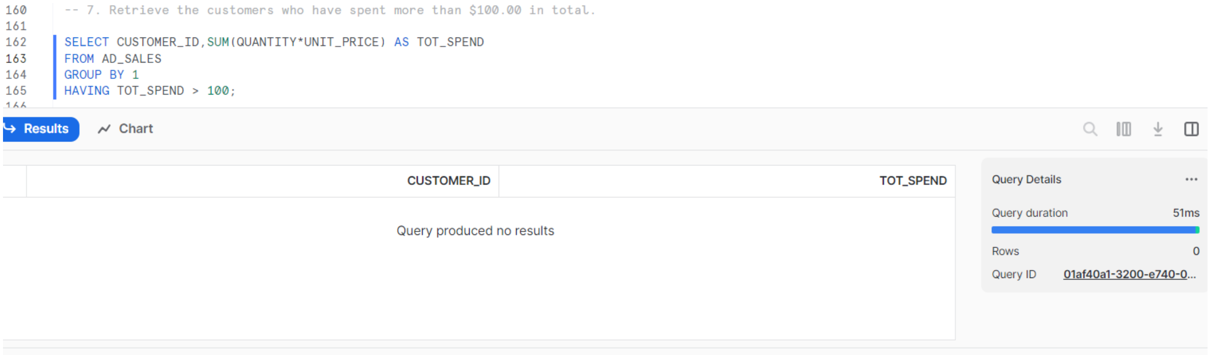
-- 7. Retrieve the customers who have spent more than $100.00 in total.

SELECT CUSTOMER_ID,SUM(QUANTITY*UNIT_PRICE) AS TOT_SPEND

FROM AD_SALES

GROUP BY 1

HAVING TOT_SPEND > 100;



```
-- 7. Retrieve the customers who have spent more than $100.00 in total.

SELECT CUSTOMER_ID,SUM(QUANTITY*UNIT_PRICE) AS TOT_SPEND
FROM AD_SALES
GROUP BY 1
HAVING TOT_SPEND > 100;
```

CUSTOMER_ID	TOT_SPEND

Query produced no results

Query Details

Query duration 51ms

Rows 0

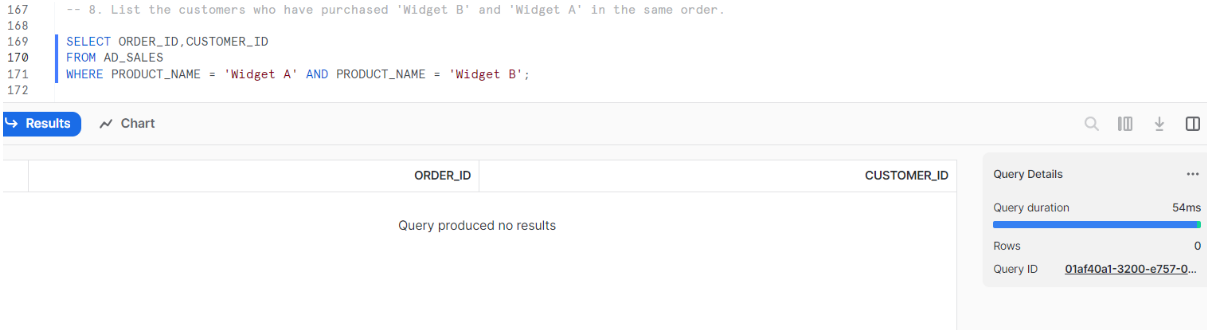
Query ID 01af40a1-3200-e740-0...

-- 8. List the customers who have purchased 'Widget B' and 'Widget A' in the same order.

SELECT ORDER_ID,CUSTOMER_ID

FROM AD_SALES

WHERE PRODUCT_NAME = 'Widget A' AND PRODUCT_NAME = 'Widget B';



```
-- 8. List the customers who have purchased 'Widget B' and 'Widget A' in the same order.

SELECT ORDER_ID,CUSTOMER_ID
FROM AD_SALES
WHERE PRODUCT_NAME = 'Widget A' AND PRODUCT_NAME = 'Widget B';
```

ORDER_ID	CUSTOMER_ID

Query produced no results

Query Details

Query duration 54ms

Rows 0

Query ID 01af40a1-3200-e757-0...