**Weekly Report - 8**

**CSE 523 Machine Learning**

Group Name: **Mavericks**

**Store Sales – Time series Forecasting**

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

* Explored the other algorithms for the modelling part.
* Use of random forest for particular dataset.

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

* Exploration of corresponding algorithms for the given dataset:

1. We explored various algorithms that fits our data for building an accurate model and found couple of them.
2. Random forest and ridge regression was two of them and primarily we started implementing the random forest to the dataset.
3. The reason for choosing random forest was that as it makes a decision tree for a various different sample and then decides a class on the basis of average vote as our dataset contains some dependent variable.

* Random Forest for particular dataset:

1. We used the random forest for the school and office supplies product familiy only.
2. We applied a condition that if the columns contain school and office supply product than only the model is a Random Forest regressor.
3. Got some validation score on fitting the model using a random forest regressor.
4. It predicted the sales for the school and office supplies product families for the training dataset.
5. **Task to be performed in the next week:**

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