

# Coffee Sales Dashboard Project - README

This project demonstrates a complete end-to-end **Coffee Sales Dashboard** built using data analysis and visualization tools like **SQL, Tableau, and Power BI**. The dataset captures daily coffee transactions from **March 2024 to the present**, used to analyze sales performance, trends, and product insights.

## Database Schema (coffee\_sales)

Column Name	Data Type	Description
sale_id	INT	Unique identifier for each transaction
sale_date	DATE	Transaction date
coffee_type	VARCHAR(50)	Type of coffee (Latte, Espresso, etc.)
quantity	INT	Number of units sold
unit_price	DECIMAL(10,2)	Price per coffee unit
total_sales	DECIMAL(10,2)	Total revenue from each transaction

## Key SQL Queries

### Total Coffee Sales

```
SELECT ROUND(SUM(total_sales), 2) AS total_sales FROM coffee_sales;
```

### Sales by Coffee Type

```
SELECT coffee_type, SUM(total_sales) AS total_sales FROM coffee_sales GROUP BY coffee_type ORDER BY total_sales DESC;
```

### Sales Over Time

```
SELECT DATE_FORMAT(sale_date, '%Y-%m') AS month, SUM(total_sales) AS total_sales FROM coffee_sales GROUP BY month ORDER BY month;
```

### Top 5 Coffee Products

```
SELECT coffee_type, SUM(total_sales) AS total_sales FROM coffee_sales GROUP BY coffee_type ORDER BY total_sales DESC LIMIT 5;
```

## Tableau Dashboard Summary

The Tableau dashboard visualizes key insights from SQL data analysis, using a coffee-colored theme to maintain brand aesthetics. It includes: - Total Coffee Sales KPI - Sales by Coffee Type (Bar Chart) - Coffee Sales Trend (Pie Chart) - Coffee Sales Over Time (Line Chart) - Top 5 Coffee Products (Horizontal Bar)

## Output Overview

**Input:** Raw transactional data from March 2024 onward.

**Processing:** SQL-based aggregation, cleaning, and KPI derivation.

**Output:** A clean interactive dashboard that shows performance, trends, and KPIs in real-time.