

Sentiment Analysis

In this assignment, the goal is to train a supervised model for sentiment analysis using sklearn Python module.

Sentiment analysis is a technique used to determine the sentiment or emotional tone of a given piece of text, such as a sentence, message, paragraph, or document. It involves analyzing the subjective information within the text to determine whether the expressed opinion is **positive**, **negative**, or **neutral**.

Your assignment can be divided into the following tasks:

1. Load a dataset for sentiment analysis.
2. Split the dataset into training and testing.
3. Train the model using sklearn pipeline on the training dataset (Hint: use feature engineering techniques to convert textual data to numerical vectors).
 - a. Train several models by using several feature engineering techniques and several machine learning algorithms.
4. Evaluate and compare the models using the testing dataset.
5. Use the model to classify new examples (Given a sentence the model should predict whether the expressed opinion in the sentence is **positive**, **negative**, or **neutral**).

At the presentation of the assignment, I need to see your running code and the table of comparison.

Good Luck