# SQL Practice Questions on Snowflake (with Answers)

## Q1. Retrieve all records from the dataset

SELECT \*   
FROM DIWALI\_SALES;

## Q2. Count total number of sales records

SELECT COUNT(\*) AS total\_records  
FROM DIWALI\_SALES;

## Q3. Find distinct states where sales occurred

SELECT DISTINCT State   
FROM DIWALI\_SALES;

## Q4. Total sales amount by each state (highest first)

SELECT State, SUM(Amount) AS total\_sales  
FROM DIWALI\_SALES  
GROUP BY State  
ORDER BY total\_sales DESC;

## Q5. Average order amount by gender

SELECT Gender, AVG(Amount) AS avg\_order\_amount  
FROM DIWALI\_SALES  
GROUP BY Gender;

## Q6. Top 5 customers with highest total purchase amount

SELECT Cust\_name, SUM(Amount) AS total\_spent  
FROM DIWALI\_SALES  
GROUP BY Cust\_name  
ORDER BY total\_spent DESC  
LIMIT 5;

## Q7. Number of orders placed per product category

SELECT Product\_Category, COUNT(Product\_ID) AS total\_orders  
FROM DIWALI\_SALES  
GROUP BY Product\_Category  
ORDER BY total\_orders DESC;

## Q8. Sales distribution across age groups

SELECT "Age Group", SUM(Amount) AS total\_sales  
FROM DIWALI\_SALES  
GROUP BY "Age Group"  
ORDER BY total\_sales DESC;

## Q9. Find total orders and sales amount by occupation

SELECT Occupation, SUM(Orders) AS total\_orders, SUM(Amount) AS total\_amount  
FROM DIWALI\_SALES  
GROUP BY Occupation  
ORDER BY total\_amount DESC;

## Q10. Filter all female customers from Maharashtra

SELECT Cust\_name, State, Gender, Amount  
FROM DIWALI\_SALES  
WHERE Gender = 'F'   
 AND State = 'Maharashtra';

## Q11. Top 3 states with highest number of orders

SELECT State, SUM(Orders) AS total\_orders  
FROM DIWALI\_SALES  
GROUP BY State  
ORDER BY total\_orders DESC  
LIMIT 3;

## Q12. Find average customer age per zone

SELECT Zone, AVG(Age) AS avg\_age  
FROM DIWALI\_SALES  
GROUP BY Zone;

## Q13. Compare married vs unmarried customers (0 = unmarried, 1 = married)

SELECT Marital\_Status, COUNT(DISTINCT User\_ID) AS total\_customers  
FROM DIWALI\_SALES  
GROUP BY Marital\_Status;

## Q14. Find product category with maximum revenue

SELECT Product\_Category, SUM(Amount) AS total\_revenue  
FROM DIWALI\_SALES  
GROUP BY Product\_Category  
ORDER BY total\_revenue DESC  
LIMIT 1;

## Q15. Find customers who placed more than 5 orders

SELECT Cust\_name, SUM(Orders) AS total\_orders  
FROM DIWALI\_SALES  
GROUP BY Cust\_name  
HAVING SUM(Orders) > 5  
ORDER BY total\_orders DESC;

**SQL commands in Snowflake** that can help in **predicting or analyzing sales trends** by different factors such as **age group, city/state, occupation, and gender**.

Here are some useful query commands:

**🔹 1. Predicting Sales by Age Group**

SELECT "Age Group",

SUM(Amount) AS total\_sales,

AVG(Amount) AS avg\_purchase,

COUNT(DISTINCT User\_ID) AS unique\_customers

FROM DIWALI\_SALES

GROUP BY "Age Group"

ORDER BY total\_sales DESC;

👉 Helps to see which **age group contributes most to sales**.

**🔹 2. Predicting Sales by City/State**

SELECT State,

SUM(Amount) AS total\_sales,

AVG(Amount) AS avg\_purchase,

COUNT(DISTINCT User\_ID) AS unique\_customers

FROM DIWALI\_SALES

GROUP BY State

ORDER BY total\_sales DESC;

👉 Identifies **top performing cities/states** in sales.

**🔹 3. Predicting Sales by Occupation**

SELECT Occupation,

SUM(Amount) AS total\_sales,

AVG(Amount) AS avg\_purchase,

COUNT(DISTINCT User\_ID) AS unique\_customers

FROM DIWALI\_SALES

GROUP BY Occupation

ORDER BY total\_sales DESC;

👉 Shows **professions that spend the most**.

**🔹 4. Predicting Sales by Gender**

SELECT Gender,

SUM(Amount) AS total\_sales,

AVG(Amount) AS avg\_purchase,

COUNT(DISTINCT User\_ID) AS unique\_customers

FROM DIWALI\_SALES

GROUP BY Gender

ORDER BY total\_sales DESC;

👉 Helps in **understanding buying behavior** of male vs female customers.

**🔹 5. Predicting Sales by Age Group + Gender (Combined Analysis)**

SELECT "Age Group", Gender,

SUM(Amount) AS total\_sales,

AVG(Amount) AS avg\_purchase

FROM DIWALI\_SALES

GROUP BY "Age Group", Gender

ORDER BY total\_sales DESC;

👉 Useful for **marketing campaigns targeted at age + gender segments**.

**🔹 6. Predicting Sales by State + Occupation**

SELECT State, Occupation,

SUM(Amount) AS total\_sales,

AVG(Amount) AS avg\_purchase

FROM DIWALI\_SALES

GROUP BY State, Occupation

ORDER BY total\_sales DESC;

👉 Helps find **which occupation in which city/state spends the most**.

✅ These queries won’t "predict" in a machine learning sense, but they provide **insights into trends**, which is the first step toward prediction.