SQL Project : Fashionstore Analysis

Project Name

Fashionstore Analysis – SQL

Objectives:

To analyze Fashion Store data and understand customer preferences, sales trends, consumer behaviour, area wise sales and popular items using SQL. The goal is to practice SQL operations such as table creation, joins, grouping, and aggregation on a small relational dataset.

Problem Statement:

A Fashion Store wants to analyze its order data to make better business decisions. They want to know:

-Find Total Orders

- How much total revenue is earned

-Which items are most popular

- Which customers are the most valuable

- How different cities are contributing to orders

- Least Popular item

Using SQL, we’ll create the database, load the data, and answer these business questions and gain useful insights.

Database Design:

1. Customers Table

CREATE TABLE customers (

customer\_id INT PRIMARY KEY,

customer\_name VARCHAR(100),

gender CHAR(1),

city VARCHAR(50)

);

INSERT INTO customers VALUES

(1,'David Warner','M','Hyderabad'),

(2,'Amelia Kerr','F','Mumbai'),

(3,'Dewald Brevis','M','Chennai'),

(4,'Linsey Smith','F','Delhi'),

(5,'Mohit Sharma','M','Lucknow');

Columns in Customers Table – customer\_id, customer\_name, gender, city.

1. Items Table

CREATE TABLE items (

item\_id INT PRIMARY KEY,

item\_name VARCHAR(100),

category VARCHAR(50),

price DECIMAL(10,2));

INSERT INTO items VALUES

(1,'Hoodie','Casual',900),

(2,'Jeans','Western',2000),

(3,'Kurta','Traditional',1000),

(4,'Skirt','Casual',1200),

(5,'Shorts','Western',600),

(6,'Tracksuit','Sportswear',1750);

Columns in Items Table – item\_id, item\_name, category, price.

1. Orders Table

CREATE TABLE orders (

order\_id INT PRIMARY KEY,

customer\_id INT,

order\_date DATE,

total\_amount DECIMAL(10,2),

FOREIGN KEY (customer\_id) REFERENCES customers(customer\_id));

INSERT INTO orders VALUES

(101,1,'2025-01-20',2000),

(102,2,'2025-01-21',3500),

(103,3,'2025-01-22',1500),

(104,5,'2025-01-23',2700),

(105,4,'2025-01-24',1200),

(106,1,'2025-01-25',3000);

Columns in orders table – order\_id, customer\_id, order\_date, total\_amount.

1. Order Details Table

CREATE TABLE order\_details (

order\_id INT,

item\_id INT,

quantity INT,

FOREIGN KEY (order\_id) REFERENCES orders(order\_id),

FOREIGN KEY (item\_id) REFERENCES menu\_items(item\_id));

INSERT INTO order\_details VALUES

(101, 1, 1),

(101, 5, 2),

(101, 6, 1),

(102, 2, 1),

(102, 4, 1),

(103, 3, 2),

(104, 5, 1),

(104, 6, 1),

(105, 4, 2),

(105, 1, 1),

(106, 3, 1),

(106, 6, 2);

Relationships

Relationship Summary

The following Relationship represents the relational structure of the FashionStore Analysis database. It highlights key tables and their relationships (One-to-Many connections).

• CUSTOMERS(1) → ORDERS(Many) = One-to-Many (A customer can place many orders)

• ORDERS(1) → ORDER\_DETAILS(Many) = One-to-Many (An order can contain many items)

• ITEMS(1) → ORDER\_DETAILS(Many) = One-to-Many (A item can appear in many orders)

Relationships:  
- customers (1) → (many) orders  
- orders (1) → (many) order\_details  
- items (1) → (many) order\_details

Basic E-R Structure:

CUSTOMERS (customer\_id)  
 |  
 | 1 --- many  
 |  
ORDERS (order\_id, customer\_id)  
 |  
 | 1 --- many  
 |  
ORDER\_DETAILS (order\_id, item\_id)  
 |  
 | many --- 1  
 |  
ITEMS (item\_id)

SQL Queries & Insights

Question: Find Total Orders

Query: Select Count(\*) from Orders;

Insight : 6 Orders were Placed



Question: What was the total revenue earned ?

Query: Select Sum(total\_amount) from Orders;

Insight : ₹13,900 is the total revenue



Question: What is the Average Order Value

Query: Select Avg(total\_amount) from Orders;

Insight: ₹2316.67 was the average order value



Question: Which Items are most popular ?

Query: Select i.item\_name,sum(od.quantity)

from items i join order\_details od

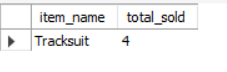
on i.item\_id=od.item\_id

group by i.item\_name

order by total\_sold desc

limit 1;

Insight : The most popular item is Tracksuit , 4 tracksuits were sold.



Question: Which Customer Spends The Most ?

Query : select c.customer\_name, sum(o.total\_amount) as total\_spent

from customers c join orders o

on c.customer\_id=o.customer\_id

group by c.customer\_name

order by total\_spent desc

limit 1;

Insight : David Warner spents the most



Question: How different cities are contributing to orders

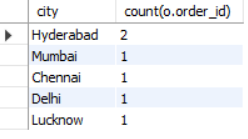
Query: select c.city,count(o.order\_id)

from orders o join customers c

on o.customer\_id=c.customer\_id

group by c.city;

Insight : Hyderabad has highest orders



Insight Generated:

- Total 6 orders and ₹13,900 revenue recorded.  
- Tracksuit and Skirt category drive major sales.  
- David Warner (Hyderabad) is the top spender.  
- Tracksuits are popular.  
- Hyderabad contributes the highest number of orders.

Conclusion :

This project demonstrates how basic SQL operations can be used to analyze fashionstore performance. By understanding customer and product data, businesses can:

* Make the product more better which has less sales
* Identify the areas which have gained a lot of sales and revenue
* Introduce a scheme where they can reward their loyal customers
* Identify their best-seller and most popular item
* Also adjust price for the product by doing some efficient cost cutting