

SQL Practical – Store Inventory System

Question

Create the following database and perform SQL queries.

1. Create two tables:
 - StoreItems(ItemID, ItemName, Category, Supplier, PurchaseDate, UnitPrice)
 - Sales(SaleID, ItemID, QuantitySold)
2. Identify primary and foreign keys and create both tables.
3. Insert minimum 2 records into each table.
4. Add new column **SaleDate** to Sales.
5. Find total number of items belonging to “Stationery”.
6. Display all items supplied by “Apex Traders” that have been sold.
7. Count how many items from each category have been sold.

Solutions

1. Create Database and Tables

```
CREATE DATABASE StoreDB;
USE StoreDB;

CREATE TABLE StoreItems(
    ItemID INT PRIMARY KEY,
    ItemName VARCHAR(40),
    Category VARCHAR(20),
    Supplier VARCHAR(30),
    PurchaseDate DATE,
    UnitPrice DECIMAL(8,2)
```

```
);

CREATE TABLE Sales(
    SaleID INT PRIMARY KEY,
    ItemID INT,
    QuantitySold INT,
    FOREIGN KEY (ItemID) REFERENCES StoreItems(ItemID)
);
```

2. Insert Records

```
INSERT INTO StoreItems VALUES
(101, 'Blue Pen', 'Stationery', 'Apex Traders', '2023-01-10', 10),
(102, 'Notebook', 'Stationery', 'Apex Traders', '2023-02-15', 40),
(201, 'USB Cable', 'Electronics', 'TechMart', '2023-03-12', 120);

INSERT INTO Sales VALUES
(1, 101, 20),
(2, 102, 15),
(3, 201, 5);
```

3. Add SaleDate Column

```
ALTER TABLE Sales
ADD SaleDate DATE;
```

4. Count Stationery Items

```
SELECT COUNT(*)
FROM StoreItems
WHERE Category='Stationery';
```

5. Items Sold Supplied by Apex Traders

```
SELECT S.ItemName, S.Supplier
FROM StoreItems S
JOIN Sales X ON S.ItemID = X.ItemID
WHERE Supplier='Apex Traders';
```

6. Items Sold per Category

```
SELECT Category, COUNT(*) AS TotalSold  
FROM StoreItems S  
JOIN Sales X ON S.ItemID = X.ItemID  
GROUP BY Category;
```