

## Retail Sales Dataset

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--1. SELECT Statement

--Q1. Display all columns for all transactions.

SELECT \*

FROM RETAIL.SALES.DATASET;

2 --Q1. Display all columns for all transactions.  
3 | SELECT \*  
4 | FROM RETAIL.SALES.DATASET;  
5

Results (just now)

Table Chart

#	TRANSACTION_ID	DATE	CUSTOMER_ID	GENDER	AGE	PRODUCT_CATEGORY	QUANTITY	PRICE_PER_UNIT	TOTAL_AMOUNT
1	1	2023-11-24	CUST001	Male	34	Beauty	3	50	150
2	2	2023-02-27	CUST002	Female	26	Clothing	2	500	1000
3	3	2023-01-13	CUST003	Male	50	Electronics	1	30	30
4	4	2023-05-21	CUST004	Male	37	Clothing	1	500	500
5	5	2023-05-06	CUST005	Male	30	Beauty	2	50	100
6	6	2023-04-25	CUST006	Female	45	Beauty	1	30	30
7	7	2023-03-13	CUST007	Male	46	Clothing	2	25	50
8	8	2023-02-22	CUST008	Male	30	Electronics	4	25	100
9	9	2023-12-13	CUST009	Male	63	Electronics	2	300	600

--Q2. Display Transaction ID, Date, Customer ID.

SELECT TRANSACTION\_ID,

DATE,

CUSTOMER\_ID

FROM RETAIL.SALES.DATASET;

8 | SELECT TRANSACTION\_ID,  
9 | DATE,  
10 | CUSTOMER\_ID  
11 | FROM RETAIL.SALES.DATASET;  
12

Results (just now)

Table Chart

#	TRANSACTION_ID	DATE	CUSTOMER_ID
1	1	2023-11-24	CUST001
2	2	2023-02-27	CUST002
3	3	2023-01-13	CUST003
4	4	2023-05-21	CUST004
5	5	2023-05-06	CUST005
6	6	2023-04-25	CUST006
7	7	2023-03-13	CUST007

-- 2. SELECT DISTINCT Statement

--Q3. Distinct product categories

```
SELECT DISTINCT PRODUCT_CATEGORY
```

```
FROM RETAIL.SALES.DATASET;
```

```
15      -- 2. SELECT DISTINCT Statement  
16      --Q3. Distinct product categories  
17      | SELECT DISTINCT PRODUCT_CATEGORY  
18      | FROM RETAIL.SALES.DATASET;  
19
```

Results (just now)

Table

Chart

PRODUCT_CATEGORY
Clothing
Beauty
Electronics

--Q4. Distinct gender values

```
SELECT DISTINCT GENDER
```

```
FROM RETAIL.SALES.DATASET;
```

```
21  
22      --Q4. Distinct gender values  
23      | SELECT DISTINCT GENDER  
24      | FROM RETAIL.SALES.DATASET;  
25
```

Results (just now)

Table

Chart

GENDER
Male
Female

--3. WHERE Clause

--Q5. Age greater than 40

SELECT \*

FROM RETAIL.SALES.DATASET

WHERE AGE > 40;

```
27      --3. WHERE Clause
28      --Q5. Age greater than 40
29      SELECT *
30      FROM RETAIL.SALES.DATASET
31      WHERE AGE > 40;
32
```

Results (just now)

Table Chart

534 rows 482ms

#	TRANSACTION_ID	DATE	CUSTOMER_ID	GENDER	AGE	PRODUCT_CATEGORY	QUANTITY	PRICE_PER_UNIT	TOTAL_AMOUNT
1	3	2023-01-13	CUST003	Male	50	Electronics	1	30	30
2	6	2023-04-25	CUST006	Female	45	Beauty	1	30	30
3	7	2023-03-13	CUST007	Male	46	Clothing	2	25	50
4	9	2023-12-13	CUST009	Male	63	Electronics	2	300	600
5	10	2023-10-07	CUST010	Female	52	Clothing	4	50	200
6	14	2023-01-17	CUST014	Male	64	Clothing	4	30	120

Q6. Price per Unit between 100 and 500

SELECT \*

FROM RETAIL.SALES.DATASET

WHERE PRICE\_PER\_UNIT BETWEEN 100 AND 500;

```
34      --Q6. Price per Unit between 100 and 500
35      SELECT *
36      FROM RETAIL.SALES.DATASET
37      WHERE PRICE_PER_UNIT BETWEEN 100 AND 500;
```

Results (just now)

Table Chart

396 rows 76ms

#	TRANSACTION_ID	DATE	CUSTOMER_ID	GENDER	AGE	PRODUCT_CATEGORY	QUANTITY	PRICE_PER_UNIT	TOTAL_AMOUNT
1	2	2023-02-27	CUST002	Female	26	Clothing	2	500	1000
2	4	2023-05-21	CUST004	Male	37	Clothing	1	500	500
3	9	2023-12-13	CUST009	Male	63	Electronics	2	300	600
4	13	2023-08-05	CUST013	Male	22	Electronics	3	500	1500
5	15	2023-04-10	CUST015	Female	48	Electronics	1	500	500

Q7. Product Category is Beauty OR Electronics

SELECT \*

FROM RETAIL.SALES.DATASET

WHERE PRODUCT\_CATEGORY IN ('Beauty', 'Electronics');

```
39      --Q7. Product Category is Beauty OR Electronics
40      SELECT *
41      FROM RETAIL.SALES.DATASET
42      WHERE PRODUCT_CATEGORY IN ('Beauty', 'Electronics');
```

Results (just now)

Table Chart

649 rows 69ms

#	TRANSACTION_ID	DATE	CUSTOMER_ID	GENDER	AGE	PRODUCT_CATEGORY	QUANTITY	PRICE_PER_UNIT	TOTAL_AMOUNT
1	1	2023-11-24	CUST001	Male	34	Beauty	3	50	150
2	3	2023-01-13	CUST003	Male	50	Electronics	1	30	30
3	5	2023-05-06	CUST005	Male	30	Beauty	2	50	100
4	6	2023-04-25	CUST006	Female	45	Beauty	1	30	30

--Q8. Product Category NOT Clothing

SELECT \*

FROM RETAIL.SALES.DATASET

WHERE PRODUCT\_CATEGORY <> 'Clothing';

```
45      --Q8. Product Category NOT Clothing
46      SELECT *
47      FROM RETAIL.SALES.DATASET
48      WHERE PRODUCT_CATEGORY <> 'Clothing';
49
```

Results (just now)

Table

Chart

Q ⚡ 649 rows ⓘ 34ms 🔍 ↴

#	# TRANSACTION_ID	DATE	CUSTOMER_ID	GENDER	# AGE	PRODUCT_CATEGORY	# QUANTITY	# PRICE_PER_UNIT	# TOTAL_AMOUNT
1	1	2023-11-24	CUST001	Male	34	Beauty	3	50	150
2	3	2023-01-13	CUST003	Male	50	Electronics	1	30	30
3	5	2023-05-06	CUST005	Male	30	Beauty	2	50	100
4	6	2023-04-25	CUST006	Female	45	Beauty	1	30	30
5	8	2023-02-22	CUST008	Male	30	Electronics	4	25	100

Q9. Quantity ≥ 3

SELECT \*

FROM RETAIL.SALES.DATASET

WHERE QUANTITY >= 3;

```
50      --Q9. Quantity ≥ 3
51      SELECT *
52      FROM RETAIL.SALES.DATASET
53      WHERE QUANTITY >= 3;
54
```

Results (just now)

Table

Chart

Q ⚡ 504 rows ⓘ 464ms 🔍 ↴

#	# TRANSACTION_ID	DATE	CUSTOMER_ID	GENDER	# AGE	PRODUCT_CATEGORY	# QUANTITY	# PRICE_PER_UNIT	# TOTAL_AMOUNT
1	1	2023-11-24	CUST001	Male	34	Beauty	3	50	150
2	8	2023-02-22	CUST008	Male	30	Electronics	4	25	100
3	10	2023-10-07	CUST010	Female	52	Clothing	4	50	200
4	12	2023-10-30	CUST012	Male	35	Beauty	3	25	75
5	13	2023-08-05	CUST013	Male	22	Electronics	3	500	1500
6	14	2023-01-17	CUST014	Male	64	Clothing	4	30	120
7	15	2023-01-16	CUST015	Female	42	Electronics	4	500	2000
8	16	2023-02-17	CUST016	Male	19	Clothing	3	500	1500
9	17	2023-04-22	CUST017	Female	27	Clothing	4	25	100
10	20	2023-11-05	CUST020	Male	22	Clothing	3	300	900
11	23	2023-04-12	CUST023	Female	35	Clothing	4	30	120

--4. Aggregate Functions

--Q10. Count total transactions

SELECT COUNT(\*) AS Total\_Transactions

FROM RETAIL.SALES.DATASET;

```
56      --4. Aggregate Functions
57      --Q10. Count total transactions
58      SELECT COUNT(*) AS Total_Transactions
59      FROM RETAIL.SALES.DATASET;
60
61
```

Results (just now)

Table

Chart

Q ⚡ 1 row ⓘ 24ms 🔍 ↴

#	# TOTAL_TRANSACTIONS
1	1000

## Q11. Average Age

```
SELECT AVG(AGE) AS Average_Age  
FROM RETAIL.SALES.DATASET;
```

The screenshot shows a database query results table. The code executed is:  
--Q11. Average Age  
SELECT AVG(AGE) AS Average\_Age  
FROM RETAIL.SALES.DATASET;  
The results table has one row with the following data:  
# AVERAGE\_AGE  
1 41.392000

## Q12. Total quantity sold

```
SELECT SUM(QUANTITY) AS Total_Quantity  
FROM RETAIL.SALES.DATASET;
```

The screenshot shows a database query results table. The code executed is:  
--Q12. Total quantity sold  
SELECT SUM(QUANTITY) AS Total\_Quantity  
FROM RETAIL.SALES.DATASET;  
The results table has one row with the following data:  
# TOTAL\_QUANTITY  
1 2514

## Q13. Maximum Total Amount

```
SELECT MAX(TOTAL_AMOUNT) AS Max_Total_Amount  
FROM RETAIL.SALES.DATASET;
```

The screenshot shows a database query results table. The code executed is:  
--Q13. Maximum Total Amount  
SELECT MAX(TOTAL\_AMOUNT) AS Max\_Total\_Amount  
FROM RETAIL.SALES.DATASET;  
The results table has one row with the following data:  
# MAX\_TOTAL\_AMOUNT  
1 2000

## Q14. Minimum Price per Unit

```
SELECT MIN(PRICE_PER_UNIT) AS Min_Price_per_Unit  
FROM RETAIL.SALES.DATASET;
```

The screenshot shows a database query results table. The code executed is:  
--Q14. Minimum Price per Unit  
SELECT MIN(PRICE\_PER\_UNIT) AS Min\_Price\_per\_Unit  
FROM RETAIL.SALES.DATASET;  
The results table has one row with the following data:  
# MIN\_PRICE\_PER\_UNIT  
1 25

## 5. GROUP BY Statement

--Q15. Number of transactions per product category

```
SELECT PRODUCT_CATEGORY,  
COUNT(*) AS Transaction_Count
```

```
FROM RETAIL.SALES.DATASET  
GROUP BY PRODUCT_CATEGORY;
```

```
78  
-- 5. GROUP BY Statement  
79 --Q15. Number of transactions per product category  
80 | SELECT PRODUCT_CATEGORY,  
81 |     COUNT(*) AS Transaction_Count  
82 | FROM RETAIL.SALES.DATASET  
83 | GROUP BY PRODUCT_CATEGORY;  
84
```

Results (1 minute ago)

	PRODUCT_CATEGORY	TRANSACTION_COUNT
1	Clothing	351
2	Beauty	307
3	Electronics	342

Q16. Total revenue per gender

```
SELECT GENDER,  
      SUM(TOTAL_AMOUNT) AS Total_Revenue  
FROM RETAIL.SALES.DATASET  
GROUP BY GENDER;
```

```
85  
--Q16. Total revenue per gender  
86 | SELECT GENDER,  
87 |     SUM(TOTAL_AMOUNT) AS Total_Revenue  
88 | FROM RETAIL.SALES.DATASET  
89 | GROUP BY GENDER;  
90
```

Results (just now)

	GENDER	TOTAL_REVENUE
1	Male	223160
2	Female	232840

Q17. Average price per unit per product category

```
SELECT PRODUCT_CATEGORY,  
      AVG(PRICE_PER_UNIT) AS Average_Price  
FROM RETAIL.SALES.DATASET  
GROUP BY PRODUCT_CATEGORY;
```

```
91  
--Q17. Average price per unit per product category  
92 | SELECT PRODUCT_CATEGORY,  
93 |     AVG(PRICE_PER_UNIT) AS Average_Price  
94 | FROM RETAIL.SALES.DATASET  
95 | GROUP BY PRODUCT_CATEGORY;  
96  
97
```

Results (just now)

	PRODUCT_CATEGORY	AVERAGE_PRICE
1	Beauty	184.055375
2	Clothing	174.287749
3	Electronics	181.900585

## 6. HAVING Clause

--Q18. Total revenue per product category > 10,000

```
SELECT PRODUCT_CATEGORY,
```

```

SUM(TOTAL_AMOUNT) AS Total_Revenue
FROM RETAIL.SALES.DATASET
GROUP BY PRODUCT_CATEGORY
HAVING SUM(TOTAL_AMOUNT) > 10000;

```

Results (just now)		
	PRODUCT_CATEGORY	TOTAL_REVENUE
1	Beauty	143515
2	Clothing	155580
3	Electronics	156905

Q19. Average quantity > 2

```

SELECT PRODUCT_CATEGORY,
       AVG(QUANTITY) AS Average_Quantity
FROM RETAIL.SALES.DATASET
GROUP BY PRODUCT_CATEGORY
HAVING AVG(QUANTITY) > 2;

```

Results (just now)		
	PRODUCT_CATEGORY	AVERAGE_QUANTITY
1	Beauty	2.511401
2	Clothing	2.547009
3	Electronics	2.482456

## 7. CASE Statement

--Q20. Spending Level (High/Low)

```
SELECT TRANSACTION_ID,  
      TOTAL_AMOUNT,  
      CASE  
        WHEN TOTAL_AMOUNT > 1000 THEN 'High'  
        ELSE 'Low'  
      END AS Spending_Level
```

```
FROM RETAIL.SALES.DATASET;
```

```
112      ||----  
113      -- 7. CASE Statement  
114      --Q20. Spending Level (High/Low)  
115      SELECT TRANSACTION_ID,  
116          TOTAL_AMOUNT,  
117          CASE  
118              WHEN TOTAL_AMOUNT > 1000 THEN 'High'  
119              ELSE 'Low'  
120          END AS Spending_Level  
121      FROM RETAIL.SALES.DATASET;  
122
```

Results (just now)

Table Chart

Q ⏪ 1,000 rows ⓘ 71ms ⚡ ⌂

#	TRANSACTION_ID	TOTAL_AMOUNT	SPENDING_LEVEL
1	1	150	Low
2	2	1000	Low
3	3	30	Low
4	4	500	Low
5	5	100	Low
6	6	30	Low
7	7	50	Low
8	8	100	Low

## Q21. Age Group Classification

```
SELECT CUSTOMER_ID,  
      AGE,  
      CASE  
        WHEN AGE < 30 THEN 'Youth'  
        WHEN AGE BETWEEN 30 AND 59 THEN 'Adult'  
        ELSE 'Senior'  
      END AS Age_Group  
FROM RETAIL.SALES.DATASET;
```

--Q21. Age Group Classification

```
123  SELECT CUSTOMER_ID,  
124    AGE,  
125    CASE  
126      WHEN AGE < 30 THEN 'Youth'  
127      WHEN AGE BETWEEN 30 AND 59 THEN 'Adult'  
128      ELSE 'Senior'  
129    END AS Age_Group  
130   FROM RETAIL.SALES.DATASET;  
131
```

Results (just now)

Table Chart

#	CUSTOMER_ID	AGE	AGE_GROUP
1	CUST001	34	Adult
2	CUST002	26	Youth
3	CUST003	50	Adult
4	CUST004	37	Adult
5	CUST005	30	Adult
6	CUST006	45	Adult