

# Documentation

## **precision()**

This function calculates the accuracy score of a model or its capacity to predict accurate results.

**Input:** the function takes as a parameter a contingency table with dimensions 5\*5 which is adapted to five-class-classification problems.

**Output:** the function returns the model accuracy that is calculated as the number of true positives out of the sum of the number of true and false positives for all five classes. The model accuracy is a mean of all five accuracies calculated.

## **learning\_curve()**

This function generates the learning curve of a model. It is used to visualize the accuracy evolution as a function of the number of training samples used.

**Input:** the function takes as parameters:

- x\_train (the training part of the predictive variables)
- y\_train (the training part of the dependent variable)
- x\_test (the testing part of the predictive variables)
- y\_test (the testing part of the dependent variable)
- model (the defined model)

**Output:** the function returns a plot with the number of training samples on the x-axis and the model accuracy on the y\_axis. Two curves: the first is the training curve in blue, the other is the testing curve in red.