Assignment 1 – Using NLTK and Vader Sentiment Analysis

In this assignment you will be using <u>NLTK</u>, <u>PyPDF2</u>, <u>py-readability-metrics</u> and <u>wordcloud</u> to compare two news stories on the same topic, from two different sources. Complete your analysis and commentary in a Jupyter notebook. The notebook should be pushed to your personal Github class repository and a URL to the notebook submitted for the assignment of Canvas

- 1. Install PyPDF2 and py-readability-metrics
- 2. In a new notebook, import nltk and run the following commands:
 - a. nltk.download('punkt')
 - b. nltk.download('stopwords')
 - c. nltk.download('vader_lexicon')
- 3. Read the two news stories found in this assignment on Canvas. In a markdown cell in your notebook, briefly characterize the issue at hand and your impressions from a news reporting objectivity perspective.
- 4. Use PyPDF2 to extract the text out of each document
 - a. Display the text
 - b. Briefly note any anomalies in your notebook
- 5. Use NLTK to complete sentiment analysis for each of the articles
 - a. Compare the results from the two articles
 - b. Compare the results to your reading of the articles; do you agree with the outcome?
- 6. Run sentiment analysis on the article headlines
 - a. Do those results agree with the overall sentiment?
- 7. Using py-readability-metrics complete 2-3 different readability scores
 - a. Discuss what the chosen metric is measuring
 - b. Compare the scores from both articles
- 8. Using wordcloud, create word clouds for both articles
 - a. Briefly comment on the word clouds