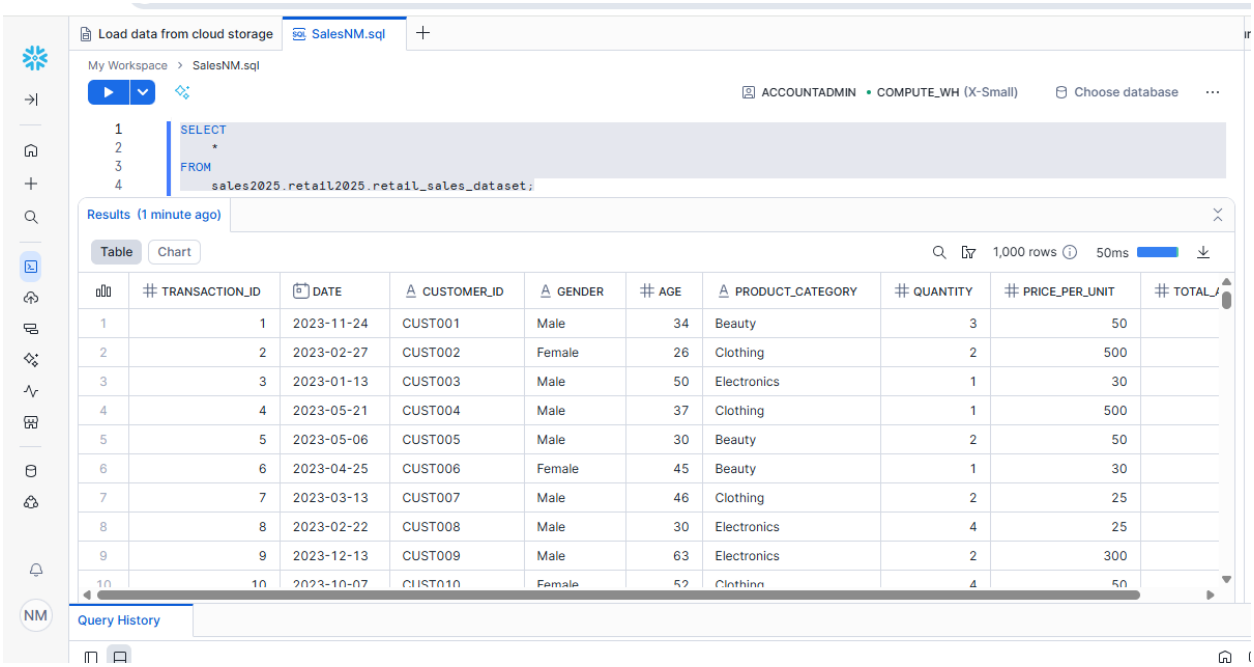
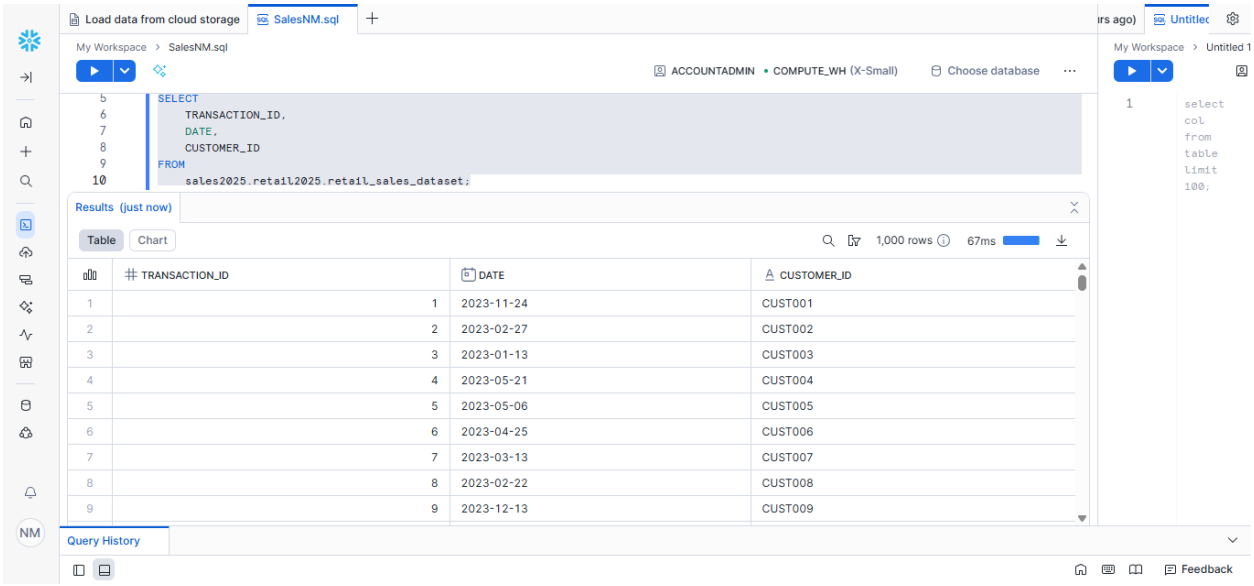
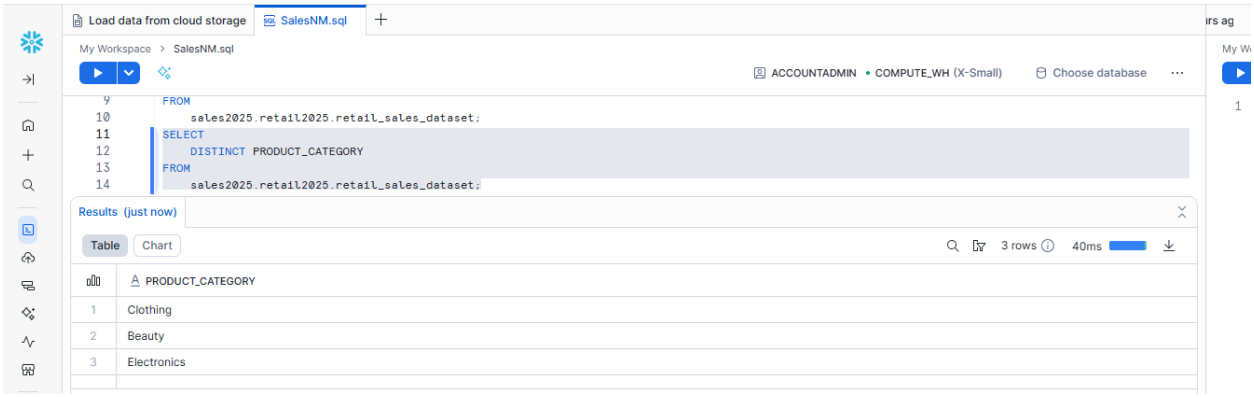
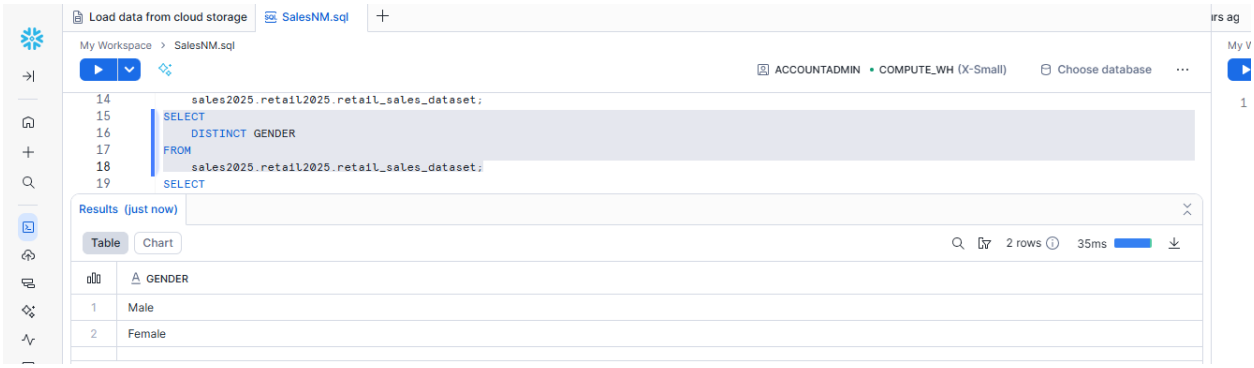
Nolwandle Mkwanazi

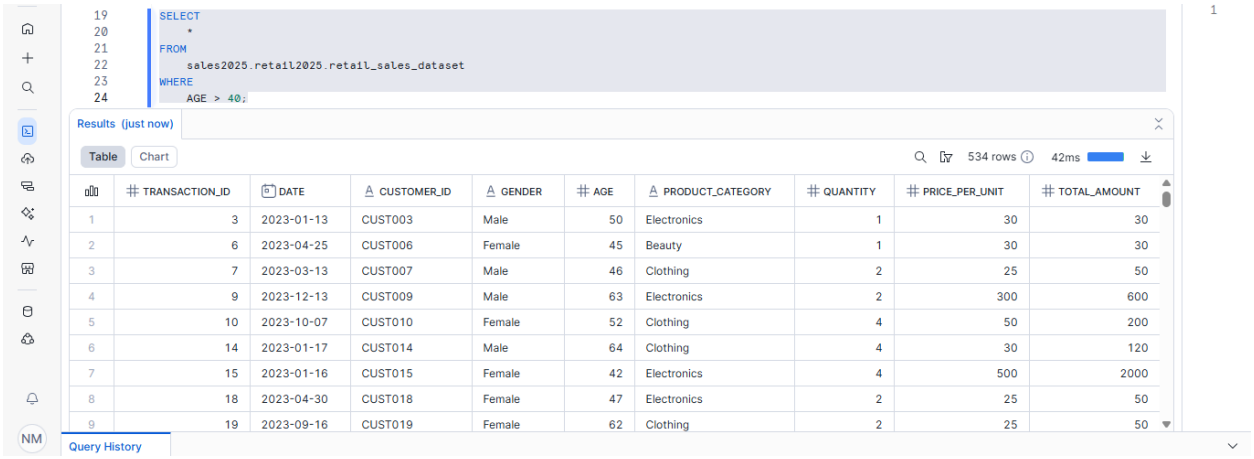
Coding Practical 1: Basic SQL Syntax






Load data from cloud storage
SalesNM.sql
My Workspace › SalesNM.sql
ACCOUNTADMIN • COMPUTE_WH (X-Small)
Choose database
FROM
sales2025.retail2025.retail_sales_dataset;
SELECT
DISTINCT PRODUCT_CATEGORY
FROM
sales2025.retail2025.retail_sales_dataset;
Results (just now)
Table
Chart
3 rows
40ms
PRODUCT_CATEGORY
1 Clothing
2 Beauty
3 Electronics


Load data from cloud storage
SalesNM.sql
My Workspace › SalesNM.sql
ACCOUNTADMIN • COMPUTE_WH (X-Small)
Choose database
sales2025.retail2025.retail_sales_dataset;
SELECT
DISTINCT GENDER
FROM
sales2025.retail2025.retail_sales_dataset;
SELECT
Results (just now)
Table
Chart
2 rows
35ms
GENDER
1 Male
2 Female


SELECT
*
FROM
sales2025.retail2025.retail_sales_dataset
WHERE
AGE > 40;
Results (just now)
Table
Chart
534 rows
42ms
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
7 15 2023-01-16 CUST015 Female 42 Electronics 4 500 2000
8 18 2023-04-30 CUST018 Female 47 Electronics 2 25 50
9 19 2023-09-16 CUST019 Female 62 Clothing 2 25 50
Query History

```sql
SELECT
    *
FROM
    sales2025.retail2025.retail_sales_dataset
WHERE
    "PRICE_PER_UNIT" BETWEEN 100
    AND 500;
```

Results (just now)

Table | Chart — 396 rows — 46ms

	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	2023-01-16	CUST015	Female	42	Electronics	4	500	2000
6	16	2023-02-17	CUST016	Male	19	Clothing	3	500	1500
7	20	2023-11-05	CUST020	Male	22	Clothing	3	300	900
8	21	2023-01-14	CUST021	Female	50	Beauty	1	500	500

```sql
SELECT
    *
FROM
    sales2025.retail2025.retail_sales_dataset
WHERE
    "PRODUCT_CATEGORY" IN ('Beauty', 'Electronics');
```

Results (just now)

Table | Chart — 649 rows — 45ms

	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
7	12	2023-10-30	CUST012	Male	35	Beauty	3	25	75
8	13	2023-08-05	CUST013	Male	22	Electronics	3	500	1500
9	15	2023-01-16	CUST015	Female	42	Electronics	4	500	2000

```sql
SELECT
    *
FROM
    SALES2025.RETAIL2025.RETAIL_SALES_DATASET
WHERE
    "PRODUCT_CATEGORY" <> 'Clothing';
```

Results (just now)

Table | Chart — 649 rows — 26ms

	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
7	12	2023-10-30	CUST012	Male	35	Beauty	3	25	75
8	13	2023-08-05	CUST013	Male	22	Electronics	3	500	1500

```sql
SELECT
    *
FROM
    SALES2025.RETAIL2025.RETAIL_SALES_DATASET
WHERE
    QUANTITY >= 3;
SELECT
```

Results (just now)

Table | Chart — 504 rows — 27ms

	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

```sql
SELECT
    COUNT(*) AS TOTAL_TRANSACTION
FROM
    SALES2025.RETAIL2025.RETAIL_SALES_DATASET;
SELECT
```

Results (just now)

Table | Chart — 1 row — 31ms

	TOTAL_TRANSACTION
1	1000

```sql
SELECT
    AVG(Age) AS average_age
FROM
    SALES2025.RETAIL2025.RETAIL_SALES_DATASET;
```

Results (just now)

Table | Chart — 1 row — 26ms

	AVERAGE_AGE
1	41.392000

```sql
SELECT
    SUM(Quantity) AS total_quantity_sold
FROM
    SALES2025.RETAIL2025.RETAIL_SALES_DATASET;
```

Results (just now)

Table | Chart — 1 row — 36ms

	TOTAL_QUANTITY_SOLD
1	2514

```sql
SELECT
    MAX(total_amount) AS total_amount_spent
FROM
    SALES2025.RETAIL2025.RETAIL_SALES_DATASET;
```

Results (just now)

Table | Chart — 1 row — 37ms

	TOTAL_AMOUNT_SPENT
1	2000

```sql
SELECT
    MIN(price_per_unit)
FROM
    sales2025.retail2025.retail_sales_dataset;
```

Results (just now)

Table | Chart — 1 row — 35ms

	MIN(PRICE_PER_UNIT)
1	25

```sql
SELECT
    COUNT(TRANSACTION_ID) AS number_of_transactions
FROM
    SALES2025.RETAIL2025.RETAIL_SALES_DATASET
GROUP BY
    product_category;
```

Results (just now)

Table | Chart — 3 rows — 24ms

	NUMBER_OF_TRANSACTIONS
1	307
2	351
3	342

```sql
SELECT
    SUM(QUANTITY * PRICE_PER_UNIT) AS TOTAL_REVENUE
FROM
    SALES2025.RETAIL2025.RETAIL_SALES_DATASET
GROUP BY
    GENDER;
```

Results (just now)

Table | Chart — 2 rows — 40ms

	TOTAL_REVENUE
1	223160
2	232840

```sql
SELECT
    SUM(TOTAL_AMOUNT) / SUM(QUANTITY) AS AVERAGE_PRICE_PER_UNIT
FROM
    sales2025.retail2025.retail_sales_dataset
GROUP BY
    PRODUCT_CATEGORY;
```

Results (just now)

Table | Chart — 3 rows — 25ms

	AVERAGE_PRICE_PER_UNIT
1	186.141375
2	174.026846
3	184.811543

```sql
SELECT
    AVG (QUANTITY) AS AVERAGE_QUANTITY
FROM
    SALES2025.RETAIL2025.RETAIL_SALES_DATASET
GROUP BY
    PRODUCT_CATEGORY
HAVING
    AVERAGE_QUANTITY > 2;
```

Results (just now)

Table | Chart — 3 rows — 1.7s

	AVERAGE_QUANTITY
1	2.511401
2	2.547009
3	2.482456

```sql
SELECT
    CUSTOMER_ID,
    TOTAL_AMOUNT,CASE
        when(quantity * PRICE_PER_UNIT) > 1000 THEN 'HIGH'
        ELSE 'LOW'
    END AS spending_level
FROM
    sales2025.retail2025.retail_sales_dataset;
```

Results (just now)

Table | Chart — 1,000 rows — 30ms

	CUSTOMER_ID	TOTAL_AMOUNT	SPENDING_LEVEL
1	CUST001	150	LOW
2	CUST002	1000	LOW
3	CUST003	30	LOW
4	CUST004	500	LOW
5	CUST005	100	LOW
6	CUST006	30	LOW

```sql
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
sales2025.retail2025.retail_sales_dataset
```

Results (just now)

Table | Chart — 1,000 rows — 61ms

	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