Instructions

1. Follow the instructions in each question carefully.
2. Only two files should be uploaded in canvas without zipping them. One is ipynb file and other one html output of the ipynb file. No other files should be uploaded
3. Any assignment submitted using other python IDEs are not considered for grading.
4. If there are any issues in accessing the links to datasets, you can search for the same dataset from any repositories and use them.
5. Incorrect Assignment Set submitted will not be considered.

**NLP Assignment 2**

**Set C**

**Link to the Dataset:**

[**https://drive.google.com/file/d/1cH-EMnQ\_2mhWi5Uh6u5SA0lk9r0gAP1D/view?usp=sharing**](https://drive.google.com/file/d/1cH-EMnQ_2mhWi5Uh6u5SA0lk9r0gAP1D/view?usp=sharing)

***Note: Use First 2000 rows of dataset from the original dataset given***

**Description of Data:**

This dataset (FinancialPhraseBank) contains the sentiments for financial news headlines from the perspective of a retail investor. The dataset contains two columns, "Sentiment" and "News Headline". The sentiment can be negative, neutral or positive.

***Task 1 :*** Load the dataset, select the first 2000 rows, and perform a comprehensive Exploratory Data Analysis (EDA) followed by necessary preprocessing steps. ***(2 Mark)***

***Task 2 :*** Implementing Parsing Algorithms **[ 1+ 3 +3+1]**

1. Display the POS tagging on the first 2 rows of ‘News Headlines’

2. Plot the dependency parser for any two random sentences from the entire corpus/dataset that has at least 10 words in the sentence. Make sure that dependency parser looks good and should visually understandable. (3 Mark)

3. Plot the Statistical parser for any two random sentences from the entire corpus/dataset that has at least 10 words in the sentence. Make sure that Statistical parser looks good and should visually understandable. (3 Mark)

4. Compare the efficiency of each approach in terms of the number of operations and time taken.