**Exercise:**

1. Download Amazon Fine Food Reviews dataset from Kaggle. You may have to create a Kaggle account to download data. (<https://www.kaggle.com/snap/amazon-fine-food-reviews>)
2. Split data into train and test using time based slicing as 70% train & 30% test.
3. Perform featurization, BoW, tf-idf,Avg Word2Vec, tf-idf-Word2Vec.
4. Apply Naive Bayes on train data.
5. Perform cross validation to find optimal alpha (Laplace Smoothing).
6. Find important features for +ve and –ve class labels.
7. To test the performance of the model, calculate accuracy,precision,recall,F1-score,confusion matrix(TPR,TNR,FPR,FNR)
8. Write your observations in English as crisply and unambiguously as possible. Always quantify your results.