ML Problem Statement

Mentorness Internship Program

Project Name: Sales Forecasting for Furniture Store

The goal of this project is to develop a machine learning model to accurately forecast future sales for a furniture store based on historical data. The dataset includes various features such as order details, customer information, product categories, and sales performance. By analyzing these features, the model will predict future sales trends, which can help the store in inventory management, marketing strategies, and financial planning.

Dataset Description:

The dataset consists of the following columns:

- **Row ID**: Unique identifier for each row.
- **Order ID**: Unique identifier for each order.
- **Order Date**: Date when the order was placed.
- **Ship Date**: Date when the order was shipped.
- **Ship Mode**: Mode of shipment (e.g., Standard Class, First Class).
- **Customer ID**: Unique identifier for each customer.
- **Customer Name**: Name of the customer.
- **Segment**: Customer segment (e.g., Consumer, Corporate, Home Office).
- **Country**: Country where the order was placed.
- **City**: City where the order was placed.
- **State**: State where the order was placed.
- **Postal Code**: Postal code for the delivery address.
- **Region**: Region where the order was placed.
- **Product ID**: Unique identifier for each product.
- **Category**: Category of the product (e.g., Furniture, Office Supplies).
- **Sub-Category**: Sub-category of the product (e.g., Chairs, Binders).
- **Product Name:** Name of the product.
- **Sales**: Sales amount for the order.
- **Quantity**: Number of items in the order.
- **Discount**: Discount applied to the order.
- **Profit**: Profit earned from the order.

Deliverables:

- Source code file from any IDE with all the steps.
- PowerPoint presentation.
- Video explaining the tasks you have performed along with insights you have gained for Prediction customer purchase behavior.