

QUESTION 1

My Workspace > Practical 1.sql

```
1 SELECT *
2 FROM RETAIL.SALES.DATA;
3
4 ---1. SELECT Statement
5 ---Q1. Display all columns for all transactions.
6 ---Expected output: All columns
7 SELECT *
8 FROM RETAIL.SALES.DATA;
9
```

Results (4 minutes ago)

Table Chart

1,000 rows 71ms

| # | 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 |

Query History

Current file All files

QUESTION 2

```
10 ---Q2. Display only the Transaction ID, Date, and Customer ID for all records.
11 ---Expected output: Transaction ID, Date, Customer ID
12 SELECT TRANSACTION_ID,
13 DATE,
14 CUSTOMER_ID
15 FROM RETAIL.SALES.DATA;
```

Results (just now)

Table Chart

1,000 rows 1.4s

| # | TRANSACTION_ID | DATE | CUSTOMER_ID |
|---|----------------|------------|-------------|
| 1 | 1 | 2023-11-24 | CUST001 |
| 2 | 2 | 2023-02-27 | CUST002 |

Query History

QUESTION 3

```
15 FROM RETAIL.SALES.DATA;
16
17 ---2. SELECT DISTINCT Statement
18 ---Q3. Display all the distinct product categories in the dataset.
19 ---Expected output: Product Category
20 SELECT DISTINCT PRODUCT_CATEGORY
21 FROM RETAIL.SALES.DATA;
22 ---Q4. Display all the distinct gender values in the dataset.
23 ---Expected output: Gender
24
25
26
```

Results (just now)

Table Chart

3 rows 1.3s

| # | PRODUCT_CATEGORY |
|---|------------------|
| 1 | Clothing |
| 2 | Beauty |
| 3 | Electronics |

QUESTION 4

```
22
23 ---Q4. Display all the distinct gender values in the dataset.
24 ---Expected output: Gender
25 SELECT DISTINCT GENDER
26 FROM RETAIL.SALES.DATA;
```

Results (just now)

Table Chart

2 rows 1.3s

| | GENDER |
|---|--------|
| 1 | Male |
| 2 | Female |

QUESTION 5

```
31 SELECT*
32 FROM RETAIL.SALES.DATA
33 WHERE AGE>40;
```

Results (just now)

Table Chart

534 rows 1.4s

| # | TRANSACTION_ID | DATE | CUSTOMER_ID | GENDER | AGE | PRODUCT_CATEGORY | QUANTITY | PRICE_PER_UNIT | TOTAL_AMOUNT |
|---|----------------|------|-------------|--------|-------|------------------|----------|----------------|--------------|
| 3 | | | CUST003 | Female | 51.3% | Clothing | 36.3% | | |
| | | | CUST006 | Male | 48.7% | Electronics | 34.8% | | |
| | | | +98 more | | | +1 more | | | |

Query History

QUESTION 6

```
35
36 ---Q6. Display all transactions where the Price per Unit is between 100 and 500.
37 ---Expected output: ALL columns
38 SELECT*
39 FROM RETAIL.SALES.DATA
40 WHERE PRICE_PER_UNIT BETWEEN 100 AND 500;
```

Results (just now)

Table Chart

396 rows 1.4s

| # | TRANSACTION_ID | DATE | CUSTOMER_ID | GENDER | AGE | PRODUCT_CATEGORY | QUANTITY | PRICE_PER_UNIT | TOTAL_AMOUNT |
|---|----------------|------------|-------------|--------|-------|------------------|----------|----------------|--------------|
| 2 | | | CUST002 | Female | 51.8% | Electronics | 35.1% | | |
| | | | CUST004 | Male | 48.2% | Clothing | 34.3% | | |
| | | | +98 more | | | +1 more | | | |
| 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 |

Query History

QUESTION 7

```
42 ---Q7. Display all transactions where the Product Category is either 'Beauty' or
43 ---'Electronics'.
44 SELECT*
45 FROM RETAIL.SALES.DATA
46 WHERE PRODUCT_CATEGORY = 'BEAUTY' OR PRODUCT_CATEGORY = 'ELECTRONICS';
47
48 ---Expected output: ALL columns
49 ---Q8. Display all transactions where the Product Category is not 'Clothing'.
50 ---Expected output: ALL columns
```

Results (just now)

Table Chart

0 rows 705ms

| | TRANSACTION_ID | DATE | CUSTOMER_ID | GENDER | AGE | PRODUCT_CATEGORY | QUANTITY | PRICE_PER_UNIT | TOTAL_AMOUNT |
|--|----------------|------|-------------|--------|-----|------------------|----------|----------------|--------------|
|--|----------------|------|-------------|--------|-----|------------------|----------|----------------|--------------|

QUESTION 8

```
51 SELECT*
52 FROM RETAIL.SALES.DATA
53 WHERE PRODUCT_CATEGORY <>'CLOTHING';
54
55 ---Q9. Display all transactions where the Quantity is greater than or equal to 3.
56 ---Expected output: All columns
57
```

Results (just now)

Table Chart

1,000 rows 2.2s

| # | 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 |

Query History

Question 9

```
57 SELECT*
58 FROM RETAIL.SALES.DATA
59 WHERE QUANTITY>=3;
```

Results (just now)

Table Chart

504 rows 1.0s

| # | 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 |

QUESTION 10

```
61 ---4. Aggregate Functions
62 ---Q10. Count the total number of transactions.
63 ---Expected output: Total_Transactions
64 SELECT COUNT(TRANSACTION_ID) AS TOTAL_TRANSACTIONS
65 FROM RETAIL.SALES.DATA;
```

Results (just now)

Table Chart

1 row 58ms

| # | TOTAL_TRANSACTIONS |
|---|--------------------|
| 1 | 1000 |

QUESTION 11

```
66 ---Q11. Find the average Age of customers.
67 ---Expected output: Average_Age
68 SELECT AVG(AGE) AS AVERAGE_AGE
69 FROM RETAIL.SALES.DATA;
70
71 ---Q12. Find the total quantity of products sold.
72 ---Expected output: Total_Quantity
73 ---Q13. Find the maximum Total Amount spent in a single transaction.
74 ---Expected output: Max_Total_Amount
```

Results (just now)

Table Chart

1 row 730ms

| # | AVERAGE_AGE |
|---|-------------|
| 1 | 41.392000 |

QUESTION 12

```
71 ---Q12. Find the total quantity of products sold.
72 ---Expected output: Total_Quantity
73
74 SELECT SUM(TOTAL_AMOUNT) AS TOTAL_QUANTITY
75 FROM RETAIL.SALES.DATA;
76
```

Results (just now)

| Table | Chart | 1 row | 257ms | ↓ |
|------------------|-------|-------|-------|--------|
| # TOTAL_QUANTITY | | | | |
| 1 | | | | 456000 |

QUESTION 13

```
1 SELECT MAX(TOTAL_AMOUNT) AS MAX_TOTAL_AMOUNT
2 FROM RETAIL.SALES.DATA;
3
4 ---Q14. Find the minimum Price per Unit in the dataset.
5 ---Expected output: Min_Price_per_Unit
6
```

Results (just now)

| Table | Chart | 1 row | 41ms | ↓ |
|--------------------|-------|-------|------|------|
| # MAX_TOTAL_AMOUNT | | | | |
| 1 | | | | 2000 |

QUESTION 14

```
83 ---Q14. Find the minimum Price per Unit in the dataset.
84 ---Expected output: Min_Price_per_Unit
85 SELECT MIN(PRICE_PER_UNIT) AS MIN_PRICE_PER_UNIT
86 FROM RETAIL.SALES.DATA;
```

Results (just now)

| Table | Chart | 1 row | 330ms | ↓ |
|----------------------|-------|-------|-------|----|
| # MIN_PRICE_PER_UNIT | | | | |
| 1 | | | | 25 |

QUESTION 15

```
88 ---5. GROUP BY Statement
89 ---Q15. Find the number of transactions per Product Category.
90 ---Expected output: Product Category, Transaction_Count
91 SELECT Product_category,
92 COUNT(TRANSACTION_ID) AS TRANSACTION_COUNT
93 from retail.sales.data
94 GROUP BY PRODUCT_CATEGORY;
95
```

Results (just now)

| Table | Chart | 3 rows | 1.8s | ↓ |
|------------------|---------------------|--------|------|-----|
| PRODUCT_CATEGORY | # TRANSACTION_COUNT | | | |
| 1 Beauty | | | | 307 |
| 2 Clothing | | | | 351 |
| 3 Electronics | | | | 342 |

QUESTION 16

```
96  ---Q16. Find the total revenue (Total Amount) per gender.
97  ---Expected output: Gender, Total_Revenue
98  SELECT GENDER,
99  SUM(TOTAL_AMOUNT) AS TOTAL_REVENUE
100 FROM RETAIL.SALES.DATA
101 GROUP BY GENDER;
102 ---Q17. Find the average Price per Unit per product category.
103 ---Expected output: Product Category, Average_Price
104
105 Ctrl+I to generate
106
```

Results (1 minute ago)

| Table | | Chart | 2 rows | 73ms | ↓ |
|-------|--------|-----------------|--------|------|---|
| # | GENDER | # TOTAL_REVENUE | | | |
| 1 | Male | 223160 | | | |
| 2 | Female | 232840 | | | |

QUSETION 17

```
103  ---Q17. Find the average Price per Unit per product category.
104  ---Expected output: Product Category, Average_Price
105  SELECT PRODUCT_CATEGORY,
106  AVG(PRICE_PER_UNIT) AS AVERAGE_PRICE
107 FROM RETAIL.SALES.DATA
108 GROUP BY PRODUCT_CATEGORY;
```

Results (just now)

| Table | | Chart | 3 rows | 734ms | ↓ |
|-------|------------------|-----------------|--------|-------|---|
| # | PRODUCT_CATEGORY | # AVERAGE_PRICE | | | |
| 1 | Beauty | 184.055375 | | | |
| 2 | Clothing | 174.287749 | | | |
| 3 | Electronics | 181.900585 | | | |

QUESTION 18

```
110  ---6. HAVING Clause
111  ---Q18. Find the total revenue per product category where total revenue is greater than
112  ---10,000.
113  SELECT PRODUCT_CATEGORY,
114  SUM(TOTAL_AMOUNT) AS TOTAL_REVENUE
115 FROM RETAIL.SALES.DATA
116 GROUP BY PRODUCT_CATEGORY
117 HAVING SUM(TOTAL_AMOUNT) > 10000;
```

Results (just now)

| Table | | Chart | 3 rows | 1.8s | ↓ |
|-------|------------------|-----------------|--------|------|---|
| # | PRODUCT_CATEGORY | # TOTAL_REVENUE | | | |
| 1 | Beauty | 143515 | | | |
| 2 | Clothing | 155580 | | | |
| 3 | Electronics | 156905 | | | |

QUESTION 19

119
120
121
122
123
124
125
126

Expected output: Product Category, Total_Revenue

Q19. Find the average quantity per product category where the average is more than 2.

Expected output: Product Category, Average_Quantity

SELECT PRODUCT_CATEGORY,

AVG(QUANTITY) AS AVERAGE_QUANTITY

FROM RETAIL.SALES.DATA

GROUP BY PRODUCT_CATEGORY

HAVING AVG(QUANTITY)>2;

Results (just now)

Table

Chart

3 rows

851ms

| | PRODUCT_CATEGORY | AVERAGE_QUANTITY |
|---|------------------|------------------|
| 1 | Beauty | 2.511401 |
| 2 | Clothing | 2.547009 |
| 3 | Electronics | 2.482456 |

QUESTION 20

132
133
134
135
136
137
138

SELECT TRANSACTION_ID,

TOTAL_AMOUNT,

CASE

WHEN TOTAL_AMOUNT>1000 THEN 'HIGH'

ELSE 'LOW'

END AS SPENDING_LEVEL

FROM RETAIL.SALES.DATA;

Results (1 minute ago)

Table

Chart

1,000 rows

2.8s

| | TRANSACTION_ID | TOTAL_AMOUNT | SPENDING_LEVEL |
|---|----------------|--------------|----------------|
| 1 | 1 | 150 | LOW |
| 2 | 2 | 1000 | LOW |
| 3 | 3 | 30 | LOW |
| 4 | 4 | 500 | LOW |

QUESTION 21

145
146
147
148
149
150
151
152

SELECT CUSTOMER_ID,

AGE,

CASE

WHEN AGE<30 THEN 'YOUTH'

WHEN AGE BETWEEN 30 AND 59 THEN 'ADULT'

WHEN AGE>=60 THEN 'SENIOR'

END AS AGE_GROUP

FROM RETAIL.SALES.DATA;

Results (just now)

Table

Chart

1,000 rows

70ms

| | CUSTOMER_ID | AGE | AGE_GROUP |
|---|-------------|-----|-----------|
| 1 | CUST001 | 34 | ADULT |
| 2 | CUST002 | 26 | YOUTH |
| 3 | CUST003 | 50 | ADULT |
| 4 | CUST004 | 37 | ADULT |