## **ABSTRACT**

Nowadays product review becomes one of supporting factors for consumers to buy a desired goods, because each product that will be purchased has advantages and disadvantages and this review is very helpful for consumers to determine which goods will be purchased. The number of product reviews in e-commerce made consumers confused to determine the items to be purchased. So it takes sentiment analysis to help consumers to summarize or conclude a review of the product that will be purchased. The process of sentiment analysis has been done in previous research, but there are some deficiency such as the number of true features are still small and it cannot handle the pronoun which has a meaning in a sentence. So this final project has added preprocessing process to handle the lack of true features and coreference resolution to handle the problem of the pronoun. Assosiation mining is used as an extraction process that can produce features of the preprocessing. After getting the features of extraction, then the process of identifying the word opinion with the help of lexicon opinion to determine the orientation of each word of opinion is will be done. The result of the addition of coreference reolution can increase the extraction results by the mean difference on each dataset of 0.85%. And with the addition of infrequent feature extraction can improve the extraction results with an average of 4.78% difference.

**Keywords:** Sentiment Analysis, Coreference Resolution, Preprocessing, Assosiation Mining, Opinion Lexicon.