**Weekly Report - 9**

**CSE 523 Machine Learning**

Group Name: **Mavericks**

**Store Sales – Time series Forecasting**

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1. **Task Performed in the Ninth week:**

* Use of Ridge regression for the other product families.
* Generating the validation score for the prediction of the sales.

1. **Outcome of the task in the Ninth week:**

* Ridge regression for the other product families:

1. As we used random forest regressor for the school and office supplies product family so for the other product families we have used ridge regression.
2. We choose the ridge regression in our model for the linearly independent variables that are highly correlated.
3. Tried to fit the model using the ridge regression to predict the sales for the remaining product families.

* Validation of the model for the prediction of the datasets:

1. We generated a validation score for the sale prediction.
2. With the help of mean squared log error, we tried to reduce the error in the model for a good validation score.
3. By combining the ridge and random forest, we fit the model with the help of training dataset.
4. **Task to be performed in the next week:**

* Trying the light bgm model.
* Completion of the Final Documentation.