### 1. Viewing the Complete Customer Table

SELECT \* FROM `ekartdataset.customer\_t`

#### 2. Counting Total Rows in the Customer Table

SELECT COUNT(\*) AS total\_rows FROM `ekartdataset.customer t`

# 3. Counting Customers by Occupation (Sorted Descending)

SELECT OCCUPATION, COUNT(\*) AS count FROM `ekartdataset.customer\_t`
GROUP BY OCCUPATION
ORDER BY count DESC;

### 4. Viewing Distinct Occupation Categories

SELECT DISTINCT OCCUPATION FROM `ekartdataset.customer\_t`;

### 5. Viewing Sample Records from the Sales Table (First 20 Rows)

SELECT \*
FROM `ekartdataset.sales\_t`
LIMIT 20;

## 6. Counting Total Rows in the Sales Table

SELECT COUNT(\*) AS total\_rows FROM `ekartdataset.sales\_t`

### 7. Joining Customer and Sales Tables to View Key Info

```
SELECT
c.customer_id,
c.first_name,
c.last_name,
c.occupation,
```

```
s.revenue,
s.total_orders
FROM `ekart-assignment.ekartdataset.customer_t` c
JOIN `ekart-assignment.ekartdataset.sales_t` s
ON c.customer_id = s.customer_id
LIMIT 10;
```

# 8. Cleaning Occupation Field in the Joined Data

```
SELECT
c.customer_id,
c.first_name,
c.last_name,
CASE
WHEN c.occupation = 'Blue Collar' THEN 'Blue-Collar'
ELSE c.occupation
END AS cleaned_occupation,
s.revenue,
s.total_orders
FROM `ekart-assignment.ekartdataset.customer_t` c
JOIN `ekart-assignment.ekartdataset.sales_t` s
ON c.customer_id = s.customer_id
LIMIT 10;
```

# 9. Creating Age Categories Based on Date of Birth

```
SELECT
c.customer_id,
CASE
WHEN DATE_DIFF(CURRENT_DATE(), c.DOB, YEAR) <= 19 THEN '19 or below'
WHEN DATE_DIFF(CURRENT_DATE(), c.DOB, YEAR) BETWEEN 20 AND 29 THEN '20-29'
WHEN DATE_DIFF(CURRENT_DATE(), c.DOB, YEAR) BETWEEN 30 AND 39 THEN '30-39'
WHEN DATE_DIFF(CURRENT_DATE(), c.DOB, YEAR) BETWEEN 40 AND 49 THEN '40-49'
ELSE '50 and above'
END AS age_category
FROM `ekart-assignment.ekartdataset.customer_t` c

JOIN `ekart-assignment.ekartdataset.sales_t` s
ON c.customer_id = s.customer_id
LIMIT 10;
```

## 10. Final Cleaned Dataset with Demographic and Behavioral Insights

- Combines customer and sales data
- Cleans occupation values

- Computes age and age category
- Adds detailed order and revenue breakdowns

#### **SELECT**

c.CUSTOMER ID,

CONCAT(c.FIRST\_NAME, '', c.LAST\_NAME) AS CUSTOMER\_NAME,

c.EMAIL ID,

-- Cleaned OCCUPATION field

**CASE** 

WHEN c.OCCUPATION = 'Blue Collar' THEN 'Blue-Collar'

ELSE c.OCCUPATION

END AS CLEANED\_OCCUPATION,

c.DOB,

-- Calculated AGE

DATE DIFF(CURRENT DATE(), DATE(c.DOB), YEAR) AS AGE,

-- Age Categories

**CASE** 

WHEN DATE\_DIFF(CURRENT\_DATE(), DATE(c.DOB), YEAR) <= 19 THEN '19 & below' WHEN DATE\_DIFF(CURRENT\_DATE(), DATE(c.DOB), YEAR) BETWEEN 20 AND 29 THEN '20-29'

WHEN DATE\_DIFF(CURRENT\_DATE(), DATE(c.DOB), YEAR) BETWEEN 30 AND 39 THEN '30-39'

WHEN DATE\_DIFF(CURRENT\_DATE(), DATE(c.DOB), YEAR) BETWEEN 40 AND 49 THEN '40-49'

ELSE '50 and above'

END AS AGE\_CATEGORY,

- -- Sales info
- s.TOTAL ORDERS,
- s.REVENUE,
- s.AVERAGE ORDER VALUE,
- s.CARRIAGE REVENUE,
- s.FIRST\_ORDER\_DATE,
- s.LATEST\_ORDER\_DATE,
- -- Additional fields
- s.AVERAGESHIPPING,
- s.AVGDAYSBETWEENORDERS,
- s.DAYSSINCELASTORDER,
- s.MONDAY\_ORDERS,

```
s.TUESDAY_ORDERS,
```

- s.WEDNESDAY\_ORDERS,
- s.THURSDAY ORDERS,
- s.FRIDAY\_ORDERS,
- s.SATURDAY\_ORDERS,
- s.SUNDAY\_ORDERS,
- s.MONDAY REVENUE,
- s.TUESDAY\_REVENUE,
- s.WEDNESDAY\_REVENUE,
- s.THURSDAY REVENUE,
- s.FRIDAY REVENUE,
- s.SATURDAY\_REVENUE,
- s.SUNDAY\_REVENUE,
- s.WEEK1\_DAY01\_DAY07\_ORDERS,
- s.WEEK2\_DAY08\_DAY15\_ORDERS,
- s.WEEK3\_DAY16\_DAY23\_ORDERS,
- s.WEEK4\_DAY24\_DAY31\_ORDERS,
- s.WEEK1 DAY01 DAY07 REVENUE,
- s.WEEK2\_DAY08\_DAY15\_REVENUE,
- s.WEEK3 DAY16 DAY23 REVENUE,
- s.WEEK4\_DAY24\_DAY31\_REVENUE,
- s.TIME\_0000\_0600\_ORDERS,
- s.TIME 0601 1200 ORDERS,
- s.TIME 1200 1800 ORDERS,
- s.TIME\_1801\_2359\_ORDERS,
- s.TIME 0000 0600 REVENUE,
- s.TIME\_0601\_1200\_REVENUE,
- s.TIME 1200 1800 REVENUE,
- s.TIME\_1801\_2359\_REVENUE

FROM `ekart-assignment.ekartdataset.customer\_t` c

JOIN `ekart-assignment.ekartdataset.sales\_t` s

ON c.customer id = s.customer id