**Muhammad Adam Khan Bin Abu Ganim Khan is01083956**

**Muhammad Farhan Bin Abdul Mutalib is01082992**

**Tet analytics lab assignment 2**

**Discussion about the strengths and weaknesses of the selected models for sentiment classification.**

**Lexicon-Based Approach (VADER)**

**Strengths**

* **No training data required**: Works out-of-the-box using a pre-defined dictionary of words and rules.
* **Interpretable**: You can understand how sentiment scores are calculated based on word polarity.
* **Fast and lightweight**: Suitable for real-time applications or quick analyses.
* **Handles social media text well**: VADER is optimized for casual language, punctuation (e.g., "!!!"), capitalization, and emoticons.

**Weaknesses**

* **Limited to its dictionary**: It cannot capture domain-specific language or slang not included in the lexicon.
* **Poor at understanding context**: It doesn't understand sarcasm, irony, or subtle linguistic cues.
* **Static scoring**: Cannot improve or adapt without modifying the dictionary.