**Business Questions**

Inspect the table schema

SELECT column\_name, data\_type, is\_nullable, column\_default  
FROM information\_schema.columns  
WHERE table\_name = 'retail';

Q1: Show first 10 rows

select \* from retail  
limit 10;

Q2: Check # of records

SELECT COUNT(\*)  
FROM retail;

Q3: number of clients (e.g. unique client ID)

SELECT COUNT(DISTINCT customer\_id) AS number\_of\_clients

FROM retail;

Q4: invoice date range (e.g. max/min dates)

SELECT   
 MIN(invoice\_date) AS min\_invoice\_date,  
 MAX(invoice\_date) AS max\_invoice\_date  
FROM retail;

Q5: number of SKU/merchants (e.g. unique stock code)

SELECT COUNT(DISTINCT stock\_code) AS num\_skus  
FROM retail;

Q6: Calculate average invoice amount excluding invoices with a negative amount (e.g. canceled orders have negative amount)

SELECT AVG(total\_amount) AS average\_invoice\_amount  
FROM (  
 SELECT   
 invoice\_no,  
 SUM(unit\_price \* quantity) AS total\_amount  
 FROM retail  
 GROUP BY invoice\_no  
 HAVING SUM(unit\_price \* quantity) >= 0  
) AS valid\_invoices;

Q7: Calculate total revenue (e.g. sum of unit\_price \* quantity)

SELECT SUM(unit\_price \* quantity) AS total\_revenue  
FROM retail;

Q8: Calculate total revenue by YYYYMM

SELECT  
 (EXTRACT(YEAR FROM invoice\_date) \* 100 + EXTRACT(MONTH FROM invoice\_date)) AS yyyymm,  
 SUM(unit\_price \* quantity) AS total\_revenue  
FROM  
 retail  
GROUP BY  
 yyyymm  
ORDER BY  
 yyyymm;