Here’s your **README.md** file content ready to save:

# ShopDB SQL Example

This project demonstrates creating a database with two related tables (\*\*Customers\*\* and \*\*Orders\*\*) and performing various SQL JOIN operations: \*\*INNER JOIN\*\*, \*\*LEFT JOIN\*\*, \*\*RIGHT JOIN\*\*, and \*\*FULL JOIN\*\*.

---

## 📂 Database Creation

```sql

CREATE DATABASE ShopDB;

USE ShopDB;

## 🏗 Table Structures

### Customers Table

CREATE TABLE Customers (

CustomerID INT PRIMARY KEY,

CustomerName VARCHAR(50),

Country VARCHAR(50)

);

### Orders Table

CREATE TABLE Orders (

OrderID INT PRIMARY KEY,

OrderDate DATE,

CustomerID INT,

Amount DECIMAL(10,2),

FOREIGN KEY (CustomerID) REFERENCES Customers(CustomerID)

);

## 📌 Sample Data

### Insert Customers

INSERT INTO Customers (CustomerID, CustomerName, Country)

VALUES

(1, 'Alice', 'USA'),

(2, 'Bob', 'UK'),

(3, 'Charlie', 'Canada'),

(4, 'David', 'USA');

### Insert Orders

INSERT INTO Orders (OrderID, OrderDate, CustomerID, Amount)

VALUES

(101, '2025-08-01', 1, 250.00),

(102, '2025-08-02', 2, 150.00),

(103, '2025-08-03', 1, 300.00),

(104, '2025-08-04', 3, 200.00);

## 🔍 JOIN Queries

### 1️⃣ INNER JOIN — Customers with Orders

SELECT Customers.CustomerName, Orders.OrderID, Orders.Amount

FROM Customers

INNER JOIN Orders

ON Customers.CustomerID = Orders.CustomerID;

### 2️⃣ LEFT JOIN — All Customers, Orders if Available

SELECT Customers.CustomerName, Orders.OrderID, Orders.Amount

FROM Customers

LEFT JOIN Orders

ON Customers.CustomerID = Orders.CustomerID;

### 3️⃣ RIGHT JOIN — All Orders, Customers if Available

SELECT Customers.CustomerName, Orders.OrderID, Orders.Amount

FROM Customers

RIGHT JOIN Orders

ON Customers.CustomerID = Orders.CustomerID;

### 4️⃣ FULL JOIN — All Customers & Orders

(Note: MySQL doesn’t support FULL JOIN directly — use UNION of LEFT + RIGHT)

SELECT Customers.CustomerName, Orders.OrderID, Orders.Amount

FROM Customers

FULL JOIN Orders

ON Customers.CustomerID = Orders.CustomerID;

✅ For MySQL, use:

SELECT Customers.CustomerName, Orders.OrderID, Orders.Amount

FROM Customers

LEFT JOIN Orders

ON Customers.CustomerID = Orders.CustomerID

UNION

SELECT Customers.CustomerName, Orders.OrderID, Orders.Amount

FROM Customers

RIGHT JOIN Orders

ON Customers.CustomerID = Orders.CustomerID;

## 📊 Output Overview

| **JOIN Type** | **What It Shows** |
| --- | --- |
| INNER JOIN | Customers who have placed orders |
| LEFT JOIN | All customers (orders may be NULL) |
| RIGHT JOIN | All orders (customers may be NULL) |
| FULL JOIN | All customers and all orders |

## 🛠 Requirements

MySQL or any SQL-compatible RDBMS

SQL execution environment (Workbench, phpMyAdmin, CLI)

## 📌 Notes

Ensure that ShopDB is created before running the scripts.

FULL JOIN works in PostgreSQL, SQL Server, and Oracle, but not directly in MySQL.

---

If you want, I can now \*\*add example query results\*\* into this `README.md` so it shows exactly what the output looks like when you run each JOIN. That would make it more useful for learners.

Do you want me to include those example outputs?