CHAPTER 3
RESEARCH METHODOLOGY

3.1. Literature study

In this project the author looks for datasets from the internet, this data source is obtained from the site https://www.kaggle.com/datasets/rajyellow46/wine-quality. The dataset I took was about determining the quality of a good wine. There are a lot of attributes in this dataset, the one I use is the "alcohol" dataset. So in this dataset, we can find out which wine is good from its alcohol value.

3.2. Data and variable

The main data source I used was the red and white wine list from the Portuguese "Vinho Verde". Which has 6000 data and 12 attributes, the dataset attributes used in this method are fixed acidity, volatile acidity, citric acid, residual sugar, chlorides, free sulfur dioxide, total sulfur dioxide, density, pH, sulfates, alcohol, and quality. From these data and attributes, the author will compare the accuracy and smallest error of the AdaBoost and Random Forest methods to get good wine quality.

3.3. Orange Data Mining Tool

Data mining is a process of collecting important information and data. In the process of collecting data, it utilizes several methods such as mathematics, statistics, and the use of artificial intelligence (AI) technology. Another term for data mining is data analysis. Orange data mining is an open-source program for the process itself using data mining and data analytics through the concept of visual programming.