**SQL Practice Question: Sales Table (DDL, DML & DQL)**

You are managing a database for a small retail business. You need to create and manage a Sales table that stores information about product sales. Complete the tasks below using appropriate SQL statements.

**1. DDL (Data Definition Language)**

**Task:**

Create a table named Sales with the following columns:

|  |  |
| --- | --- |
| **Column Name** | **Description** |
| SaleID | Primary key, auto-incremented |
| SaleDate | Date of the sale |
| CustomerName | Name of the customer |
| Product | Product sold |
| Quantity | Quantity sold |
| PricePerUnit | Price per single unit |
| PaymentMethod | e.g., 'Cash', 'Card', 'Online' |

**2. DML – INSERT (Insert Data)**

**Task:**

Insert the following records into the Sales table:

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **SaleDate** | **CustomerName** | **Product** | **Quantity** | **PricePerUnit** | **PaymentMethod** |
| 2025-05-01 | Alice | Headphones | 2 | 150.00 | Card |
| 2025-05-02 | Bob | Smartphone | 1 | 700.00 | Online |
| 2025-05-03 | Charlie | Charger | 3 | 25.00 | Cash |
| 2025-05-03 | Alice | Laptop | 1 | 1200.00 | Card |

**3. DML – UPDATE (Update Data)**

**Tasks:**

a) Update the payment method to 'Online' for all sales made by 'Alice'.

b) Update the price per unit of 'Charger' to 30.00.

**4. DML – DELETE (Delete Data)**

**Tasks:**

a) Delete all sales records where the quantity is less than 2.

b) Delete the record of any sale made by 'Bob'.

**5. DQL (Data Query Language)**

**Tasks:**

a) List all sales made using the 'Card' payment method.

b) Calculate the total revenue generated (Quantity × PricePerUnit).

c) Display the total quantity of each product sold.

d) Show all sales where the quantity sold is more than 1.

e) Find the customer who spent the most in a single transaction.