Problem Statement

Can we accurately predict the product's stock levels based on sales and sensor data on an hourly basis to more intelligently procure products from our suppliers?

Data Collection/Features Want to use:

Independent Features(X Variables):

- Product Id
- Timestamp
- Category
- Customer Type
- Total
- Temperature

Dependent Feature(Predicting Variable)

- Estimated_stock_pct

Selecting the features from the given sensor and sales data

Perform EDA and Data Pre-Processing

Model Building- Use Regression models like Linear Regression, Decision Tree Regressor, and Boosting Techniques

Train and Test the model and Perform Evaluation Metrics like RMSE, MSE, R-Squared

We can the Predicted values for the Estimated stock product

Deploy the model For Future predictions

- Yes we can predict the Products stock levels with the given 3 tables
- As the Predicting Feature is a Continuous Variable we have to use Regression models