-- Step 1: Create a new database

CREATE DATABASE store\_sales\_data;

-- Step 2: Use the database

USE store\_sales\_data;

-- Step 3: Create sales\_transactions table

CREATE TABLE sales\_transactions (

transaction\_id INT PRIMARY KEY,

sale\_date DATE NOT NULL,

quantity INT NOT NULL,

unit\_price DECIMAL(10,2) NOT NULL,

category VARCHAR(50)

);

-- Step 4: Insert sample data

INSERT INTO sales\_transactions (transaction\_id, sale\_date, quantity, unit\_price, category) VALUES

(1, '2023-01-05', 2, 50.00, 'Electronics'),

(2, '2023-01-15', 1, 100.00, 'Apparel'),

(3, '2023-02-10', 3, 25.00, 'Groceries'),

(4, '2023-02-22', 2, 150.00, 'Electronics'),

(5, '2023-03-03', 1, 75.00, 'Apparel'),

(6, '2023-03-15', 5, 10.00, 'Groceries'),

(7, '2023-04-02', 2, 90.00, 'Electronics'),

(8, '2023-04-20', 4, 20.00, 'Groceries'),

(9, '2023-05-05', 2, 120.00, 'Apparel'),

(10, '2023-05-22', 3, 15.00, 'Groceries'),

(11, '2023-06-03', 2, 110.00, 'Electronics'),

(12, '2023-06-18', 1, 45.00, 'Apparel'),

(13, '2022-11-25', 1, 80.00, 'Apparel'),

(14, '2022-12-05', 2, 30.00, 'Groceries'),

(15, '2022-12-20', 2, 160.00, 'Electronics');

-- Step 5: Sales Trend Queries

-- 5.1 Monthly Sales Revenue (quantity \* unit\_price)

SELECT

YEAR(sale\_date) AS year,

MONTH(sale\_date) AS month,

SUM(quantity \* unit\_price) AS total\_sales

FROM sales\_transactions

GROUP BY year, month

ORDER BY year, month;

-- 5.2 Yearly Revenue by Category

SELECT

YEAR(sale\_date) AS year,

category,

SUM(quantity \* unit\_price) AS category\_revenue

FROM sales\_transactions

GROUP BY year, category

ORDER BY year, category;

-- 5.3 Top 3 Revenue Months (Formatted)

SELECT

CONCAT(YEAR(sale\_date), '-', LPAD(MONTH(sale\_date), 2, '0')) AS month,

SUM(quantity \* unit\_price) AS monthly\_revenue

FROM sales\_transactions

GROUP BY YEAR(sale\_date), MONTH(sale\_date)

ORDER BY monthly\_revenue DESC

LIMIT 3;

-- 5.4 Average Sale Value per Transaction per Month

SELECT

YEAR(sale\_date) AS year,

MONTH(sale\_date) AS month,

AVG(quantity \* unit\_price) AS avg\_transaction\_value

FROM sales\_transactions

GROUP BY year, month

ORDER BY year, month;







