CHAPTER 6
CONCLUSION

In the above research, the AdaBoost and Random Forest algorithms were used to predict the level of good alcohol quality in wine using a dataset obtained from Kaggle. The data used amounted to 6,000 data with 12 attributes. Then in the training process, the data is divided into four proportions 60%, 70%, 80%, and 90%. The above data is processed using the Orange data mining application.

Based on the research results at a proportion of 60% the AdaBoost algorithm obtained an MSE value of 0.144 while the Random Forest algorithm obtained an MSE value of 0.180. At a proportion of 70%, the AdaBoost algorithm obtained an MSE value of 0.136 while the Random Forest algorithm obtained an MSE value of 0.177. At a proportion of 80%, the AdaBoost algorithm obtained an MSE value of 0.115 while the Random Forest algorithm obtained an MSE value of 0.151. Then at a proportion of 90%, the AdaBoost algorithm obtained an MSE value of 0.112 while the Random Forest algorithm obtained an MSE value of 0.151. Based on the results of this study, it can be concluded that the AdaBoost algorithm is the best algorithm for this study. Because the algorithm obtained a smaller error rate compared to the Random Forest algorithm

AdaBoost and Random Forest algorithms are not the only methods that can be used to predict. The author can suggest using other methods such as Tree, Linear Regression, KNN, and Neural Networks to perform a prediction to find better results and improve research.