Project Title: Product Demand Forecasting

Abstract:

The technique of estimating and predicting future demand for a good or service is known as "product demand forecasting," which uses predictive analysis of previous data.

As an actual-time illustration, Zomato, a well-known mobile application in India that links its users to nearby restaurants by offering their own delivery drivers, recently launched a promotion called "No Cooking July." The company has planned to introduce interesting incentives for its clients each day, which the customers are enjoying. However, the restaurants are having difficulties since they must ensure that they can accommodate as many people as possible. It is a task to create an adequate inventory for such situations. Most businesses that sell products need to make sure they have enough on hand to satisfy all of their consumers. Therefore, it is significant.

Application of pertinent machine learning techniques can be used to make the prediction in demand forecasting. Machine learning techniques like the Ridge regression model, Decision Tree model, Random Forest model, and Linear Regression model can be used to implement it.

Dataset Link: kaggle kernels output hiralmshah/bigmart-sales-prediction -p /path/to/dest

Learning Goal:

By projecting future total sales and revenue, the aim is to assist the company in lowering risks and making effective financial decisions.
By enabling them to provide their customers with the appropriate goods at the appropriate times, it aids in the planning of all company choices. Additionally, it can aid companies in preventing needless resource waste.

The dataset under consideration comprises statistics on sales in relation to many factors that affect them, hence the answer is yes.
The proportion of sales predicted will be used as the basis for the project's evaluation, together with the identification of the model that was most helpful in improving sales prediction.