

FADZAI MAKANDA-

PRACTICAL 1 EXERCISE

The screenshot shows the Snowflake web interface with a query executed in the 'SALES.RETAIL' database. The query is:

```
1 SELECT *
2 FROM retail_sales_dataset
```

The results are displayed in a table with 8 rows. The columns are: #, TRANSACTION_ID, DATE, CUSTOMER_ID, GENDER, AGE, and PRODUCT. The query details show a duration of 37ms and 1K rows.

#	TRANSACTION_ID	DATE	CUSTOMER_ID	GENDER	AGE	PRODUCT
1	1	2023-11-24	CUST001	Male	34	Beauty
2	2	2023-02-27	CUST002	Female	26	Clothing
3	3	2023-01-13	CUST003	Male	50	Electronics
4	4	2023-05-21	CUST004	Male	37	Clothing
5	5	2023-05-06	CUST005	Male	30	Beauty
6	6	2023-04-25	CUST006	Female	45	Beauty
7	7	2023-03-13	CUST007	Male	46	Clothing
8	8	2023-02-22	CUST008	Male	30	Electronics

Question 1

The screenshot shows the Snowflake web interface with a query executed in the 'SALES.RETAIL' database. The query is:

```
3 .....
4 SELECT transaction_id,
5 Date,
6 customer_id
7 FROM retail_sales_dataset
```

The results are displayed in a table with 9 rows. The columns are: #, TRANSACTION_ID, DATE, and CUSTOMER_ID. The query details show a duration of 441ms and 1K rows.

#	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
8	8	2023-02-22	CUST008
9	9	2023-12-13	CUST009

QUESTION 2

2025-10-04 10:26am 2025-10-11 11:30am 2025-10-16 2:21pm

ACCOUNTADMIN COMPUTE_WH (X-Small) Share

SALES.RETAIL Settings

1 SELECT DISTINCT product_category
2 FROM retail_sales_dataset

Results Chart

PRODUCT_CATEGORY
1 Clothing
2 Beauty
3 Electronics

Query Details

Query duration 85ms

Rows 3

Query ID 01bfbfa0-000c-b0ed-0...

Show more

PRODUCT_CATEGORY

100% filled

QUESTION 3

2025-10-04 10:26am 2025-10-11 11:30am 2025-10-16 2:21pm

ACCOUNTADMIN COMPUTE_WH (X-Small) Share

SALES.RETAIL Settings

1 SELECT DISTINCT product_category
2 FROM retail_sales_dataset

Results Chart

PRODUCT_CATEGORY
1 Clothing
2 Beauty
3 Electronics

Query Details

Query duration 85ms

Rows 3

Query ID 01bfbfa0-000c-b0ed-0...

Show more

PRODUCT_CATEGORY

100% filled

QUESTION4

app.snowflake.com/af-south-1.aws/tp56197/w1t7lw5CMzpf#query

2025-10-04 10:26am 2025-10-11 11:30am 2025-10-16 2:21pm

ACCOUNTADMIN COMPUTE_WH (X-Small) Share

SALES.RETAIL Settings

```
1 SELECT DISTINCT gender
2 FROM retail_sales_dataset
```

Results Chart

	GENDER
1	Male
2	Female

Query Details

Query duration 73ms

Rows 2

Query ID 01bfbfa1-000c-b0ed-00...

Show more

GENDER 100% filled

QUESTION 4

app.snowflake.com/af-south-1.aws/tp56197/w1t7lw5CMzpf#query

2025-10-04 10:26am 2025-10-11 11:30am 2025-10-16 2:21pm

ACCOUNTADMIN COMPUTE_WH (X-Small) Share

SALES.RETAIL Settings

```
1 SELECT *
2 FROM retail_sales_dataset
3 WHERE Age>40
```

Results Chart

	TRANSACTION_ID	DATE	CUSTOMER_ID	GENDER	AGE	PRODUCT_CATEGORY	QUANTITY	PRICE_PER_UNIT
1	3	2023-01-13	CUST003	Male	50	Electronics	1	
2	6	2023-04-25	CUST006	Female	45	Beauty	1	
3	7	2023-03-13	CUST007	Male	46	Clothing	2	
4	9	2023-12-13	CUST009	Male	63	Electronics	2	
5	10	2023-10-07	CUST010	Female	52	Clothing	4	
6	14	2023-01-17	CUST014	Male	64	Clothing	4	
7	15	2023-01-16	CUST015	Female	42	Electronics	4	
8	18	2023-04-30	CUST018	Female	47	Electronics	2	

Query Details

Query duration 74ms

Rows 534

Query ID 01bfbfa2-000c-b0ed-00...

Show more

TRANSACTION_ID #

QUESTION 5

app.snowflake.com/af-south-1.aws/tp56197/w1t7w5CMzpf#query

2025-10-04 10:26am 2025-10-11 11:30am 2025-10-16 2:21pm

ACCOUNTADMIN COMPUTE_WH (X-Small) Share

```
1 SELECT*
2 FROM retail_sales_dataset
3 WHERE PRICE_PER_UNIT
4 BETWEEN 100 and 500
```

Results Chart

	#	TRANSACTION_ID	DATE	CUSTOMER_ID	GENDER	AGE	PRODUCT_CATEGORY	QUANTITY	PRICE_PER_UNIT
1	2	2023-02-27	CUST002	Female	26	Clothing	2		
2	4	2023-05-21	CUST004	Male	37	Clothing	1		
3	9	2023-12-13	CUST009	Male	63	Electronics	2		
4	13	2023-08-05	CUST013	Male	22	Electronics	3		
5	15	2023-01-16	CUST015	Female	42	Electronics	4		
6	16	2023-02-17	CUST016	Male	19	Clothing	3		
7	20	2023-11-05	CUST020	Male	22	Clothing	3		
8	21	2023-01-14	CUST021	Female	50	Beauty	1		

Query Details

Query duration 35ms

Rows 398

Query ID 01bfbfa8-000c-b0ed-0...

Show more

TRANSACTION_ID #

14:56 2025/10/16

QUESTION 6

app.snowflake.com/af-south-1.aws/tp56197/w2VzBZPz6B1#query

2025-10-04 10:26am 2025-10-11 11:30am 2025-10-16 2:21pm 2025-10-16 5:23pm

ACCOUNTADMIN COMPUTE_WH (X-Small) Share

```
1 SELECT*
2 FROM retail_sales_dataset
3 WHERE product_category <> 'clothing';
```

Results Chart

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

Query Details

Query duration 433ms

Rows 1K

Query ID 01bfc072-000c-b0ed-0...

Show more

TRANSACTION_ID #

18:19 2025/10/16

QUESTION 7

FADZAI MAKANDA

2025-10-04 10:26am 2025-10-11 11:30am 2025-10-16 2:21pm 2025-10-16 5:23pm

ACCOUNTADMIN COMPUTE_WH (X-Small) Share

SALES.RETAIL Settings

```

1 display all transactions where the product category is NOT "clothing".
2
3 SELECT*
4 FROM retail_sales_dataset
5 WHERE product_category <> 'clothing';

```

Results Chart

	# TRANSACTION_ID	DATE	CUSTOMER_ID	GENDER	# AGE	PRODUCT_CATEGORY	# QUANTITY	# PRICE_PER_L
1	1	2023-11-24	CUST001	Male	34	Beauty	3	
2	2	2023-02-27	CUST002	Female	26	Clothing	2	
3	3	2023-01-13	CUST003	Male	50	Electronics	1	
4	4	2023-05-21	CUST004	Male	37	Clothing	1	
5	5	2023-05-06	CUST005	Male	30	Beauty	2	
6	6	2023-04-25	CUST006	Female	45	Beauty	1	
7	7	2023-03-13	CUST007	Male	46	Clothing	2	
8	8	2023-02-22	CUST008	Male	30	Electronics	4	

Query Details

Query duration 433ms

Rows 1K

Query ID 01bfc072-000c-b0ed-9...

Show more

TRANSACTION_ID #

1 1000

QUESTION 8

FADZAI MAKANDA

2025-10-04 10:26am 2025-10-11 11:30am 2025-10-16 2:21pm 2025-10-16 5:23pm

ACCOUNTADMIN COMPUTE_WH (X-Small) Share

SALES.RETAIL Settings

```

1 display all transactions where the Quality is greater or equal to 3.
2
3 SELECT*
4 FROM retail_sales_dataset
5 WHERE Quantity >= 3;

```

Results Chart

	# TRANSACTION_ID	DATE	CUSTOMER_ID	GENDER	# AGE	PRODUCT_CATEGORY	# QUANTITY	# PRICE_PER_L
1	1	2023-11-24	CUST001	Male	34	Beauty	3	
2	8	2023-02-22	CUST008	Male	30	Electronics	4	
3	10	2023-10-07	CUST010	Female	52	Clothing	4	
4	12	2023-10-30	CUST012	Male	35	Beauty	3	
5	13	2023-08-05	CUST013	Male	22	Electronics	3	
6	14	2023-01-17	CUST014	Male	64	Clothing	4	
7	15	2023-01-16	CUST015	Female	42	Electronics	4	
8	16	2023-02-17	CUST016	Male	19	Clothing	3	

Query Details

Query duration 58ms

Rows 504

Query ID 01bfc078-000c-b0ed-9...

Show more

TRANSACTION_ID #

1 1000

QUESTION 9

FADZAI MAKANDA

app.snowflake.com/af-south-1.aws/tp56197/w2VzBZPz6BI1#query

2025-10-04 10:26am 2025-10-11 11:30am 2025-10-16 2:21pm 2025-10-16 5:23pm

ACCOUNTADMIN COMPUTE_WH (X-Small) Share

SALES.RETAIL Settings

6
7 COUNT the total number of transactions.
8
9 SELECT COUNT(*) AS Total_transactions
10 FROM retail_sales_dataset

Results Chart

# TOTAL_TRANSACTIONS	
1	1000

Query Details

Query duration 30ms

Rows 1

Query ID 01bfc07e-000c-b0ed-0...

Show more

TOTAL_TRANSACTIONS #

100% filled

QUESTION 10

FADZAI MAKANDA

app.snowflake.com/af-south-1.aws/tp56197/w2VzBZPz6BI1#query

2025-10-04 10:26am 2025-10-11 11:30am 2025-10-16 2:21pm 2025-10-16 5:23pm

ACCOUNTADMIN COMPUTE_WH (X-Small) Share

SALES.RETAIL Settings

11
12 Find the average Age of customers.
13
14 SELECT AVG(Age) AS average_age
15 FROM retail_sales_dataset

Results Chart

# AVERAGE_AGE	
1	41.392000

Query Details

Query duration 533ms

Rows 1

Query ID 01bfc084-000c-b0ed-0...

Show more

AVERAGE_AGE #

100% filled

QUESTION 11

FADZAI MAKANDA

2025-10-04 10:26am 2025-10-11 11:30am 2025-10-16 2:21pm 2025-10-16 5:23pm

ACCOUNTADMIN COMPUTE_WH (X-Small) Share

SALES.RETAIL Settings

Find the total quantity of products sold.

```
SELECT SUM(quantity) AS quantity_sold
FROM retail_sales_dataset
```

Results Chart

#	QUANTITY_SOLD
1	2514

Query Details

Query duration 67ms

Rows 1

Query ID 01bfc089-000c-b0ed-9...

Show more

QUANTITY_SOLD #

100% filled

QUESTION 12

FADZAI MAKANDA

2025-10-04 10:26am 2025-10-11 11:30am 2025-10-16 2:21pm 2025-10-16 5:23pm

ACCOUNTADMIN COMPUTE_WH (X-Small) Share

SALES.RETAIL Settings

Find the maximum Total Amount spent in a single transaction.

```
SELECT MAX(total_amount) AS Max_Total_Amount
FROM retail_sales_dataset
```

Results Chart

#	MAX_TOTAL_AMOUNT
1	2000

Query Details

Query duration 21ms

Rows 1

Query ID 01bfc08c-000c-b0ed-9...

Show more

MAX_TOTAL_AMOUNT #

100% filled

QUESTION 13

FADZAI MAKANDA

The screenshot shows a Snowflake query interface. The query is: `SELECT MIN(price_per_unit) AS Min_Price_per_Unit FROM retail_sales_dataset;`. The results table has one column, `MIN_PRICE_PER_UNIT`, and one row with the value 25. The query details show a duration of 28ms and 1 row.

MIN_PRICE_PER_UNIT
25

Query Details: Query duration 28ms, Rows 1, Query ID 01bfc090-000c-b0ed-9...

QUESTION 14

FADZAI MAKANDA

The screenshot shows a Snowflake query interface. The query is: `SELECT product_category, COUNT(*) AS Transaction_count FROM retail_sales_dataset GROUP BY product_category;`. The results table has two columns, `PRODUCT_CATEGORY` and `TRANSACTION_COUNT`, and three rows: Clothing (351), Beauty (307), and Electronics (342). The query details show a duration of 422ms and 3 rows.

PRODUCT_CATEGORY	TRANSACTION_COUNT
Clothing	351
Beauty	307
Electronics	342

Query Details: Query duration 422ms, Rows 3, Query ID 01bfc094-000c-b0ed-9...

QUESTION 15

FADZAI MAKANDA

2025-10-04 10:26am 2025-10-11 11:30am 2025-10-16 2:21pm 2025-10-16 5:23pm

ACCOUNTADMIN COMPUTE_WH (X-Small) Share

SALES.RETAIL Settings

Find the total revenue(Total Amount)per gender.
39 SELECT SUM(total_Amount)AS Total_Revenue,
40 gender
41 FROM retail_sales_dataset
42 GROUP BY gender;
43

Results Chart

#	TOTAL_REVENUE	GENDER
1	223160	Male
2	232840	Female

Query Details

Query duration 74ms

Rows 2

Query ID 01bfc09a-000c-b0ed-9...

Show more

TOTAL_REVENUE #

223160 232840

QUESTION 16

FADZAI MAKANDA

2025-10-04 10:26am 2025-10-11 11:30am 2025-10-16 2:21pm 2025-10-16 5:23pm

ACCOUNTADMIN COMPUTE_WH (X-Small) Share

SALES.RETAIL Settings

Find the average Price per Unit per product category.
45 SELECT product_category,
46 AVG(price_per_Unit)AS avg_price
47 FROM retail_sales_dataset
48 GROUP BY product_category;
49

Results Chart

	PRODUCT_CATEGORY	# AVG_PRICE
1	Beauty	184.055375
2	Clothing	174.287749
3	Electronics	181.900585

Query Details

Query duration 87ms

Rows 3

Query ID 01bfc09d-000c-b0ed-9...

Show more

PRODUCT_CATEGORY

100% filled

QUESTION 17

FADZAI MAKANDA

2025-10-04 10:26am 2025-10-11 11:30am 2025-10-16 2:21pm 2025-10-16 5:23pm

ACCOUNTADMIN COMPUTE_WH (X-Small) Share

SALES.RETAIL Settings

```

52 SELECT product_category,
53        SUM(total_amount) AS total_revenue
54 FROM retail_sales_dataset
55 GROUP BY product_category
56 HAVING total_revenue > 10000;

```

Results Chart

	PRODUCT_CATEGORY	TOTAL_REVENUE
1	Beauty	143515
2	Clothing	155580
3	Electronics	156905

Query Details

- Query duration: 100ms
- Rows: 3
- Query ID: 01bfc0a3-000c-b0ed-9...

Show more

PRODUCT_CATEGORY 100% filled

QUESTION 18

FADZAI MAKANDA

2025-10-04 10:26am 2025-10-11 11:30am 2025-10-16 2:21pm 2025-10-16 5:23pm

ACCOUNTADMIN COMPUTE_WH (X-Small) Share

SALES.RETAIL Settings

```

40 SELECT SUM(total_Amount) AS Total_Revenue,
41        gender
42 FROM retail_sales_dataset
43 GROUP BY gender;
44
45 Find the average Price per Unit per product category

```

Results Chart

	PRODUCT_CATEGORY	AVERAGE_QUANTITY
1	Beauty	2.511401
2	Clothing	2.547009
3	Electronics	2.482456

Query Details

- Query duration: 90ms
- Rows: 3
- Query ID: 01bfc0ac-000c-b0ed-9...

Show more

PRODUCT_CATEGORY 100% filled

QUESTION 19

FADZAI MAKANDA

2025-10-04 10:26am 2025-10-11 11:30am 2025-10-16 2:21pm 2025-10-16 5:23pm

ACCOUNTADMIN COMPUTE_WH (X-Small) Share

```
66 SELECT Transaction_id,
67        Total_amount,
68        CASE WHEN Total_amount>1000 THEN 'High'
69        ELSE 'Low'
70        END AS Spending_Level
```

Results Chart

	# 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
9	9	600	Low

Query Details

Query duration 432ms

Rows 1K

Query ID 01bfc0b8-000c-b0ed-0...

Show more

TRANSACTION_ID #

1 1000

QUESTION 20

FADZAI MAKANDA

2025-10-04 10:26am 2025-10-11 11:30am 2025-10-16 2:21pm 2025-10-16 5:23pm

ACCOUNTADMIN COMPUTE_WH (X-Small) Share

```
109 CASE
110 WHEN age < 30 THEN 'Youth'
111 WHEN age BETWEEN 30 AND 59 THEN 'Adult'
112 WHEN age >= 60 THEN 'Senior'
113 ELSE 'Unknown'
114 END AS age_group
```

Results 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
7	CUST007	46	Adult
8	CUST008	30	Adult
9	CUST009	63	Senior

Query Details

Query duration 1.3s

Rows 1K

Query ID 01bfc709-000c-b147-0...

Show more

CUSTOMER_ID

100% filled

QUESTION 21

FADZAI MAKANDA