

# SQL Tutorial Playlist

[https://www.youtube.com/playlist?list=PLQ77KV5GQnWZQjgDOvCngvoxj\\_CW\\_ePK4](https://www.youtube.com/playlist?list=PLQ77KV5GQnWZQjgDOvCngvoxj_CW_ePK4)

If you prefer to work with text tutorial instead of video:

<https://www.w3schools.com/postgresql/index.php>

## Hand-held project

[https://youtu.be/qfyynHBFOsM?si=f2v5rT\\_ZQGIQNaSG](https://youtu.be/qfyynHBFOsM?si=f2v5rT_ZQGIQNaSG)

(double-click the link)

### Context

The growth of supermarkets in most populated cities are increasing and market competitions are also high. The dataset is one of the historical sales of a supermarket company which has been recorded in 3 different branches for 3 months.

### Attribute information:

**Invoice id:** Computer generated sales slip invoice identification number

**Branch:** Branch of supercenter (3 branches are available identified by A, B and C).

**City:** Location of supercenters

**Customer type:** Type of customers, recorded by Members for customers using member card and Normal for without member card.

**Gender:** Gender type of customer

**Product line:** General item categorization groups - Electronic accessories, Fashion accessories, Food and beverages, Health and beauty, Home and lifestyle, Sports and travel

**Unit price:** Price of each product in \$

**Quantity:** Number of products purchased by customer

**Tax:** 5% tax fee for customer buying

**Total:** Total price including tax

**Date:** Date of purchase (Record available from January 2019 to March 2019)

**Time:** Purchase time (10am to 9pm)

**Payment:** Payment used by customer for purchase (3 methods are available – Cash, Credit card and Ewallet)

**COGS:** Cost of goods sold

**Gross margin percentage:** Gross margin percentage

**Gross income:** Gross income (Total - COGS)

**Rating:** Customer stratification rating on their overall shopping experience (On a scale of 1 to 10)

### Objective

The objective is to gain a comprehensive understanding of the store's performance, identify areas for improvement, and make informed decisions to drive growth and profitability.

**Analysis Questions:**

1. How does the revenue vary across different branches?
2. Can you identify the top-selling product lines and the least popular ones?
3. What is the distribution of customer types (Members vs. Normal)?
4. What are the preferred payment methods for customers?
5. Is there a correlation between payment method and the total purchase amount?
6. How do the different branches compare in terms of customer ratings?
7. Which of the branches has more of the highest customer rating?
8. Which Gender purchases the most?

**Submit your analysis in a documented format with screenshots of your SQL queries.**