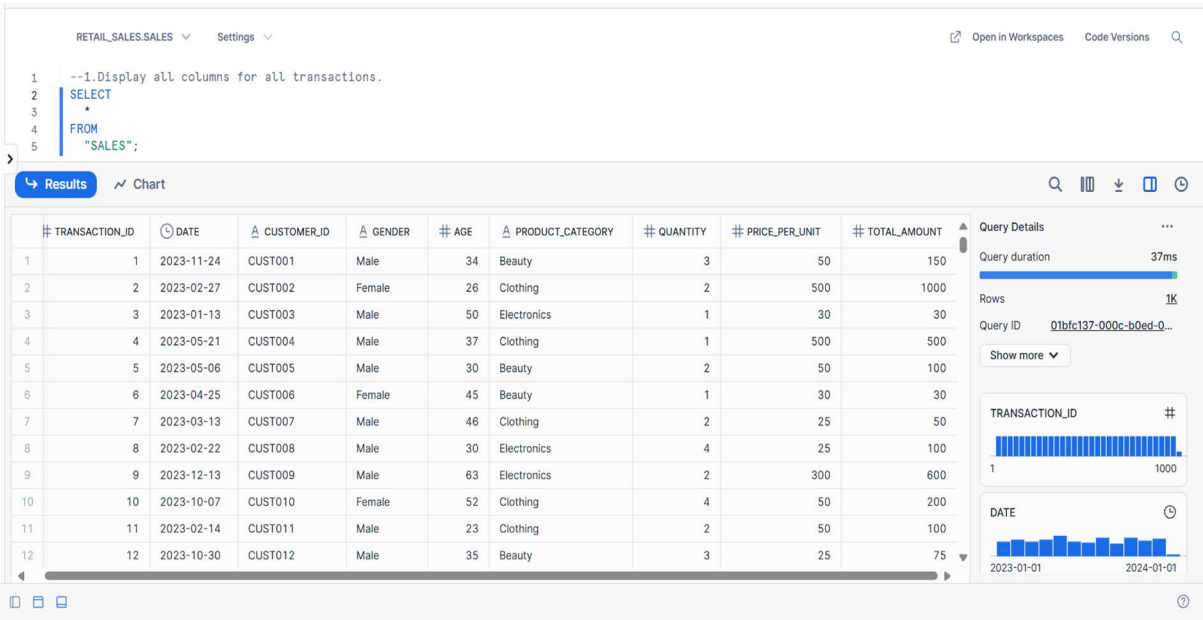


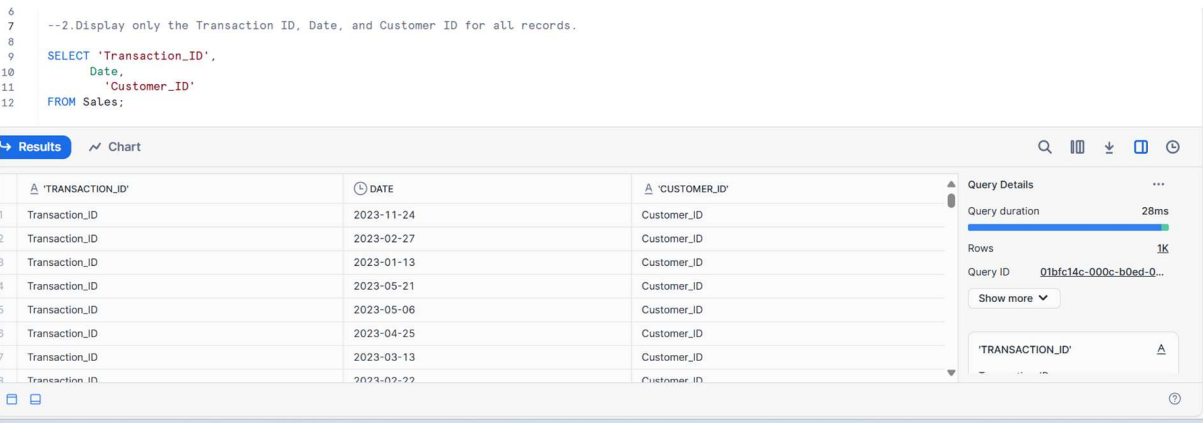
Gugulethu Dlamini

Practical 1:

Question 1:



Question 2:



Question 3:

```

14 --3. Display all the distinct product categories in the dataset.
15 SELECT DISTINCT 'Product_Category'
16 FROM Sales;
17

```

'PRODUCT_CATEGORY'
Product_Category

Results | Chart

Query Details

- Query duration: 30ms
- Rows: 1
- Query ID: 01bfc158-000c-b0ed-0...
- Show more

'PRODUCT_CATEGORY'

Question 4:

```

14 --4. Display all the distinct gender values in the dataset.
15 SELECT DISTINCT 'Gender'
16 FROM Sales;
17

```

'GENDER'
Gender

Results | Chart

Query Details

- Query duration: 59ms
- Rows: 1
- Query ID: 01bfc156-000c-b0ed-0...
- Show more

'GENDER'

Question 5:

--5. Display all transactions where the age is greater than 40

SELECT*

FROM Sales

WHERE Age >40;

ResultsChart

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

Query Details

Query duration60ms

Rows534

Query ID01bfc15c-000c-b0ed-0...

Show more

TRANSACTION ID

#

Question 6:

--6.Display all transactions where the price per unit is between 100 and 500.
SELECT*
FROM Sales
WHERE price_per_unit Between 100 AND 500;

ResultsChart

#	TRANSACTION_ID	DATE	CUSTOMER_ID	GENDER	AGE	PRODUCT_CATEGORY	QUANTITY	PRICE_PER_UNIT	TOTAL_AMOUNT
2	2023-02-27	CUST002	Female	26	Clothing	2	500	1000	
4	2023-05-21	CUST004	Male	37	Clothing	1	500	500	
9	2023-12-13	CUST009	Male	63	Electronics	2	300	600	
13	2023-08-05	CUST013	Male	22	Electronics	3	500	1500	
15	2023-01-16	CUST015	Female	42	Electronics	4	500	2000	
16	2023-02-17	CUST016	Male	19	Clothing	3	500	1500	

Query Details

Query duration67ms

Rows396

Query ID01bfc165-000c-b0ed-0...

Show more

TRANSACTION ID

#

Question 7:

```
28 --7. Display all transactions where the product Category is either 'Beauty' or 'electronics'.
29 SELECT*
30 FROM Sales
31 WHERE product_category IN ('Beauty','Electronic');
```

ResultsChart

#	TRANSACTION_ID	DATE	CUSTOMER_ID	GENDER	AGE	PRODUCT_CATEGORY	QUANTITY	PRICE_PER_UNIT	TOTAL_AMOUNT
	1	2023-11-24	CUST001	Male	34	Beauty	3	50	150
	5	2023-05-06	CUST005	Male	30	Beauty	2	50	100
	6	2023-04-25	CUST006	Female	45	Beauty	1	30	30
	12	2023-10-30	CUST012	Male	35	Beauty	3	25	75
	21	2023-01-14	CUST021	Female	50	Beauty	1	500	500
	25	2023-12-26	CUST025	Female	64	Beauty	1	50	50

Query Details

Query duration65ms

Rows307

Query ID01bfc16b-000c-b0ed-0...

Show more

TRANSACTION ID#

Question 8:

```
33 --8. Display all transactions where the product category is not 'Clothing'
34 SELECT*
35 FROM Sales
36 WHERE PRODUCT_CATEGORY !='Clothing';
```

ResultsChart

#	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
6	9	2023-12-13	CUST009	Male	63	Electronics	2	300	600

Query Details

Query duration65ms

Rows649

Query ID01bfc16f-000c-b0ed-00...

Show more

TRANSACTION ID#

Question 9:

```
37 --9. Display all transactions where the quantity is greater than or equal to 3
38 SELECT*
39 FROM Sales
40 WHERE QUANTITY >=3;
41
```

ResultsChart

#	TRANSACTION_ID	DATE	CUSTOMER_ID	GENDER	AGE	PRODUCT_CATEGORY	QUANTITY	PRICE_PER_UNIT	TOTAL_AMOUNT
1	8	2023-02-22	CUST008	Male	30	Electronics	4	25	100
2	10	2023-10-07	CUST010	Female	52	Clothing	4	50	200
3	14	2023-01-17	CUST014	Male	64	Clothing	4	30	120
4	15	2023-01-16	CUST015	Female	42	Electronics	4	500	2000
5	17	2023-04-22	CUST017	Female	27	Clothing	4	25	100
6	23	2023-04-12	CUST023	Female	35	Clothing	4	30	120

Query Details

Query duration66ms

Rows263

Query ID01bfc172-000c-b0ed-0...

Show more

TRANSACTION ID#

Question 10:

```
42 --10. Count the total number of transactions
43 SELECT COUNT(*) AS Total_Transactions
44 FROM Sales;
```

ResultsChart

#	TOTAL_TRANSACTIONS
1	1000

Query Details

Query duration27ms

Rows1

Query ID01bfc174-000c-b0ed-0...

Show more

TOTAL_TRANSACTIONS#

Question 11:

46

--11. Find the average Age of customers

47

SELECT

48

AVG(Age)AS Average_Age

49

FROM Sales;

50

ResultsChart

AVERAGE_AGE

1

41.392000

Query Details

...

Query duration63ms

Rows1

Query ID01bfc178-000c-b0ed-0...

Show more

AVERAGE_AGE#

Question 12:

51

--12. Find the total quantity of products sold

52

SELECT

53

SUM(Quantity) AS Total_Quantity

54

FROM Sales;

55

ResultsChart

TOTAL_QUANTITY

1

2514

Query Details

...

Query duration58ms

Rows1

Query ID01bfc17b-000c-b0ed-0...

Show more

TOTAL_QUANTITY#

Question 13:

57

--13. Find the maximum total amount spent in a single transaction.

58

SELECT

59

MAX('Total Amount') AS Max_Total_Amount

60

FROM Sales;

ResultsChart

MAX_TOTAL_AMOUNT

1

Total Amount

MAX_TOTAL_AMOUNT

Total Amount

Question 14:

```
61 --14. Find the minimum Price per unit in the dataset
62
63 SELECT
64     MIN('Price per unit') AS Min_price_per_unit
65 FROM Sales;
```

Results Chart

	MIN_PRICE_PER_UNIT
1	Price per unit

Query Details

Query duration 20ms

Rows 1

Query ID 01bfc184-000c-b0ed-0...

Show more

MIN_PRICE_PER_UNIT

Question 15:

```
66 --15. Find the number of transactions per product category
67
68 SELECT 'PRODUCT_CATEGORY',
69     COUNT(*) AS Transaction_Count
70 FROM Sales
71 GROUP BY 'Product category';
```

Results Chart

	'PRODUCT_CATEGORY'	# TRANSACTION_COUNT
1	PRODUCT_CATEGORY	1000

Query Details

Query duration 396ms

Rows 1

Query ID 01bfc188-000c-b0ed-0...

Show more

'PRODUCT_CATEGORY'

Question 16:

```
73 --16. Find the total revenue (Total Amount) per gender
74
75 SELECT Gender,
76     SUM(Total_Amount) AS Total_Revenue
77 FROM Sales
78 GROUP BY GENDER;
```

Results Chart

	GENDER	# TOTAL_REVENUE
1	Male	223160
2	Female	232840

Query Details

Query duration 109ms

Rows 2

Query ID 01bfc18f-000c-b0ed-00...

Show more

GENDER

Question 17:

```

78
79 --17. Find the average price per unit per product category.
80 SELECT 'Product Category',
81        AVG(PRICE_PER_UNIT) AS Average_Price
82 FROM Sales
83 GROUP BY 'Product Category';

```

	PRODUCT CATEGORY	AVERAGE_PRICE
1	Product Category	179.890000

Results | Chart

Query Details

- Query duration: 60ms
- Rows: 1
- Query ID: 01bfc194-000c-b0ed-0...
- Show more

PRODUCT CATEGORY

Question 18:

```

84
85 --18. Find the total revenue per product category where total revenue is greater than 10,000.
86 SELECT 'Product Category',
87        SUM(Total_Amount) AS Total_Revenue
88 FROM Sales
89 GROUP BY 'Product_Category' HAVING SUM(TOTAL_AMOUNT)>10000;

```

	PRODUCT CATEGORY	TOTAL_REVENUE
1	Product Category	456000

Results | Chart

Query Details

- Query duration: 71ms
- Rows: 1
- Query ID: 01bfc19b-000c-b0ed-0...
- Show more

PRODUCT CATEGORY

Question 19:

```

90
91 --19. Find the average quantity per product category where the average is more than 2.
92 SELECT Product_Category,
93        AVG(Quantity) AS Average_Quantity
94 FROM Sales
95 Group BY PRODUCT_CATEGORY;

```

	PRODUCT_CATEGORY	AVERAGE_QUANTITY
1	Beauty	2.511401
2	Clothing	2.547009
3	Electronics	2.482456

Results | Chart

Query Details

- Query duration: 108ms
- Rows: 3
- Query ID: 01bfc19f-000c-b0ed-00...
- Show more

PRODUCT CATEGORY

Question 20:

```

96
97 --20. Display a column called Spending_Level that shows 'High' if Total Amount >1000, otherwise 'Low'.
98
99 SELECT
100     Transaction_ID,
101     Total_Amount,
102     CASE WHEN Total_Amount >1000 THEN 'High'
103     ELSE 'Low'
104 END AS Spending_Level
FROM Sales;

```

Results				Chart		Query Details	
#	TRANSACTION_ID	TOTAL_AMOUNT	SPENDING_LEVEL			Query duration	52ms
1		150	Low			Rows	1K
2		1000	Low			Query ID	01bfc1a7-000c-b0ed-0...
3		30	Low			Show more	
4		500	Low			TRANSACTION ID	#
5		100	Low				
6		30	Low				
7		50	Low				

Question 21:

```

105
106 --21. Display a new column called Age_Group that labels customers as Youth, Adult, Senior
107
108 SELECT Customer_ID
109     Age,
110     CASE WHEN Age <30 THEN 'Youth'
111     WHEN Age BETWEEN 30 AND 59 THEN 'Adult'
112     WHEN Age >=60 THEN 'Senior'
113 END AS Age_Group
FROM Sales;

```

Results				Chart		Query Details	
#	AGE	AGE_GROUP				Query duration	68ms
1	CUST001	Adult				Rows	1K
2	CUST002	Youth				Query ID	01bfc1ac-000c-b0ed-0...
3	CUST003	Adult				Show more	
4	CUST004	Adult				AGE	A
5	CUST005	Adult					
6	CUST006	Adult					
7	CUST007	Adult					