**CONCLUSION**

This study aims to explain sentiment analysis of twitter data regarding ordinal regression using several machine learning techniques. In the context of this work, we present an approach that aims to extract Twitter sentiment analysis by building a balancing and scoring model, afterward, classifying tweets into several ordinal classes using machine learning classifiers. Classifiers, such as Multinomial logistic regression, Support vector regression, Decision Trees, and Random Forest, are used in this study. This approach is optimized using Twitter data set that is publicly available in the NLTK corpora resources.

Experimental results indicate that Support Vector Regression and Random Forest have an almost similar accuracy, which is better than that of the Multinomial logistic regression classifier. However, the Decision Tree gives the highest accuracy at 91.81%. Experimental results concluded that the proposed model can detect ordinal regression in Twitter using machine learning methods with a good accuracy result. The performance of the model is measured using accuracy, Mean Absolute Error, and Mean Squared Error.

In the future, we plan to improve our approach by attempting to use bigrams and trigrams. Furthermore, we intend to investigate different machine learning techniques and deep learning techniques, such as Deep Neural Networks, Convolutional Neural Networks, and Recurrent Neural Networks.