# **SQL Assignment 3**

USE DATABASE SQL;

USE SCHEMA PUBLIC;

CREATE TABLE sales (

order\_id INT PRIMARY KEY,

customer\_id INT,

product\_id INT,

product\_name VARCHAR(50),

quantity INT,

unit\_price DECIMAL(10, 2),

order\_date DATE

);

INSERT INTO sales (order\_id, customer\_id, product\_id, product\_name, quantity, unit\_price, order\_date)

VALUES

(1, 101, 1, 'Widget A', 5, 10.00, '2023-01-15'),

(2, 102, 2, 'Widget B', 2, 12.50, '2023-01-16'),

(3, 103, 1, 'Widget A', 3, 10.00, '2023-01-16'),

(4, 104, 3, 'Widget C', 1, 15.75, '2023-01-17'),

(5, 105, 2, 'Widget B', 4, 12.50, '2023-01-17'),

(6, 106, 1, 'Widget A', 2, 10.00, '2023-01-18'),

(7, 107, 4, 'Widget D', 3, 20.00, '2023-01-18'),

(8, 108, 2, 'Widget B', 5, 12.50, '2023-01-19'),

(9, 109, 1, 'Widget A', 1, 10.00, '2023-01-19'),

(10, 101, 3, 'Widget C', 2, 15.75, '2023-01-20');

SELECT \* FROM SALES;

A table with black text and numbers

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--1. Retrieve the total sales quantity and revenue for each product.

SELECT PRODUCT\_NAME, SUM(QUANTITY) AS TOTAL\_SALES\_QUANTITY, SUM(QUANTITY\*UNIT\_PRICE) AS TOTAL\_REVENUE

FROM SALES

GROUP BY PRODUCT\_NAME;

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--2. Find the total revenue for each customer

SELECT CUSTOMER\_ID, SUM(QUANTITY\*UNIT\_PRICE) AS TOTAL\_REVENUE

FROM SALES

GROUP BY CUSTOMER\_ID;

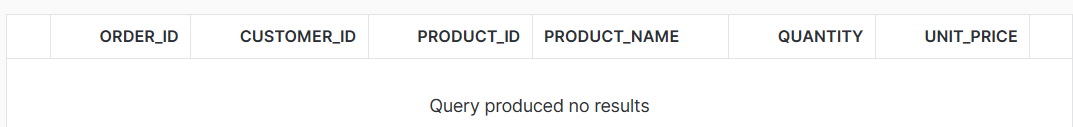
A screenshot of a table

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--3. Get the products with more than 10 units sold in a single order.

SELECT \* FROM SALES

WHERE QUANTITY>10;



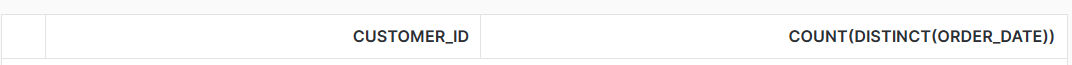
--4. List the customers who have placed orders on at least three different dates.

SELECT CUSTOMER\_ID,COUNT(DISTINCT(ORDER\_DATE))

FROM SALES

GROUP BY CUSTOMER\_ID

HAVING COUNT(ORDER\_DATE)>=3;



--5. Calculate the average unit price of products

SELECT PRODUCT\_ID, PRODUCT\_NAME, ROUND(AVG(UNIT\_PRICE),2)

FROM SALES

GROUP BY PRODUCT\_ID, PRODUCT\_NAME

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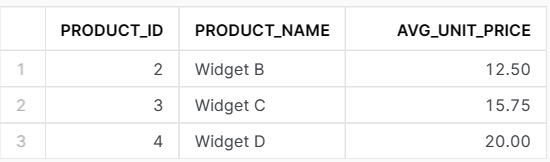
--6. Find the products with an average unit price greater than $12.00

SELECT PRODUCT\_ID, PRODUCT\_NAME, ROUND(AVG(UNIT\_PRICE),2) AS AVG\_UNIT\_PRICE

FROM SALES

GROUP BY PRODUCT\_ID, PRODUCT\_NAME

HAVING ROUND(AVG(UNIT\_PRICE),2)>12;



--7. Retrieve the customers who have spent more than $100.00 in total.

SELECT CUSTOMER\_ID, SUM(QUANTITY\*UNIT\_PRICE) AS TOTAL\_REVENUE

FROM SALES

GROUP BY 1

HAVING TOTAL\_REVENUE > 100;



--8. List the customers who have purchased 'Widget B' and 'Widget A' in the same order.

SELECT CUSTOMER\_ID, PRODUCT\_NAME

FROM SALES

WHERE PRODUCT\_NAME= 'Widget B' AND PRODUCT\_NAME= 'Widget A';

