**Time Series Analysis Project from ProjectPro**

Time series data is a collection of variables whose values depend on time.[Analyzing time-series](https://www.projectpro.io/article/time-series-projects/444) data is trivial with Python, but with SQL, it becomes a pretty challenging task. Work on this project to understand what difficulties one might encounter using SQL for time series analysis.

**Dataset:**Use the[SuperStore Time Series Dataset from Kaggle](https://www.kaggle.com/blurredmachine/superstore-time-series-dataset) to work on this project. The dataset contains 20 columns, namely, Row ID, Order ID, Order Date, Ship Date, Ship Mode, Customer ID, Customer Name, Segment, Country, and City.

**SQL Project Idea:**Clean the data first using the data preprocessing method and make it SQL-ready. After that, complete the following tasks:

* Use the LEAD window function to create a new column sales\_next that displays the sales of the next row in the dataset. This function will help you quickly compare a given row’s values and values in the next row.
* Create a new column sales\_previous to display the values of the row above a given row.
* Rank the data based on sales in descending order using the RANK function.
* Use common SQL commands and aggregate functions to show the monthly and daily sales averages.
* Analyze discounts on two consecutive days.
* Evaluate moving averages using the window functions.
* Calculate Running total using windows frame
* Group the data based on the order of quantity & each group should have same number of rows.