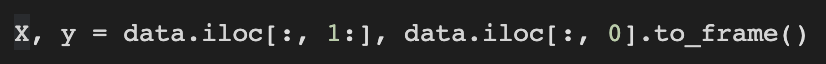
# Methods:

We load & manipulate the data using Panda’s package.

Before building the models, we need to separate the target variable that is the sign from the independent variables, the pixels. we use iloc to select the cells we want.



This application will have three different models that are:

Logistic regression

Support vector machine

Random forest classifier

We will start by fitting the models on the train dataset then test its performance on the test dataset (33% test size)

Text

Description automatically generated

For each model we use the following methods:

Fit: to estimate the optimal model parameters

Score: to evaluate the model accuracy

# Results:

Overall all the models are classifying the images on unseen data accurately with a score above 90%.

The support vector machine is doing much better with a score of 98%.

In order to predict an image, we use the predict method as follows

Graphical user interface, application, website

Description automatically generated

This chunk of code is used to predict rows 21 to 32 signs.