**WINE QUALITY PREDICTION BY USING MACHINE LEARNING ALGORITHMS**

**Steps for Execution:**

**Step 1:** Install Anaconda Navigator software from Internet.

**Step 2:** In the Anaconda Navigator software install Jupyter notebook.

**Step 3:** After installation, launch the Jupyter Notebook. It will automatically redirect to Google chrome and it shows home page of Jupyter notebook.

**Step 4:** In Jupyter notebook, select new file as ipynb extension and named it as Wine Quality prediction.

**Step 5:** In python file write the code in the cells of jupyter notebook.

**Step 6:** Primarily import all the required libraries for the project. After each cell run the code from the given run option.

**Step 7:** In this project ,we required to give input as dataset of wine quality attributes as csv extension.

**Step 8:** After insertion of dataset, we required to train and test the dataset.

**Step 9:** In training and testing of dataset take the accuracy of the each set of data in the dataset.

**Step 10:**  And also compare all the attributes in the dataset which mostly affects the quality of wine.

**Step 11:** Later use the different classifiers to find the quality of wine.They are Logistic Regression, Support Vector Machine, Stochastic Gradient Descent, and Random Forest.

**Step 12:** We use different classifiers to find effective accuracy for the quality of wine.

**Step 13:** After using different classifiers we get different accuracy of wine quality. And we get Random Forest as high accuracy among all other classifiers.

**Step 14:** Finally we get quality score of wine based on the dataset by using different classifiers.