**Data Set:**

This dataset is adapted from the Wine Data Set from <https://archive.ics.uci.edu/ml/datasets/wine> by removing the information about the types of wine for unsupervised learning.

The following descriptions are adapted from the UCI webpage:

These data are the results of a chemical analysis of wines grown in the same region in Italy but derived from three different cultivars. The analysis determined the quantities of 13 constituents found in each of the three types of wines.

**Attributes:**

The attributes are:

* Alcohol
* Malic acid
* Ash
* Alkalinity of ash
* Magnesium
* Total phenols
* Flavanoids
* Nonflavanoid phenols
* Proanthocyanins
* Color intensity
* Hue
* OD280/OD315 of diluted wines
* Proline

**Problem Statement:**

Using the given wine information, Perform a clustering analysis to determine the clusters based on the similar characteristics of the data. And use classification algorithms to predict the labels of the clusters.

**In-class Assignment Expectations/Steps -**

Part 1:

* Load the data using the Python Pandas library.
* Do an Exploratory Data Analysis of the data and state your insights.

Part 2:

* Exclude the target variable
* Perform Kmeans, Agglomerative clustering, PCA, and build a classification model of the clusters.
* Evaluation of the model and provide inferences.