## **Naive Bayes Assignment**

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## Main Tasks:

- 1. Load the Wine dataset using sklearn.datasets.load\_wine().
- 2. Split the dataset into training (80%) and testing (20%) sets.
- 3. Train a Naive Bayes classifier using GaussianNB.
- 4. Evaluate your model accuracy on the test set.

## **Questions:**

- Q1. How many features does the dataset have? And how many classes?
- Q2. How many samples are in the dataset?
- Q3. What is the role of the var\_smoothing parameter in GaussianNB?
- Q4. What are the advantages and disadvantages of Naive Bayes in this context?