

## Question: Classification + Data set

Using the Iris data set of three main flowers, Iris Setosa, Iris Versicolor, and Iris Virginica, explain in your own words the task of classification. Use keywords used in this field. Briefly mention the classification cycle.

### 1) Keywords

classification = supervised, algorithms (logistic Regression, Naive Bayes), observations, features, target class, categories ✓

### 2) answer

The Iris dataset is composed of a number of observations, 150 to be exact where each observation is composed of four features; Sepal length, sepal width, petal length and petal width in cm. In the dataset there are three labels, thus three species of Iris (setosa, versicolor, virginica) } Data set

The classification task is supervised and is to determine for a sample with a given set of features to which category the sample belongs to. For example, taking the four measurements of a flower's sepal and petal we could decide whether the flower is an Iris (setosa, virginica or versicolor).

This requires many aspects such as collecting data and selecting features of interest, and/or preprocess data, building or fitting a model while making decisions and testing or evaluating the classification decisions which could include learning or training.

→ 1) create the dataset, 2) Build the model, 3) Train the model, 4) Make predictions

Split the dataset into train & test