**SALES FORECASTING USING REGRESSION**

**Performance and Key Insights:**

**The performance of the decision tree regression model on the test data is as follows:**

* Mean Absolute Error (MAE) is 2658.50
* Root Mean Squared Error (RMSE) is 7268.19
* R-squared (Accuracy Score) is 0.89

The MAE and RMSE values indicate that the model has a moderate level of accuracy in predicting weekly sales.

However, the RMSE value is quite high, which means that the model has a relatively high level of error in predicting weekly sales.

The R-squared value of 0.89 indicates that the model is able to explain 89% of the variance in the dependent variable (weekly sales) using the independent variables in the model.

This is a relatively high R-squared value, which means that the model is able to capture a significant amount of the variation in the dependent variable.

**Key Inferences:**

* Type C has the minimum number of stores while Type A has the maximum number of stores.
* 93% of the time there is no holiday in the stores.
* 90 to 98 departments have the highest sales in general.
* store no 20 has the highest sales.