

# SQL PROJECT

## **Problem Statement:**

The retail chain, with multiple locations, seeks to optimize sales, inventory management, and profitability using transactional data from January 2022 to December 2023. The goal is to identify sales trends, improve inventory turnover, highlight high-margin products, and uncover actionable insights for better marketing and operational strategies.

# ANALYSIS BY USING SQL

## 1. Production Performance Analysis

**Goal-** Identify top-performing products based on total sales and profit.

## 2. Store Performance Analysis

**Goal-** Analyse sales performance for each store, including total revenue and profit margin.

## 3. Complex Monthly Sales Trend Analysis:

**Goal-** Examine monthly sales trends, considering the rolling 3-month average and identifying months with significant growth or decline.

## 4. Cumulative Distribution of Profit Margin:

**Goal-** Calculate the cumulative distribution of profit margin for each product category, consider where products are having profit.

## 5. Store Inventory Turnover Analysis:

**Goal:** Analyse the efficiency of inventory turnover for each store by calculating the Inventory Turnover Ratio.